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CITY OF JOLIET, IL

April 4, 2023

Olympic Boulevard Improvements
CONTRACT NO. 2711-0523

ADDENDUM NO. 1

To: Prospective Bidders

This addendum consists of four (4) pages and the following attachments:

1. Revised pages 2 and 3 of the Local Public Agency Formal Contract Proposal (BLR 12200).
2. Revised Schedule of Prices (BLR 12200a).
3. Revised plan sheets 20 and 77.
4. Meeting minutes from the pre-bid meeting.
5. Structural geotechnical report for Olympic Boulevard bridge over Rock Run Creek.
6. Geotechnical report for Rock Run Trail pedestrian bridge.
7. Roadway geotechnical report for Olympic Boulevard from I-55 East Frontage Road to Houbolt Road.
8. Preliminary Site Investigation (PSI) report.
9. Preliminary Environmental Site Assessment (PESA).

The attention of all prospective bidders on the above referenced project is called to the following listed modifications in the contract documents:

GENERAL:

1. The bid due date has been revised to 10:15 A.M. local time on Tuesday, April 25, 2023. Revised Page 2 of the Local Public Agency Formal Contract Proposal (BLR 12200) is included in this addendum.

2. Completion date has been revised to 11:59 PM on, September 30th, 2024. Revised Page 3 of the Local Public Agency Formal Contract Proposal (BLR 12200) is included in this addendum.
3. With respect to the recommended construction method for the bridge of launching, the City of Joliet will accept any alternative construction method proposed, as long as it fits within the permitted footprint of the construction area and conforms to the contract documents and specifications and addenda, including the specified schedule for completion.
4. The City would like to direct the prospective bidders' attention to Article 108.09 of the IDOT Standard Specifications which specifies liquidated damages that apply to this contract with respect to the completion date noted in General item 2, above.

SCHEDULE OF PRICES:

1. Item 5 ROCK EXCAVATION has been reduced by 1400 cubic yards. Item 61 ROCK EXCAVATION FOR STRUCTURES has been increased by 1400 cubic yards.
2. Item 27 STONE RIPRAP, CLASS A3, has been increased from 408 to 523 square yards.
3. Item 28 STONE RIPRAP, CLASS A4, has been reduced from 194 to 66 square yards.
4. Item 216 PREFORMED JOINT STRIP SEAL, 98 feet, has been added to the schedule of prices.
5. The entire schedule of prices has been reissued with this addendum (four pages).

SPECIFICATIONS:

1. Page 9, COMPLETION DATE PLUS WORKING DAYS (D1): Revise second paragraph to read: "When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on, September 30th, 2024 except as specified herein."

PLAN SHEETS:

1. Sheet 20: Additional benchmark and control points added. Revised sheet included in this addendum.
2. Sheet 21: The 1400 cubic yards of ROCK EXCAVATION for storm sewer excavation has been changed to ROCK EXCAVATION FOR

STRUCTURES. Schedule of prices updated and included with this addendum. Revised sheet will be issued to the successful bidder.

3. Sheet 77: Second sentence of Note 1 revised to "The PVC coated conduit shall be installed on the bottom of the bridge deck using conduit clamps." Revised sheet included in this addendum.

BIDDER QUESTIONS:

Question 1:
We are asking for more time to prepare our bid submittal due to the launching procedure/erection plan for the bridge structural steel that needs to be designed and engineered as required for this project. Also, the bid date falls on a Monday, vendor quotations are typically submitted and analyzed the day prior to the bid due date. For all these reasons, we are requesting a 1 to 2 week bid date extension and also have the date moved from a Monday.

Answer 1:
The bid due date has been revised to 10:15 A.M. local time on Tuesday, April 25, 2023.

Question 2:
Can I please get a copy of the Soils/Geotechnical Report for the below project?

Answer 2:
Copies of available soils/geotechnical reports have been included in Addendum 1.

Question 3:
Is there a pay item for the strip seal joint shown on sheet 112?

Answer 3:
Item 216 PREFORMED JOINT STRIP SEAL, 98 feet, has been added to the schedule of prices.

Question 4:
Please clarify the locations, quantities per location, and dimensions of the Stone Riprap, Class A1 (Pay Item 25), Stone Riprap, Class A2 (Pay item 26), Stone Riprap, Class A3 (Pay Item 27), and Stone Riprap, Class A4 (Pay

Item 28). It is very unclear where the various types of riprap are to be installed.

Answer 4:
STONE RIPRAP, CLASS A1 SQ YD 7
2' wide strip at the east end of the sidewalk, off the bridge at sta. 324+00, offset 29.50' left.

STONE RIPRAP, CLASS A2 SQ YD 9
At the outlet of the 15" sewer at sta. 315+79, offset 111' right.

STONE RIPRAP, CLASS A3 SQ YD 523
In front of the west Olympic Bridge abutment - 408 square yards.
At the outlet of the 30" sewer at sta. 325+25, offset 58' Right – 11 square yards.
At the east end of the sidewalk, off the bridge from sta. 323+19 left to sta. 324+00 left – 104 square yards.

STONE RIPRAP, CLASS A4 SQ YD 66
66 square yards from pedestrian bridge.

Prospective bidders shall acknowledge receipt of the appropriate addendum number(s) by stating this on the outside of the sealed bid packet for the above-mentioned contract. BID PROPOSALS SHALL NOT BE OPENED WITHOUT ACKNOWLEDGEMENT OF RECEIPT OF ALL ADDENDUMS FOR THE GIVEN CONTRACT.

END OF ADDENDUM NO. 1

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
City of Joliet	Will	21-00544-00-PV	Route 904 (Olympic Boulevard)

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of City Clerk (Name of Office)

150 W. Jefferson Street, Joliet, Illinois 60432-4156 (Address) until 10:15 AM (Time) on 04/25/23 (Date).

Sealed proposals will be opened and read publicly at the office of City Clerk (Name of Office)

150 W. Jefferson Street, Joliet, Illinois 60432-4156 (Address) at 10:15 AM (Time) on 04/25/23 (Date).

DESCRIPTION OF WORK

Location	Project Length
This project is located along Olympic Boulevard in the City of Joliet in Will County.	0.35 Miles

Proposed Improvement

Work on this project includes topsoil, seeding, concrete curb and gutter, driveway pavement, sidewalk, guardrail, traffic barrier terminals, new 60’ x 16’ pedestrian bridge, new 4 span (112’-10 ½”; 140’-0”; 140’-0”; 112’-10 ½”) steel plate girder bridge on semi-integral abutments and approach roadway work, storm sewer work, water main, lighting, pavement resurfacing, pavement construction, light poles and foundations, traffic signal improvements, and all materials, labor, equipment, and all incidental and collateral work necessary to complete the project as shown on the plans and described herein.

1. Plans and proposal forms will be available in the office of

City Clerk
150 W Jefferson St, Joliet, IL 60432
Phone 815-724-3780

2. ☒ Prequalification

   If checked, the 2 apparent as read low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57) in triplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and two originals with the IDOT District Office.

3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.

4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
   a. Local Public Agency Formal Contract Proposal (BLR 12200)
   b. Schedule of Prices (BLR 12201)
   c. Proposal Bid Bond (BLR 12230) (if applicable)
   d. Apprenticeship or Training Program Certification (BLR 12325) (do not use for project with Federal funds.)
   e. Affidavit of Illinois Business Office (BLR 12326) (do not use for project with Federal funds)

5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.

6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case, be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.

7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.

8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals

received after the time specified will be returned to the bidder unopened.

9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

Local Public Agency	County	Section Number	Route(s) (Street/Road Name)
City of Joliet	Will	21-00544-00-PV	Route 904 (Olympic Boulevard)

PROPOSAL

1. Proposal of _____
Contractor's Name

_____.
Contractor's Address

2. The plans for the proposed work are those prepared by Patrick Engineering and Civiltech Engineering and approved by the Department of Transportation on N/A.

3. The specifications referred to herein are those prepared by the Department of Transportation and designated as "Standard Specifications for Road and Bridge Construction" and the " Supplemental Specifications and Recurring Special Provisions" thereto, adopted and in effect on the date of invitation for bids.

4. The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Recurring Special Provisions" contained in this proposal.

5. The undersigned agrees to complete the work within _____ working days or by 09/30/24 unless additional time is granted in accordance with the specifications.

6. The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond of check shall be forfeited to the Awarding Authority.

7. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the products of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price. A bid may be declared unacceptable if neither a unit price nor a total price is shown.

8. The undersigned submits herewith the schedule of prices on BLR 12201 covering the work to be performed under this contract.

9. The undersigned further agrees that if awarded the contract for the sections contained in the combinations on BLR 12201, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.

10. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty. Accompanying this proposal is either a bid bond, if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to: City Treasurer of Joliet.
The amount of the check is _____ (_____).

RETURN WITH BID

Illinois Department of Transportation

SCHEDULE OF PRICES

A bid will be declared unacceptable if neither a unit price nor total price is shown.

County Will
Local Public Agency City of Joliet
Section 21-00544-00-PV
Route 904 (Olympic Boulevard)

Schedule for Multiple Bids

Combination Letter	Sections Included in Combinations	Total

Schedule for Single Bid

(For complete information covering these items, see plans and specifications)

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
1	TREE ROOT PRUNING	EACH	19		
2	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	17		
3	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	6		
4	EARTH EXCAVATION	CU YD	5975		
5	ROCK EXCAVATION	CU YD	500		
6	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	7820		
7	FURNISHED EXCAVATION	CU YD	8730		
8	TRENCH BACKFILL	CU YD	1392		
9	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	700		
10	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	32215		
11	SEEDING, CLASS 1	ACRE	1.8		
12	SEEDING, CLASS 1A	ACRE	2.2		
13	SEEDING, CLASS 4A	ACRE	0.2		
14	SEEDING, CLASS 4B	ACRE	1.6		
15	NITROGEN FERTILIZER NUTRIENT	POUND	356		
16	PHOSPHORUS FERTILIZER NUTRIENT	POUND	356		
17	POTASSIUM FERTILIZER NUTRIENT	POUND	356		
18	MULCH, METHOD 2	ACRE	6.7		
19	EROSION CONTROL BLANKET	SQ YD	32215		
20	SUPPLEMENTAL WATERING	UNIT	30		
21	TEMPORARY EROSION CONTROL SEEDING	POUND	666		
22	TEMPORARY DITCH CHECKS	FOOT	60		
23	PERIMETER EROSION BARRIER	FOOT	6519		
24	INLET FILTERS	EACH	69		
25	STONE RIPRAP, CLASS A1	SQ YD	7		
26	STONE RIPRAP, CLASS A2	SQ YD	9		
27	STONE RIPRAP, CLASS A3	SQ YD	408		
28	STONE RIPRAP, CLASS A4	SQ YD	194		
29	FILTER FABRIC	SQ YD	474		
30	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	200		
31	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	5951		
32	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	480		
33	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	974		
34	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	1521		
35	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	2179		
36	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 7"	SQ YD	49		
37	HOT-MIX ASPHALT BASE COURSE, 7 1/4"	SQ YD	415		
38	AGGREGATE FOR TEMPORARY ACCESS	TON	40		
39	BITUMINOUS MATERIALS (TACK COAT)	POUND	5895		
40	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	68		
41	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	95		
42	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	311		
43	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	253		
44	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10"	SQ YD	4625		
45	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	114		
46	PROTECTIVE COAT	SQ YD	1560		
47	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	139		
48	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	5388		
49	DETECTABLE WARNINGS	SQ FT	77		
50	PAVEMENT REMOVAL	SQ YD	959		
51	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	1720		

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
52	DRIVEWAY PAVEMENT REMOVAL	SQ YD	4668		
53	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2843		
54	CLASS D PATCHES, TYPE I, 7 INCH	SQ YD	90		
55	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	90		
56	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	90		
57	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	90		
58	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	172		
59	STRUCTURE EXCAVATION	CU YD	2327		
60	COFFERDAM EXCAVATION	CU YD	180		
61	ROCK EXCAVATION FOR STRUCTURES	CU YD	1626		
62	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		
63	CONCRETE STRUCTURES	CU YD	846.5		
64	CONCRETE SUPERSTRUCTURE	CU YD	937.2		
65	BRIDGE DECK GROOVING	SQ YD	2147		
66	FORM LINER TEXTURED SURFACE	SQ FT	7679		
67	PROTECTIVE COAT	SQ YD	2929		
68	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	8.1		
69	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		
70	STUD SHEAR CONNECTORS	EACH	11856		
71	REINFORCEMENT BARS, EPOXY COATED	POUND	390710		
72	PARAPET RAILING	FOOT	1233		
73	NAME PLATES	EACH	1		
74	DRILLED SHAFT IN SOIL	CU YD	12.9		
75	DRILLED SHAFT IN ROCK	CU YD	25.2		
76	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12		
77	ANCHOR BOLTS, 1 1/4"	EACH	72		
78	ANCHOR BOLTS, 1 1/2"	EACH	24		
79	PIPE CULVERTS, CLASS A, TYPE 1 12" (TEMPORARY)	FOOT	22		
80	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1		
81	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1		
82	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	2		
83	GRANULAR BACKFILL FOR STRUCTURES	CU YD	480		
84	CONCRETE SEALER	SQ FT	5390		
85	GEOCOMPOSITE WALL DRAIN	SQ YD	153		
86	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	395		
87	STORM SEWERS, CLASS A, TYPE 2 10"	FOOT	4		
88	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	306		
89	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	375		
90	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	60		
91	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	218		
92	STORM SEWERS, CLASS A, TYPE 2 36"	FOOT	47		
93	STORM SEWERS, CLASS A, TYPE 2 48"	FOOT	40		
94	STORM SEWERS, CLASS A, TYPE 2 54"	FOOT	346		
95	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 12"	FOOT	47		
96	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 12"	FOOT	95		
97	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 15"	FOOT	29		
98	STORM SEWER REMOVAL 10"	FOOT	8		
99	STORM SEWER REMOVAL 12"	FOOT	156		
100	STORM SEWER REMOVAL 30"	FOOT	181		
101	STORM SEWER REMOVAL 48"	FOOT	78		
102	STORM SEWER REMOVAL 54"	FOOT	344		
103	DUCTILE IRON WATER MAIN 6"	FOOT	41		
104	DUCTILE IRON WATER MAIN 12"	FOOT	20		
105	WATER VALVES 12"	EACH	1		
106	ADJUSTING WATER MAIN 12"	FOOT	60		
107	ADJUSTING SANITARY SEWERS, OVER 8-INCH DIAMETER	FOOT	40		
108	FIRE HYDRANTS TO BE REMOVED	EACH	1		
109	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	1		
110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	16		
111	CONCRETE SEALER	SQ FT	131		
112	GEOCOMPOSITE WALL DRAIN	SQ YD	11		
113	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	48		
114	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	5		
115	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	308		
116	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	248		
117	PIPE UNDERDRAINS FOR STRUCTURES (SPECIAL) 4"	FOOT	90		
118	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	1		
119	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	18		
120	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	1		
121	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4		
122	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2		
123	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2		

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
124	MANHOLES, TYPE A, 8'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2		
125	INLETS, TYPE A, TYPE 8 GRATE	EACH	1		
126	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	20		
127	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		
128	REMOVING MANHOLES	EACH	4		
129	REMOVING CATCH BASINS	EACH	5		
130	REMOVING INLETS	EACH	2		
131	CONCRETE CURB, TYPE B	FOOT	374		
132	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	3549		
133	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	336		
134	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2		
135	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2		
136	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2		
137	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	2		
138	GUARDRAIL REMOVAL	FOOT	39		
139	CHAIN LINK FENCE, 6'	FOOT	162		
140	NON-SPECIAL WASTE DISPOSAL	CU YD	9990		
141	SOIL DISPOSAL ANALYSIS	EACH	6		
142	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1		
143	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1		
144	REGULATED SUBSTANCES MONITORING	CAL DA	40		
145	MOBILIZATION	L SUM	1		
146	CHANGEABLE MESSAGE SIGN	CAL DA	120		
147	SHORT TERM PAVEMENT MARKING	FOOT	295		
148	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	3228		
149	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	9683		
150	TEMPORARY CONCRETE BARRIER	FOOT	163		
151	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	88		
152	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2		
153	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2		
154	SIGN PANEL - TYPE 1	SQ FT	20		
155	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2		
156	TELESCOPING STEEL SIGN SUPPORT	FOOT	45		
157	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	158		
158	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	6235		
159	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	449		
160	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	496		
161	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	42		
162	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - STANDARD - LINE 4"	FOOT	3408		
163	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - STANDARD - LINE 12"	FOOT	99		
164	GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS	SQ FT	158		
165	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	8984		
166	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	449		
167	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	595		
168	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	42		
169	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1512		
170	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	1100		
171	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	2		
172	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 8"	EACH	2		
173	HANDHOLE	EACH	5		
174	UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	1700		
175	ELECTRIC CABLE ASSEMBLY IN CONDUIT,600V (XLP-TYPE USE) 2-1/C NO. 4 AND NO. 6 GROUND	FOOT	650		
176	LIGHT POLE, ALUMINUM, 35 FT. M.H., 12 FT. DAVIT ARM	EACH	3		
177	LIGHT POLE, ALUMINUM, 35 FT. M.H., 12 FT. MAST ARM	EACH	5		
178	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	56		
179	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	5		
180	REMOVAL OF POLE FOUNDATION	EACH	1		
181	RELOCATE EXISTING LIGHTING UNIT	EACH	1		
182	DRILL EXISTING HANDHOLE	EACH	1		
183	PEDESTRIAN TRUSS SUPERSTRUCTURE	SQ FT	875		
184	CROSSHOLE SONIC LOGGING ACCESS DUCTS	FOOT	132		
185	CROSSHOLE SONIC LOGGING TESTING	EACH	6		
186	DECORATIVE RAILING (PARAPET MOUNTED)	FOOT	568		
187	LUMINAIRE, LED, SPECIAL	EACH	8		
188	REMOVE AND REPLACE LAWN SPRINKLER SYSTEM	FOOT	400		
189	EXPLORATION TRENCH, SPECIAL	FOOT	500		
190	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	4		
191	TEMPORARY ACCESS (ROAD)	EACH	2		
192	CONCRETE WEARING SURFACE, 5"	SQ YD	331		
193	PRECAST BRIDGE APPROACH SLAB	SQ FT	2885		
194	HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 600K	EACH	12		
195	HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED - 600K	EACH	6		

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
196	DUCTILE IRON WATER MAIN FITTINGS	POUND	1000		
197	WATER MAIN REMOVAL	FOOT	81		
198	MANHOLE, SPECIAL	EACH	1		
199	MANHOLES, TYPE A, 10'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		
200	VALVE BOXES TO BE ADJUSTED (SPECIAL)	EACH	1		
201	CONCRETE BARRIER BASE (SPECIAL)	FOOT	97		
202	CONCRETE BARRIER WALL (SPECIAL)	FOOT	97		
203	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	16		
204	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		
205	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6"	SQ YD	2179		
206	CONSTRUCTION LAYOUT	L SUM	1		
207	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	4		
208	DRAINAGE & UTILITY STRUCTURES TO BE RECONSTRUCTED	EACH	4		
209	DRAINAGE SCUPPERS, DS-11	EACH	24		
210	DUST CONTROL WATERING	UNIT	30		
211	TEMPORARY INFORMATION SIGNING	SQ FT	250		
212	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	8		
213	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	28		
214	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 15"	FOOT	20		
215	TEMPORARY PAVEMENT	SQ YD	347		
216	PREFORMED JOINT STRIP SEAL	FOOT	98		
				Total Overall Estimated Cost:	

ALIGNMENT COORDINATES - OLYMPIC BLVD			
	STATION	N	E
POB	310+00.00	1758480.4477	1023402.4902
POT	314+92.46	1758486.4211	1023894.9147
POE	335+00.00	1758510.7719	1025902.3063

ALIGNMENT COORDINATES - CROSSROAD DRIVE			
	STATION	N	E
POB	400+00.00	1,758,007.1067	1,025,603.1848
POE	405+00.00	1,758,507.0742	1,025,597.4881

NOTES:

1. SHOULD BENCHMARKS, MONUMENTS OR CONTROL POINTS BE DESTROYED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR RE-ESTABLISHEMENT, WHICH SHALL BE INCLUDED IN THE LUMP SUM CONTRACT COST FOR CONSTRUCTION LAYOUT.
2. ALL ELEVATIONS ARE NAVD88 DATUM.

PROP. CURVE ROCKRUN1
PI STA. = 200+97.42
Δ = 3° 08' 19" (RT)
D = 5° 43' 46"
R = 1,000.00'
T = 27.40'
L = 54.78'
E = 0.38'
P.C. STA. = 200+70.03
P.T. STA. = 201+24.81

PROP. CURVE ROCKRUN2
PI STA. = 201+52.32
Δ = 3° 09' 08" (LT)
D = 5° 43' 46"
R = 1,000.00'
T = 27.52'
L = 55.02'
E = 0.38'
P.C. STA. = 201+24.81
P.T. STA. = 201+79.82

PROP. CURVE ROCKRUN3
PI STA. = 202+11.75
Δ = 3° 39' 25" (RT)
D = 5° 43' 46"
R = 1,000.00'
T = 31.92'
L = 63.82'
E = 0.51'
P.C. STA. = 201+79.82
P.T. STA. = 202+43.65

PROP. CURVE ROCKRUN4
PI STA. = 202+78.69
Δ = 4° 00' 49" (LT)
D = 5° 43' 46"
R = 1,000.00'
T = 35.04'
L = 70.05'
E = 0.61'
P.C. STA. = 202+43.65
P.T. STA. = 203+13.70

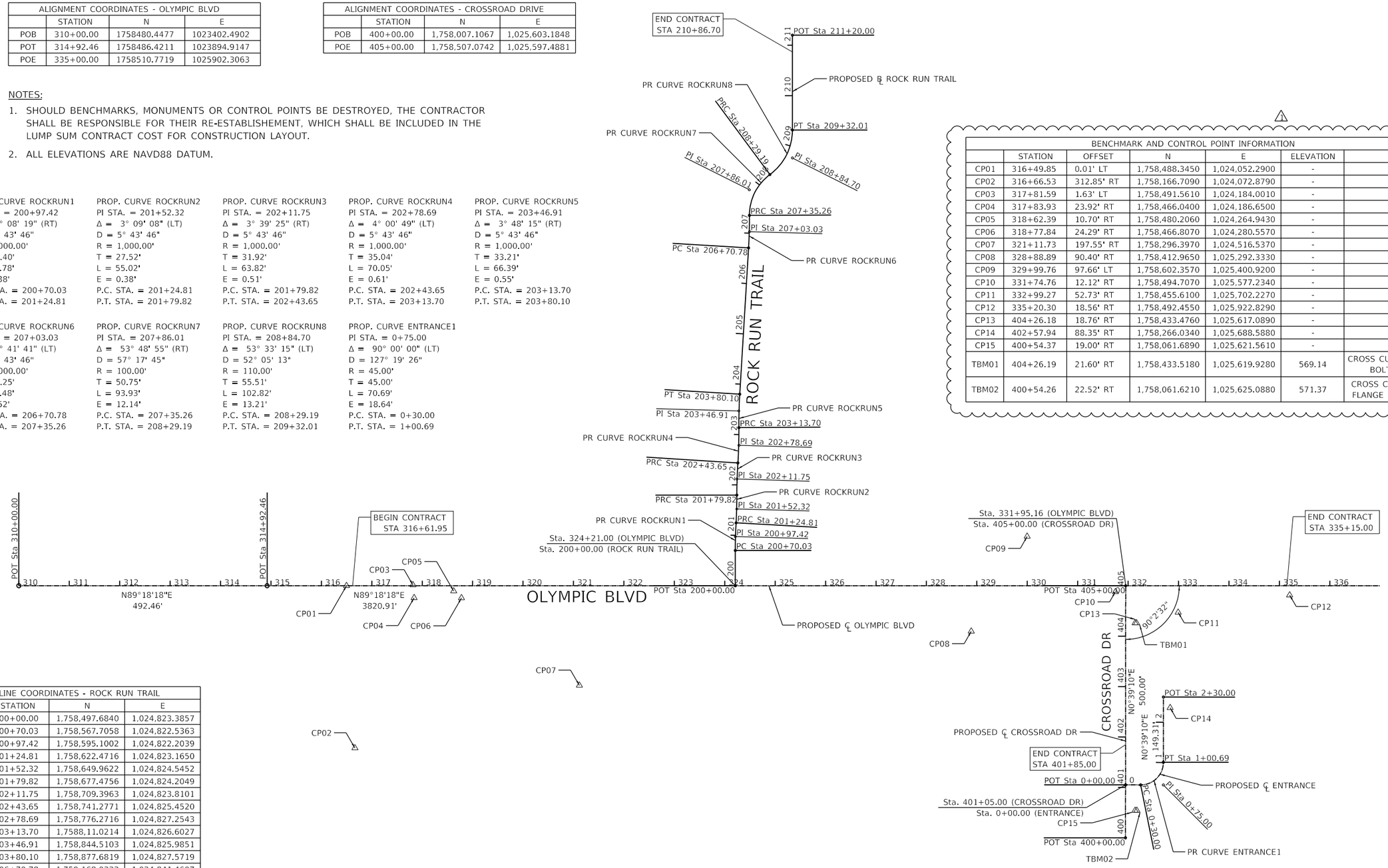
PROP. CURVE ROCKRUN5
PI STA. = 203+46.91
Δ = 3° 48' 15" (RT)
D = 5° 43' 46"
R = 1,000.00'
T = 33.21'
L = 66.39'
E = 0.55'
P.C. STA. = 203+13.70
P.T. STA. = 203+80.10

PROP. CURVE ROCKRUN6
PI STA. = 207+03.03
Δ = 3° 41' 41" (LT)
D = 5° 43' 46"
R = 1,000.00'
T = 32.25'
L = 64.48'
E = 0.52'
P.C. STA. = 206+70.78
P.T. STA. = 207+35.26

PROP. CURVE ROCKRUN7
PI STA. = 207+86.01
Δ = 53° 48' 55" (RT)
D = 57° 17' 45"
R = 100.00'
T = 50.75'
L = 93.93'
E = 12.14'
P.C. STA. = 207+35.26
P.T. STA. = 208+29.19

PROP. CURVE ROCKRUN8
PI STA. = 208+84.70
Δ = 53° 33' 15" (LT)
D = 52° 05' 13"
R = 110.00'
T = 55.51'
L = 102.82'
E = 13.21'
P.C. STA. = 208+29.19
P.T. STA. = 209+32.01

PROP. CURVE ENTRANCE1
PI STA. = 0+75.00
Δ = 90° 00' 00" (LT)
D = 127° 19' 26"
R = 45.00'
T = 45.00'
L = 70.69'
E = 18.64'
P.C. STA. = 0+30.00
P.T. STA. = 1+00.69



BENCHMARK AND CONTROL POINT INFORMATION						
	STATION	OFFSET	N	E	ELEVATION	DESCRIPTION
CP01	316+49.85	0.01' LT	1,758,488.3450	1,024,052.2900	-	-
CP02	316+66.53	312.85' RT	1,758,166.7090	1,024,072.8790	-	-
CP03	317+81.59	1.63' LT	1,758,491.5610	1,024,184.0010	-	-
CP04	317+83.93	23.92' RT	1,758,466.0400	1,024,186.6500	-	-
CP05	318+62.39	10.70' RT	1,758,480.2060	1,024,264.9430	-	-
CP06	318+77.84	24.29' RT	1,758,466.8070	1,024,280.5570	-	-
CP07	321+11.73	197.55' RT	1,758,296.3970	1,024,516.5370	-	-
CP08	328+88.89	90.40' RT	1,758,412.9650	1,025,292.3330	-	-
CP09	329+99.76	97.66' LT	1,758,602.3570	1,025,400.9200	-	-
CP10	331+74.76	12.12' RT	1,758,494.7070	1,025,577.2340	-	-
CP11	332+99.27	52.73' RT	1,758,455.6100	1,025,702.2270	-	-
CP12	335+20.30	18.56' RT	1,758,492.4550	1,025,922.8290	-	-
CP13	404+26.18	18.76' RT	1,758,433.4760	1,025,617.0890	-	-
CP14	402+57.94	88.35' RT	1,758,266.0340	1,025,688.5880	-	-
CP15	400+54.37	19.00' RT	1,758,061.6890	1,025,621.5610	-	-
TBM01	404+26.19	21.60' RT	1,758,433.5180	1,025,619.9280	569.14	CROSS CUT (SET) IN EAST FLANGE BOLT OF FIRE HYDRANT
TBM02	400+54.26	22.52' RT	1,758,061.6210	1,025,625.0880	571.37	CROSS CUT (SET) IN SOUTHEAST FLANGE BOLT OF FIRE HYDRANT

BASELINE COORDINATES - ROCK RUN TRAIL			
	STATION	N	E
POB	200+00.00	1,758,497.6840	1,024,823.3857
PC	200+70.03	1,758,567.7058	1,024,822.5363
PI	200+97.42	1,758,595.1002	1,024,822.2039
PRC	201+24.81	1,758,622.4716	1,024,823.1650
PI	201+52.32	1,758,649.9622	1,024,824.5452
PRC	201+79.82	1,758,677.4756	1,024,824.2049
PI	202+11.75	1,758,709.3963	1,024,823.8101
PRC	202+43.65	1,758,741.2771	1,024,825.4520
PI	202+78.69	1,758,776.2716	1,024,827.2543
PRC	203+13.70	1,7588,11.0214	1,024,826.6027
PI	203+46.91	1,758,844.5103	1,024,825.9851
PT	203+80.10	1,758,877.6819	1,024,827.5719
PC	206+70.78	1,759,168.0333	1,024,841.4607
PI	207+03.03	1,759,200.2498	1,024,843.0018
PRC	207+35.26	1,759,232.4987	1,024,842.4636
PI	207+86.01	1,759,283.2414	1,024,841.6169
PRC	208+29.19	1,759,313.8828	1,024,882.0723
PI	208+84.70	1,759,347.3983	1,024,926.3223
PT	209+32.01	1,759,402.9041	1,024,925.6490
POE	211+20.00	1,759,590.8845	1,024,923.3687

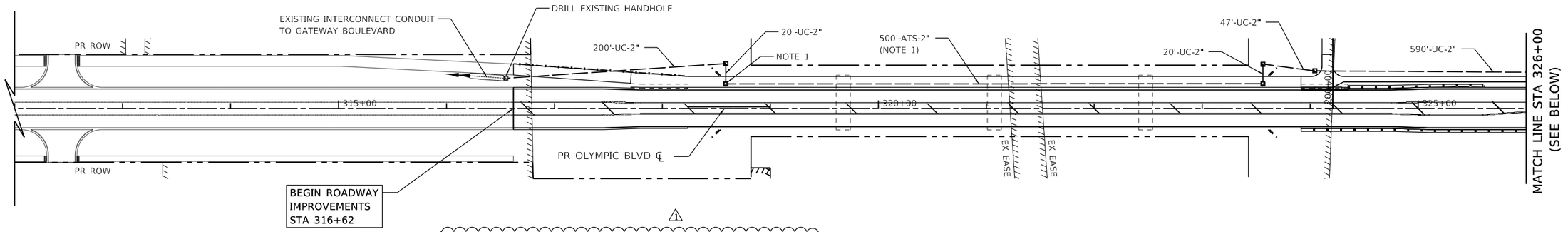
ALIGNMENT COORDINATES - ENTRANCE			
	STATION	N	E
POB	0+00.00	1,758,112.0999	1,025,601.9885
PC	0+30.00	1,758,112.4417	1,025,631.9865
PI	0+75.00	1,758,112.9544	1,025,676.9836
PT	1+00.69	1,758,157.9515	1,025,676.4709
POE	2+30.00	1,758,287.2572	1,025,674.9976

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PATRICK

USER NAME = nschilling	DESIGNED - DJT	REVISED 1 - 4/4/2023 ADDENDUM 1	CITY OF JOLIET	OLYMPIC BOULEVARD ROADWAY IMPROVEMENTS ALIGNMENT, TIES, AND BENCHMARKS
	DRAWN - DJT	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED - NS	REVISED -		SCALE: 1" = 100' SHEET 1 OF 1 SHEETS STA. 310+00 TO STA. 337+00
PLOT DATE = 4/3/2023	DATE - 3/1/23	REVISED -		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	21-00544-00-PV	WILL	208	20
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

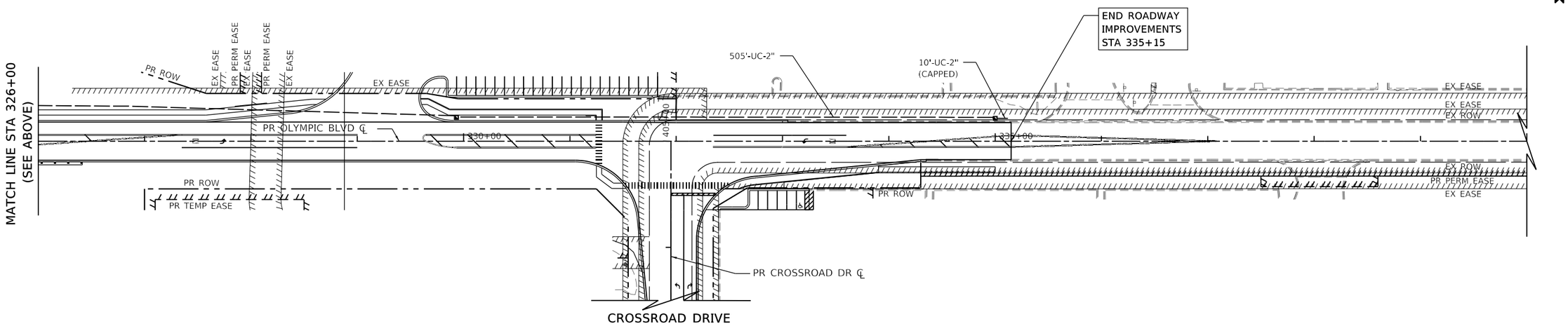


NOTES

1. STAINLESS STEEL JUNCTION BOXES SHALL BE MOUNTED ON THE FRONT FACE OF THE ABUTMENT WALLS AT THE LOCATIONS SHOWN ON THE BRIDGE PLANS (STRUCTURE NO. 099-8301). THE PVC COATED CONDUIT SHALL BE INSTALLED ON THE BOTTOM OF THE BRIDGE DECK USING CONDUIT CLAMPS. SEE BRIDGE PLANS FOR ADDITIONAL INFORMATION.

INTERCONNECT SCHEDULE OF QUANTITIES:

PAY ITEM	UNIT	QNTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1392
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	500
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 8"	EACH	2
HANDHOLE	EACH	5
DRILL EXISTING HANDHOLE	EACH	1



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CIVILTECH

USER NAME = nschilling	DESIGNED - JJE	REVISED 1 - 4/4/2023 ADDENDUM 1	
	DRAWN - MC	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - JJE	REVISED -	
PLOT DATE = 4/3/2023	DATE - 3/1/23	REVISED -	

CITY OF JOLIET

OLYMPIC BOULEVARD ROADWAY IMPROVEMENTS
INTERCONNECT PLAN

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 314+92.46 TO STA. 340+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	21-00544-00-PV	WILL	208	77
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

MEETING MINUTES

Meeting date / time: 3/30/2023 - 1:30 PM

Meeting location: City of Joliet Conference Room

Meeting Purpose: Optional Pre-Bid Meeting

Chairperson: Lisa Dorothy

Project: Olympic Boulevard

MEETING TOPICS

1.0 Introductions

Attendees introduced themselves. See sign in sheet for attendee list.

2.0 Bid Opening

Bids will be opened at 10:00 am on Monday, April 10, 2023 at 150 West Jefferson Street, Joliet.

3.0 Minority Participation Goals

The City of Joliet required 10% minority participation in contracts over $100,000. In an effort to track this information better, the City of Joliet will be requiring all GENERAL CONTRACTS to submit to a complete list of subcontractors they intend to use on the awarded project at the pre-construction meeting. The issuance of this sub-contractor list will help the City ensure that minority requirements are met as well as prevailing wages. The sub-contractor list should include the dollar amount or percentage of this contract for the work the sub-contractor is responsible. In addition, the specification states that monthly certified payroll records are to be submitted to the Engineer.

4.0 Scope of Work

Work on this project includes topsoil, seeding, concrete curb and gutter, driveway pavement, sidewalk, guardrail, traffic barrier terminals, new 60’ x 16’ pedestrian bridge, new 4 span (112’-10-½”; 140’-0”; 140’-0”; 112’-10 ½”) steel plate girder bridge on semi-integral abutments and approach roadway work, cofferdam, storm sewer work, water main, lighting, pavement resurfacing, pavement construction, light poles and foundations, traffic signal improvements, sidewalk, and multi-use path, and all materials, labor, equipment, and all incidental and collateral work necessary to complete the project as shown on the plans and described herein.

5.0 Adjacent Projects

Olympic Boulevard west of this project
Advanced Tree Removal Project – Trees are cut down. Clearing of material and restorative work to be completed.
Houbolt Road, I-80 (DDI) to US Route 6
Future Houbolt Road/Olympic Boulevard Project – Anticipated for advertisement in late summer or early fall.

MEETING MINUTES

Meeting date / time: 3/30/2023 - 1:30 PM

Meeting location: City of Joliet Conference Room

Meeting Purpose: Optional Pre-Bid Meeting

Chairperson: Lisa Dorothy

Project: Olympic Boulevard

6.0 Construction Schedule

Completion Date: April 1, 2024 + 10 Working Days

7.0 Environmental Considerations

Wetlands and Waters of the US – Permits from USACE and Will-South Cook Soil & Water Conservation District (pre-construction meeting required with WSCSWCD)

8.0 Olympic Boulevard Bridge

New 4 span (112'-10-½"; 140'-0"; 140'-0"; 112'-10 ½") steel plate girder bridge supported by wall-type piers and semi-integral abutments.

9.0 Recommended Bridge Construction Method

Launching method recommended due to minimizing environmental impacts. The reason launching is recommended is to minimize impacts to wetlands and sensitive environmental resources in the vicinity of the bridge. Incremental launching would be done from east to west, for superstructure construction once all piers and abutments are built, using a rear-thrust system. Launching would be done for half the bridge at a time (girders 1-3 first followed by girders 4-6). After launching, stage 3 includes crossframes, formwork, and reinforcement between girders 3 and 4 and stage 4 includes concrete deck pour and parapets. The contractor shall present a detailed launching sequence, including computations and detailed drawings, to be submitted to the engineer for review as part of the shop drawings.

10.0 Right-of-Way

Parcels 5, 6, 7, 8, 22 - Agreement has been reached with property owners on all 5 parcels and the final paperwork and City approvals are in process.

11.0 Available Reports

Preliminary Site Investigation (PSI)
Preliminary Environmental Site Assessment (PESA)
Soils/Geotechnical Reports
FAA Form 7460-1

MEETING MINUTES

Meeting date / time: 3/30/2023 - 1:30 PM

Meeting location: City of Joliet Conference Room

Meeting Purpose: Optional Pre-Bid Meeting

Chairperson: Lisa Dorothy

Project: Olympic Boulevard

12.0 Electronic Data Files Available

The City will work with the successful contractor to provide appropriate electronic files upon contract award.

13.0 Utility Relocations

Pre-Stage
Nicor – Done with relocates
AT&T – Have a permit but have not started their relocation
Comcast – Have a permit and currently on site, started on their relocation this week
Stage 1
ComEd – Coordination ongoing, waiting on their revised drawings

14.0 Addenda

None have been issued to date. All questions submitted must be answered by addendum. No addendums can be issued less than 48 hours before the bid opening. If the City is in a situation where they need to issue one within that timeframe, then the City will have to change the bid opening date and time to allow for 48 hours from issuance of the addendum to the bid opening date.

15.0 Written Questions Received to Date

Question 1: We are asking for more time to prepare our bid submittal due to the launching procedure/erection plan for the bridge structural steel that needs to be designed and engineered as required for this project. Also, the bid date falls on a Monday, vendor quotations are typically submitted and analyzed the day prior to the bid due date. For all these reasons, we are requesting a 1 to 2 week bid date extension and also have the date moved from a Monday.

Question 2: Can I please get a copy of the Soils/Geotechnical Report for the below project?

Responses will be issued by the City via addendum.

16.0 Questions/Discussion

Additional questions and responses are included via addendum.

Question: Steel for the bridge is not anticipated until the first quarter of 2024 for delivery per discussions with fabricators. Can the required project completion date be extended?

MEETING MINUTES

Meeting date / time: 3/30/2023 - 1:30 PM

Meeting location: City of Joliet Conference Room

Meeting Purpose: Optional Pre-Bid Meeting

Chairperson: Lisa Dorothy

Project: Olympic Boulevard

Response: The contract completion date will be reviewed by the City and if revised, will be issued as part of the addendum.

Question: While bridge launching is recommended, can other methods be considered?
Response: Other methods can be considered. If other methods are proposed they must conform to the permitted footprint for construction activities as shown in the contract documents and conform to the all the stipulations in the contract documents, specifications, and addenda, including the specified construction schedule for completion. This will be further clarified in an addendum.

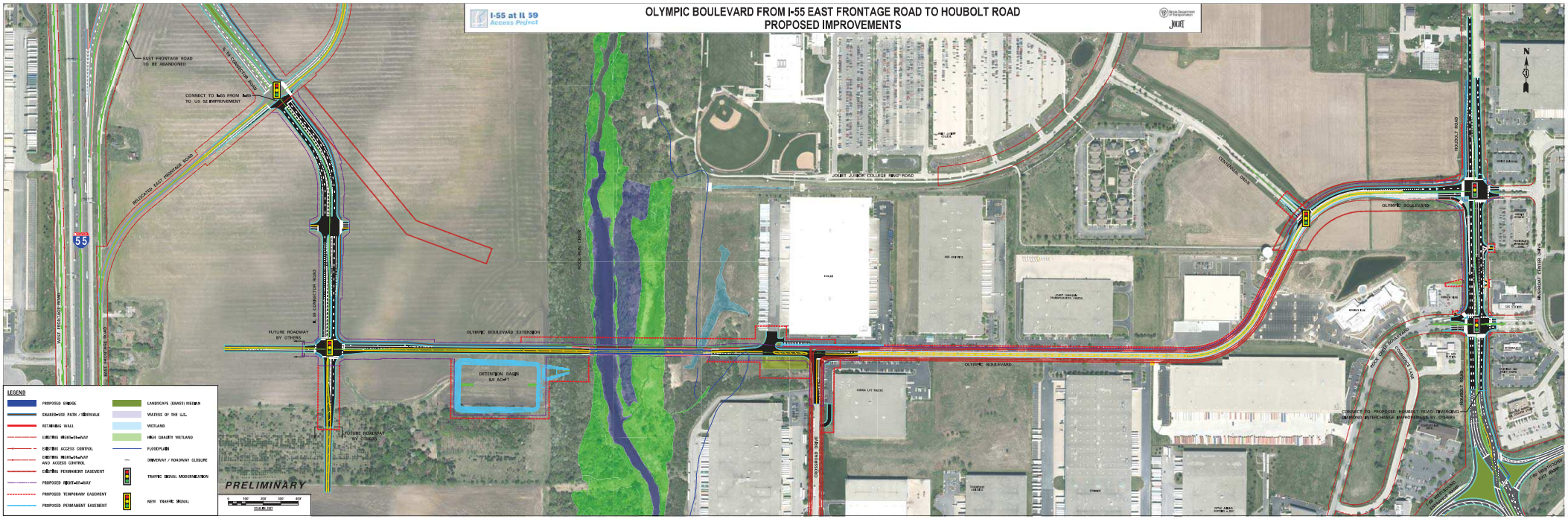
Question: On sheet 112, strip seal is mentioned, but there is no pay item.
Response: This will be addressed via addendum.

Question: The contract plans specify launching in two stages. Can this be done in one?
Response: Yes, as long as details and calculations are performed to support this.

The City stated that any and all questions should be submitted via email to Purchasing@Joliet.gov and the contract name and number should be listed in the subject line of the email.

17.0 Attachments

1. Meeting Exhibits.
2. Meeting Attendance Record.


I-55 at IL 59 Access Project
OLYMPIC BOULEVARD FROM I-55 EAST FRONTAGE ROAD TO HOUBOLT ROAD
PROPOSED IMPROVEMENTS
JOLIET
EAST FRONTAGE ROAD TO BE ABANDONED
CONNECT TO I-55 FROM IL 59 TO US 52 IMPROVEMENT
IL 59 CONNECTOR ROAD
RELOCATED EAST FRONTAGE ROAD
WEST FRONTAGE ROAD
EAST FRONTAGE ROAD
55
FUTURE ROADWAY BY OTHERS
OLYMPIC BOULEVARD EXTENSION
DETENTION BASIN 5.5 AC-FT
ROCK RUN CREEK
JOLIET JUNIOR COLLEGE ROAD
CENTENNIAL DRIVE
OLYMPIC BOULEVARD
HOUBOLT ROAD
BROADWAY STREET (RTE 59)
ROCK RUN CROSSING
COMMERCE LANE
CROSSROAD DRIVE
CONNECT TO PROPOSED HOUBOLT ROAD DIVERGING DIAMOND INTERCHANGE BY OTHERS
N
LEGEND
PROPOSED BRIDGE
SHARED-USE PATH / SIDEWALK
RETAINING WALL
EXISTING RIGHT-OF-WAY
EXISTING ACCESS CONTROL
EXISTING RIGHT-OF-WAY AND ACCESS CONTROL
EXISTING PERMANENT EASEMENT
PROPOSED RIGHT-OF-WAY
PROPOSED TEMPORARY EASEMENT
PROPOSED PERMANENT EASEMENT
LANDSCAPE (GRASS) REGION
WATERS OF THE U.S.
WETLAND
HIGH QUALITY WETLAND
FLOODPLAIN
DRIVEWAY / ROADWAY CLOSURE
TRAFFIC SIGNAL MODERNIZATION
NEW TRAFFIC SIGNAL
PRELIMINARY

JOLIET JUNIOR COLLEGE

WETLAND #17

WETLAND #8

ROCK RUN CREEK

WETLAND SITE 8

WETLAND #8

PR BIKE PATH

WETLAND #16

PR TEMP EASEMENT

WETLAND #8

WETLAND IMPACT - TEMPORARY

EASEMENT

PR TEMP EASEMENT

EAST ABUTMENT

PR TEMP EASEMENT

PR PERM EASEMENT

WEST ABUTMENT

PIER #1

PIER #2

PIER #3

PR ROW

PR ROW

OLYMPIC BLVD

PR ROW

PR ROW

PR TEMP EASEMENT

PR TEMP EASEMENT

30" RCP

PR PERM EASEMENT

COFFERDAM

TEMPORARY ACCESS ROAD

WETLAND IMPACT - PERMANENT

WETLAND IMPACT - TEMPORARY

PR TEMP EASEMENT

0 100 200 300

SCALE IN FEET

PATRICK ENGINEERING

3/30/2023

EXHIBIT - WETLAND IMPACTS

PATRICK ENGINEERING

MEETING ATTENDANCE RECORD

PROJECT: OLYMPIC BOULEVARD PURPOSE: PRE-BID MTG.

DATE: 3/30/23 LOCATION: JOLIET CITY HALL PATRICK PROJECT NO: —

NAME	AGENCY / COMPANY	PHONE	EMAIL ADDRESS
Cindy Moore	D Construction	815-634-2455	cmoore@dconstruction.com
Ron Housman	D CONSTRUCTION	815 634 2555	r.housman@dconstruction.com
MICHAEL ROLLINS	WALSH CONSTRUCTION II	(312) 735-9325	mrollins@walshgroup.com
William Stroad	WALSH CONSTRUCTION II	(312)-852-9594	Wstroad@walshgroup.com
Jeff Meagher	Herlihy Mid-Continent Co	630-378-1000	jeff@hmcco.net
DARREN TONARELLI	LORIG CONSTRUCTION	847-298-0360	estimating@lorigconstruction.com
LUKE KESSLING	DUNNET BAY CONST.	779.435.3970	L.KESSLING@DUNNETBAY.NET ESTIMATING@DUNNETBAY.NET
LISA DOROTHY	CITY OF JOLIET	815 724 4211	LDOROTHY@JOLIET.GOV
SEAN MIKOS	CITY OF JOLIET	815.724.4200	smikos@joliet.com
BRENT GIESEN	CIVILTECH	630-878-7641	bgiesen@civiltechinc.com
JIM EWERS	CIVILTECH	630.735.3383	jewers@civiltechinc.com
Pat Shea	Kraemer North America	815-200-2216	pshea@kraemerna.com
Chase Heinberg	Kraemer NA	815 543 9370	cheinberg@kraemerna.com
Greg Ruddy	City of Joliet	815-724-4216	gruddy@joliet.gov
Jim Testin	Cullinan Properties	815-744-0840	jtestin@cullprop.com
MATT BOOMSMA	P.T. FERRO	615-726-6284	estimating@ptferro.com
RUSS LUBASH	COJ	815 724 4200	RLUBASH@JOLIET.GOV

PATRICK
ENGINEERING

MEETING ATTENDANCE RECORD

PROJECT: _____ PURPOSE: _____

DATE: _____ LOCATION: _____ PATRICK PROJECT NO: _____

NAME	AGENCY / COMPANY	PHONE	EMAIL ADDRESS
Sophia Ahmed	Patrick Engineering	312-201-7908	sahmed@patrickco.com
JARROD CEBULSKI	" "	630-816-7334	JCEBULSKI@PATRICKCO.COM
Nick Schilling	" "	630-795-7299	nschilling@patrickco.com

STRUCTURE GEOTECHNICAL REPORT
OLYMPIC BOULEVARD BRIDGE OVER ROCK RUN CREEK
STRUCTURE NO. 099-8301
CITY OF JOLIET, ILLINOIS

Prepared: 11/18/2021
Revised: 08/08/2022

INTERRA, INC.
600 Territorial Drive, Suite G, Bolingbrook, IL 60440
Phone: (630) 754-8700, Fax: (630) 754-8705
By: Sanjeev Bandi
Email: sbandi@interraservices.com
www.interraservices.com

Prepared for:

Patrick Engineering
4970 Varsity Drive
Lisle, Illinois 60532

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STRUCTURE GEOTECHNICAL REPORT
OLYMPIC BOULEVARD BRIDGE OVER ROCK RUN CREEK
STRUCTURE NO. 099-8301
CITY OF JOLIET, ILLINOIS

1.0 INTRODUCTION

It is proposed that a new bridge extend Olympic Boulevard west over the Rock Run Creek to develop a new East-West connection between Houbolt Road and the I-55 East Frontage Road. The main goal in design of the new bridge is to provide a cost-effective solution that can be built quickly with long-term durability and minimum impact to wetlands and floodplains located at project site.

2.0 PROJECT SUMMARY

City of Joliet, Division of Transportation tasked Patrick Engineering Inc. (CONSULTANT) to perform Phase II Engineering to finalize the Olympic Boulevard Bridge project in Joliet, Illinois. Interra, Inc. (SUBCONSULTANT) was tasked by the CONSULTANT to perform Geotechnical Subsurface Soil investigation to identify soil conditions to aid in the foundation design of the bridge. The proposed bridge is a 4-span with semi-integral abutments with a total length of 510' back-to-back of abutments, with the two outer spans measuring 115' each and the two interior spans measuring 140' each. The proposed width of the bridge is 49'-7" out-to-out which includes a 10' wide shared use path along the north side of the bridge.

3.0 SITE DESCRIPTION

The project site is located in Will County, within the limits of City of Joliet. The site is located approximately 0.5 mile east, and 0.5 mile north of the intersection of I-80 and I-55, within Troy Township defined as T35N R9E of the Third Principal Meridian

3.1 Geology

At ground surface there exists Quaternary aged unconsolidated recent fill material and glacially derived sediments whose thickness ranges from one to eight feet. The unconsolidated sediments consist of topsoil of the developing modern soil profile, and variable thicknesses of glacial fluvial, glacial lacustrine, and subglacial till deposits.

Below the unconsolidated sediments are sequences of carbonate bedrock of the Silurian System, from the Niagaran Series. The majority of the shallow bedrock in this area is of the Joliet Formation which is predominately dolomite rock. The dolomite rock in this area is moderately to highly argillaceous. It is speculated that the shallow bedrock here is of the Brandon Bridge Member of the Joliet Formation. The top one to seven feet of the bedrock surface is moderately to very weathered and fractured. Beneath the top weathered zone of bedrock is relatively strong and competent, argillaceous to highly argillaceous dolomite.

In all the six boreholes, there is an interbedded interval of Claystone, Shale and argillaceous Dolomite, that varies in thickness from approximately four feet to more than seventeen feet thick. This interval is moderately to very fractured, and weak, and may correspond to a persistent Green Shale bed that occurs near the middle of the Brandon Bridge Member of the Joliet Formation. In boring OB-BSB-01 the top of weak fractured interval is at approximately 18-feet below ground surface. The bottom of the weak, fractured interval was not encountered. This interval is at least 17-feet thick at OB-BSB-01. Beneath the weak, fractured interval encountered in borings OB-BSB-02 through OB-BSB-05, the bedrock is relatively strong and competent dolomite bedrock.

3.1 Mining Activity

Based on the Illinois State Geological Survey (ISGS) Will County Coal Mine Map (2019), the project area is not identified as coal producing area. Therefore, no past coal mining activities may have taken place at the project site.

3.2 Seismic Activity

USGS National Seismic Hazard Maps (AASHTO LRFD, Figure 3.10.2.1-1) indicate a Peak Ground Acceleration (PGA) of 5% of gravity, with a 7% probability of exceedance in 75 years. The project area has no active, major faults (Kolata, 2005).

4.0 FIELD INVESTIGATION

A total of six (6) borings have been performed for this study by Interra. The locations of the borings were determined after consultations with the CONSULTANT. The boring locations were established in the field as shown in the boring location plan. Please see Appendix A for Site Location Map and Borehole Location Plan. Geocon, a sub-contractor to Interra was tasked to drill the borings. Geocon contacted the local one-call utility clearance service (JULIE) to clear underground utilities. Diedrick D-50 Turbo ATV drill rig was used for drilling.

The borings were drilled and samples were tested in general accordance with the guidelines in the IDOT Geotechnical Manual. Soil sampling was performed per AASHTO T-206, "Penetration Test and Split Barrel Sampling of Soils". Sampling was performed at 2.5 foot. The soil samples were taken in conjunction with the Standard Penetration Test where a driving resistance to a standard 2" split-spoon samples indicates relative density of granular materials and consistency of cohesive soils. Also, RIMAC tests were performed on the recovered cohesive samples. Pocket penetrometer tests were performed in the field on soil boring cohesive soil samples that could not be tested with RIMAC. Water level readings were taken during drilling, immediately after the completion of drilling and twenty-four hours after the completion of drilling.

Bedrock was encountered at depths, ranging from 2 feet to 15.5 feet at the boring locations. Hence, rock coring was performed at boring locations to determine the quality of bedrock. The boreholes were backfilled with soil auger cuttings, followed by bentonite chips after the completion of drilling and recording twenty-four-hour water levels.

Table 1 summarizes the boring depth, depth of auger refusal and groundwater depth information.

Table 1 - Summary of Field Exploration

Boring	Surface Elevation (feet)	Depth (feet)	Auger Refusal (feet)	Rock Core (feet)	Groundwater During Drilling (feet)	Groundwater After Drilling (feet)	Groundwater 24 Hours After Drilling (feet)
OB-BSB-01B	560.00	68.0	8.0	8.0-68.0	-	-	-
OB-BSB-01	551.049	35.0	10.0	10.1-35.0	-	-	3.55
OB-BSB-02	540.224	18.0	2.0	2.0-18.0	*	*	*
OB-BSB-03	546.024	36.5	15.5	15.5-36.5	6.0	-	-
OB-BSB-04	543.959	25.0	5.0	5.0-25.0	-	-	-
OB-BSB-05	560.624	19.0	4.0	4.0-19.0	-	-	8.02

* Location OB-BSB-02 had 2.5 feet of surface water at the time of drilling.

5.0 LABORATORY TESTING

All laboratory testing was performed in accordance with IDOT and/or AASHTO standard methods for testing. Moisture content tests were performed for all soil samples. The rock cores were checked for Rock Quality Designation (RQD).

Soil profiles have been prepared for the boring logs for all the structure borings. The boring logs include the results of the laboratory testing. Included in the Appendix B of this report are the boring logs of all the boreholes.

6.0 SUMMARY OF CLIMATIC CONDITIONS

Borings OB-BSB-01 to OB-BSB-05 were drilled between 5/3/21 and 5/5/21. Boring OB-BSB-01B was drilled on 06/28/21. Observations made of precipitation during this time and three months preceding are provided in the Table 2. These observations were obtained from the Chicago Midway International Airport Weather Station - KILCHICA656 (Weather Underground) located in Illinois.

Table 2-Precipitation Data

Month	Monthly Total, inches	Monthly Average, inches
February, 2021	0.64	0.02
March, 2021	0.97	0.03
April, 2021	1.40	0.05
May, 2021	2.84	0.09

7.0 SUBSURFACE CONDITIONS

Subsurface soil conditions encountered are presented below:

- Location of OB-BSB-01B had black topsoil from surface to 4.0 feet below ground surface. This was followed by very dense sand up to a depth of 7.0 feet. This was underlain by very dense weathered bedrock to a depth of 8.0 feet below ground surface. Auger refusal was encountered at 8.0 feet depth. Rock coring was done between 8.0 feet and 68 feet. Water table was not encountered during and upon completion of drilling.
- Location of OB-BSB-01 had black topsoil from surface to 3.5 feet below ground surface. This was followed by medium dense silt, up to a depth of 4.0 feet. This was underlain by very dense weathered bedrock to a depth of 10 feet below ground surface. Auger refusal was encountered at 10 feet depth. Rock coring was done between 10.1 to 18.5 feet, 18.5 to 25 feet, and 25 to 35 feet. Boring was terminated at 35 feet. Water table was not encountered during and upon completion of drilling. Groundwater was observed at 3.5 feet below the ground surface, 24 hours after drilling.
- OB-BSB-02 was drilled on the riverbed, and there was 2.5 feet of standing water at the time of drilling. Medium dense, silt was encountered from ground surface to 1.5 feet below the ground surface. 1.5 to 2.0 feet was very dense, weathered bedrock. This was underlain by bedrock. Rock core was taken between 2.0 to 8.0 feet and 8.0 to 18.0 feet. Boring was terminated at 18 feet depth.

- At OB-BSB-03, below the 2 feet thick topsoil layer was one foot of medium dense sand. This was underlain by medium stiff clay to a depth of 5.5 feet below ground surface. This was followed by medium dense sandy loam up to a depth of 8.0 feet. 8.0 feet to 15.5 feet was weathered bedrock. Rock coring was done between 15.5 to 21.5 feet, 21.5 to 31.5 feet, and 31.5 to 36.5 feet. Boring was terminated at 36.5 feet depth. Water table was encountered at 6.0 feet depth during drilling. There was no ground water in the bore hole, immediately or 24 hours after drilling.
- At OB-BSB-04, below the one foot thick topsoil layer was very soft clay, up to a depth of 3 feet below ground surface. This was followed by very dense weathered bedrock, up to a depth of 5.0 feet. Bedrock was encountered at 5.0 feet. Rock coring was done between 5.0 to 15.0 feet and 15.0 to 25.0 feet. Boring was terminated at 25 feet depth. Water table was not encountered at this boring location.
- Location of OB-BSB-05, had one foot layer of topsoil, followed by 1.5 feet layer of very dense sand. Below this was weathered bedrock, up to a depth of 4 feet below ground surface. Auger refusal was encountered at 4.0 feet depth. Rock core was taken from 4.0 to 14.0 feet and 14.0 to 19.0 feet. Boring was terminated at 19.0 feet depth. Water table was not encountered during or immediately after drilling. Groundwater level was observed at 8.0 below ground surface, 24 hours after drilling.

Groundwater Information

Groundwater elevations were recorded during drilling, immediately after completion of drilling and 24 hours after boring was drilled at both boring locations. Depths at which groundwater was encountered are presented in Table 1. Due to the proximity of the borings to Rock Run Creek, fluctuations in water levels should be expected in the area. Generally, a change in color of soil from brown to gray indicates long term groundwater level. This color change was observed between the depths of 3.0 and 3.5 feet.

Seismic Considerations

The following seismic data is recommended in accordance with IDOT Geotechnical Manual,

AGMU 09.1 and the LRFD Bridge Design Specifications.

Soil Site Class: C

Seismic Performance Zone (SPZ): 1

Design Spectral Acceleration at a period of (T) of 1.0 sec, S_{D1} : 0.068g

Design Spectral Acceleration at a period of (T) of 0.2 sec, S_{DS} : 0.127g

Liquefaction Potential

According to AGMU 10.1 "Liquefaction Analysis Procedure", the site does not require a liquefaction analysis as it is not located in Seismic Performance Zones 2, 3 or 4.

8.0 ANALYSIS AND RECOMMENDATIONS

The anticipated reactions at the abutments and piers provided by PEI are shown in Table 3 below.

Table 3-Anticipated Reactions at Abutments and Piers

Forces/Moments		West Abutment (Drilled Shaft)	Pier 1	Pier 2	Pier 3	East Abutment
Vertical (kips)	Service	215	3055	3108	3062	2061
	Strength	296	4177	4229	4161	2271
Shear (kips)	Service	157	121	90	105	478
	Strength	185	102	97	102	606
Moment (kip-ft) Mxx/Mzz	Service	488	2803/5049	2307/5587	2618/5589	1096
	Strength	586	2546/8268	2868/8753	2617/8268	1221

Note: Values for piers are net and values for East abutment are gross

The foundation options considered are shallow foundations, drilled shafts and H-piles. Of these, driven H-piles are not considered suitable as pile fixity may not be achieved due to shallow bedrock. Therefore, H-piles were eliminated as a foundation option.

Drilled Shafts

At ground surface there exists Quaternary aged unconsolidated recent fill material and glacially derived sediments whose thickness ranges from one to eight feet. Below the unconsolidated sediments are sequences of carbonate bedrock of the Silurian System, from the Niagaran Series. The majority of the shallow bedrock in this area is of the Joliet Formation which is predominately dolomite rock. The dolomite rock in this area is moderately to highly argillaceous. The top one to seven feet of the bedrock surface is moderately to very weathered and fractured. Beneath the top weathered zone of bedrock is relatively strong and competent, argillaceous to highly argillaceous dolomite. In five of the six boreholes, boreholes OB-BSB-01 through OB-BSB-05, is an interbedded interval of Claystone, Shale and argillaceous Dolomite, that varies in thickness from approximately four feet to more than seventeen feet thick. This interval is moderately to very fractured, and weak, and may correspond to a persistent Green Shale bed that occurs near the middle of the Brandon Bridge Member of the Joliet Formation. Beneath the weak, fractured interval encountered in borings OB-BSB-02 through OB-BSB-05, the bedrock is relatively strong and competent dolomite bedrock.

Due to the highly variable thickness and elevation of this very fractured interval of the claystone, shale and the argillaceous dolomite along the bridge axis and presumably in the transverse direction, a drilled shaft option is feasible primarily with side resistance and the shafts will run longer. This may render the drilled shaft option uneconomical and thus not considered further except for the West abutment otherwise an abutment on a spread footing will have to excessive lateral forces because of the embankment height at this location.

Shallow Foundations

The Shallow foundation option is considered feasible because of the shallow depth to competent bedrock. Both the abutments and the piers could be supported on shallow foundations set into bedrock. PEI provided size 51’ x 13’ for the spread footing of the piers and 52’ x 13’ for the abutments. The maximum service bearing pressure at the bottom of the footing varied from 4 to 9 ksf (gross) and the maximum factored pressure varied from 5 to 12.2 ksf (gross). Based on

the recommended values for use by AASHTO LRFD (Table C10.6.2.5.1-1), a service limit state bearing pressure of 20 ksf is adopted to take into consideration the deeper broken bedrock and highly argillaceous rock. This value is more than both service and strength and service bearing pressures and is considered satisfactory.

Shallow foundations should be designed to resist overturning so that eccentricities of loading at the strength limit state will not exceed 3/8 of the corresponding footing dimensions. Foundations should also be designed to resist sliding caused by lateral or eccentric loading. Sliding friction between the bedrock and the footing will provide resistance to sliding. Resistance to sliding can also be provided by the passive pressure in front of the footing if the footing is keyed into the bedrock. To count on this passive resistance, the footing should be set in rock excavated with near-vertical sides and the footing is cast against undisturbed bedrock surface. To calculate the resistance to sliding, an unfactored (nominal) coefficient of sliding friction of 0.55 and a resistance factor of 0.8 are recommended. It is recommended that the footing is keyed in at least 18 inches into the competent bedrock with the final 12 inches of the excavation to neat lines of the footing. A nominal passive resistance equivalent fluid pressure 350 pcf and a resistance factor of 0.50 are recommended for the keyed in portion of the footing. Material excavated during the foundation construction at the spread footing locations can be placed and compacted for the spread foundation trench backfill.

Scour Potential

Scour elevations provided by the PEI are presented in Table 4 below.

Table 4 - Scour Elevations

Event Limit State	Design Scour Elevation (ft)					
	West Abutment	Pier 1	Pier 2	Pier 3	East Abutment	Item 113
Q100	560	538	538.5	536.5	558	8 (W & E Abut, Pier 2)
Q200	560	538	537.7	536.5	558	

Design	558	536	531	535	548	5(Pier 1 & Pier 3)
Check	558	536	531	535	548	

Settlement

The spread foundations will undergo negligible settlement (less than 1 inch).

Drilled Shafts

A spread footing was considered at for west abutment. Because of the abutment wall height, the lateral pressures from the embankment are estimated to be excessive. A drilled shaft option was recommended. From the initial design, the west abutment was moved 30 feet west. An additional boring OB-BSB-01B was later conducted and rock coring was performed below the weathered rock to a depth of 68 feet. Due to general variability of the rock, and low unconfined compressive strength of the intact rock specimens, and highly variable, interbedded and argillaceous nature of infillings, we recommend a minimum socket depth of 16.0 in rock (below weathered rock) for a 3.0 ft diameter socket. Vertical loads are assumed to be carried by the side resistance developed. Side resistance developed in the weathered rock is ignored. If required, the drilled shafts should use temporary casing. Socket diameter should be 6 in smaller than that of the cased portion. Construction of the sockets should be done using the wet excavation method as there is a potential for seepage from the fractured and weathered zones. To control seepage, a positive head should be maintained. A minimum of one percent reinforcement should be included. The center-to-center distance of the should be at least 2.5 times the diameter in the transverse direction (perpendicular to the bridge centerline). To account for effects of group interaction, a group reduction factor Pm of 0.8 is recommended . Settlement of the drilled shafts is estimated to be less than 0.25 in.

The following are the input properties for LPILE analysis.

Effective Unit Weight	82.6	pcf
RQD	40%	
krm	0.0005	
Uniaxial Comp. strength	700	psi
Young's Modulus	50000	psi

For the weathered rock, the following properties are recommended.

Effective Unit weight	65.0 pcf

Friction angle	32 deg
Lateral soil modulus, k	125 pci

Recommended bottom footing elevations and shaft tip elevations are presented in Table 5 below:

Table 5 – Recommended Footing and Shaft Tip Elevations

West Abutment	Pier 1	Pier 2	Pier 3	East Abutment
537.00 feet	536.00 feet	529.00 feet	535.00 feet	548.00 feet

9.0 CONSTRUCTION CONSIDERATIONS

Construction of the pile foundations and bridge abutments will require sheeting, bracing and groundwater control due to the proximity to the Rock Run Creek. We understand that the EWSE will be below the existing ground line at the spread footing locations at Pier 2, Pier 3 and the east abutment . Based on the borehole information, it is our opinion that water accumulating open excavations can be removed using sump pump method. It is anticipated that a coffer dam will be required to construct the shallow foundations at the location of Pier 1.

Drilled shafts

Drilled shafts should be constructed in accordance with IDOT Standard specifications. The contractor should submit a site-specific installation plan which shall be subject to revisions and review of the engineer. A full-sized test shaft should be installed which can be a production shaft. It is recommended that non-destructive testing (NDT) be performed to assess the test shaft and 1/3 of the remainder production shafts. NDT should include cross-hole sonic logging with at least one CSL tube for each foot of shaft diameter, with the tubes spaced equally around the inside of the reinforcement cage. All drilled shaft construction be observed and inspected by a full time experienced geotechnical engineer or inspector.

The construction monitoring shall be in accordance with the IDOT Standard Specifications, Special

Provisions and Contract Plans. Local, state and federal regulations and IDOT guidelines shall be followed for all excavations and construction.

Excavation for Foundations

Six bridge borings, four detention pond borings and two roadway subgrade were performed.

In general, the surficial soils consisted of topsoil followed, medium sand or silt followed by partially weathered rock (PWR) underlain by parent bedrock. The depth to parent bedrock varied from 2 feet to 20 feet with an average depth of 8 feet. The surficial topsoil, clay, sand and silt averaged about 4 feet thickness followed by the PWR. The average thickness of the PWR was about 4 feet. Auger refusal during the subsurface investigation is assumed to be indicative of parent bedrock. SPT sampling performed within the PWR registered blow counts between 50/5" to 50/2".

It is our opinion that the PWR would likely be rippable, although rippability greatly depends on the size of excavator, bucket and ripping claws. PWR with SPT N-value of up to 50/4"can generally be loosened and ripped using a D-8 or similar dozer equipped with a single-tooth ripper. In confined excavations, the PWR may be removed with a CAT 330 or equivalent excavator equipped with rock teeth. PWR exhibiting an N-value of above 50/3" will likely require rock excavation methods.

For excavation below the level of auger or spoon refusal rock excavation methods such as blasting or pneumatic equipment may be required.

10.0 LIMITATIONS

The analysis and recommendations submitted in this report are based upon the data obtained from six (6) soil borings performed at the locations indicated on the Borehole Location Plan and from any other information discussed in this report. This report does not reflect any variations that may occur between these boreholes. In performing subsurface explorations, specific

information is obtained at specific locations at specific times. It is a well-known fact that variations in soil and rock conditions exist on most sites between borehole locations. Also, groundwater levels vary from time to time. The nature and extent of variations may not become evident until the course of construction. If variations then appear evident, it will be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during construction period and noting the characteristics of any variations.

We appreciate the opportunity to be of service to you. Should you need additional information or clarifications, please call us at (630) 754-8700.

Yours truly,

Interra, Inc.

Ashok Guntaka, EI
Project Engineer

Reshma Chirakkara, Ph.D.
Staff Engineer

Sanjeev Bandi, Ph.D., PE
Principal Engineer

STATE OF ILLINOIS
SANJEEVAREDDY
BANDI
062-051187
LICENSED
PROFESSIONAL ENGINEER
Exp. 11/30/23

11.0 REFERENCES

- DuPage County Highway Department 1984, Plans, Profiles and details of proposed County Highway 21, Section 88-00265-00-BR, Geneva Road Bridge over W. Branch or DuPage River

- AASHTO , LRFD Bridge Design Specifications, 9th Edition 2020, American Association of State Highway and Transportation Officials, Washington, DC.

- IDOT 2020, Geotechnical Manual, Illinois Department of Transportation.

- IDOT 2016, Standard Specifications for Road and Bridge Construction. Illinois Department of Transportation.

- IDOT 2012, Bridge Manual, Bureau of Bridges and Structures, Illinois Department of Transportation.

- Kolata, D. R., 2005, Bedrock Geology of Illinois, Illinois Map 14, Illinois State Geological Survey.

- H.B. Willman, SUMMARY OF THE GEOLOGY OF THE CHICAGO AREA Circular 460, 1971 Illinois State Geological Survey

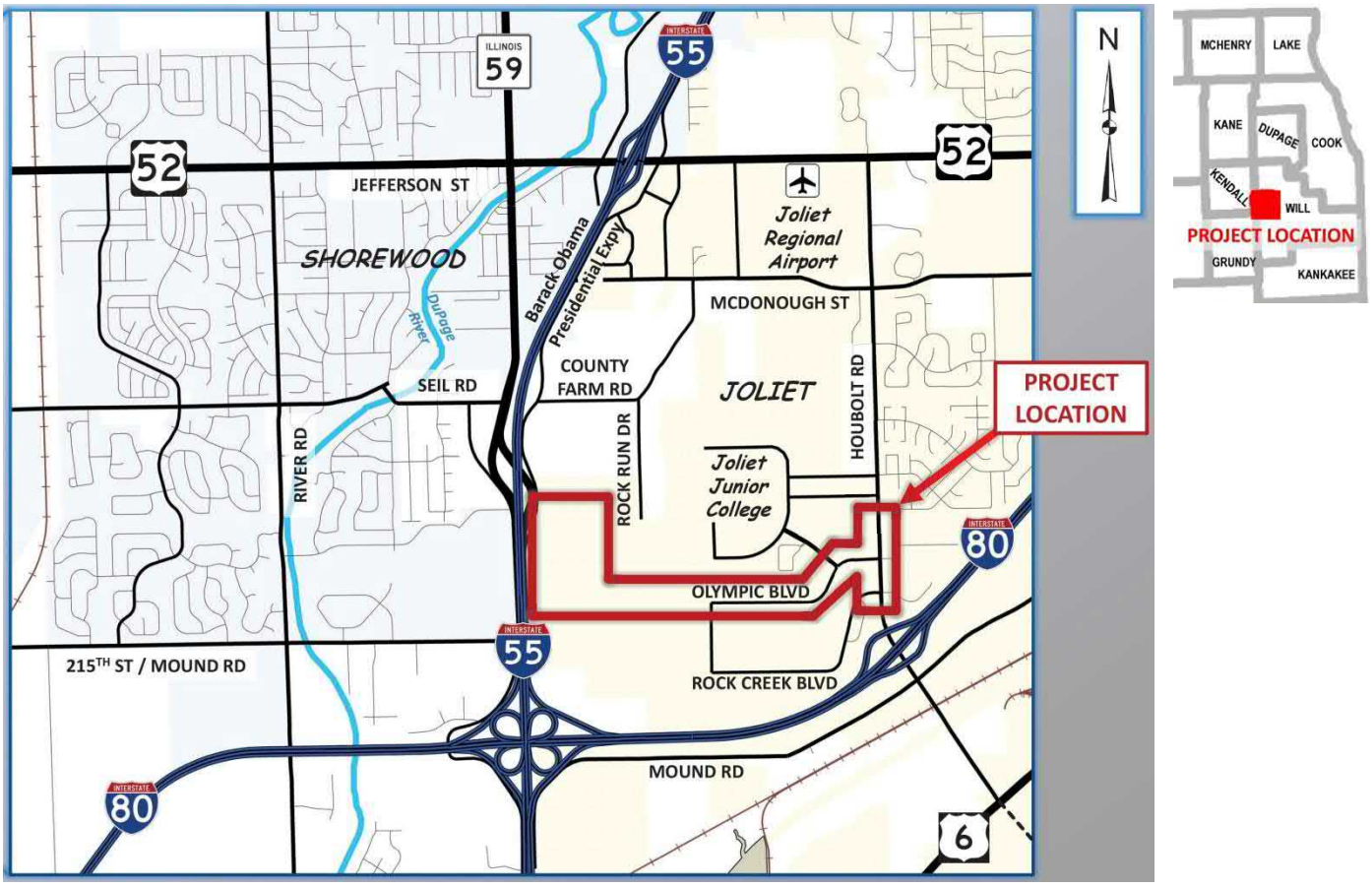
- Donald G. Mikulic, Michael L. Sargent, Rodney D. Norby, Dennis R. Kolata, Silurian Geology of the Des Plaines River Valley, Northeastern Illinois Nineteenth Annual Meeting, North-Central Section of the Geological Society of America, Northern Illinois University, DeKalb, Illinois, April 25-27, 1985 Sponsored by the Illinois State Geological survey

Appendix A

Site Location Map

Borehole Location Plan

PROJECT LOCATION MAP
4-SPAN PLATE GIRDER BRIDGE
SN: 099-8301
OLYMPIC BOULEVARD OVER RICK RUN CREEK
CITY OF JOLIET, WILL COUNTY, ILLINOIS
INTERRA PROJECT NO.: 8865
DRAWN BY: GAK. CHECKED BY: SB
DATE: 6/14/2021



Illinois Department of Transportation

JOLIET

Benchmark: Set cut "+" on light pole base, north side of Olympic Boulevard just east of Crossroad Dr. "Bus Stop #51". Elev. 567.438

Existing Structure: none

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)					
	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.	Item 113
Q100	560	538	538.5	536.5	558	W & E Abut.,
Q200	560	538	537.7	536.5	558	Pier 2 – 8,
Design	558	536	531	535	548	Pier 1 and
Check	558	536	531	535	548	Pier 3 – 5

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

FIELD UNITS

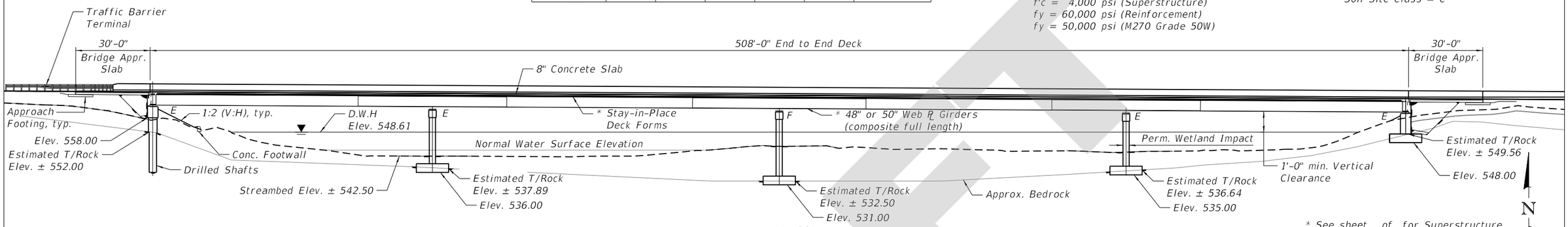
f'c = 3,500 psi (Substructure)
f'c = 4,000 psi (Superstructure)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

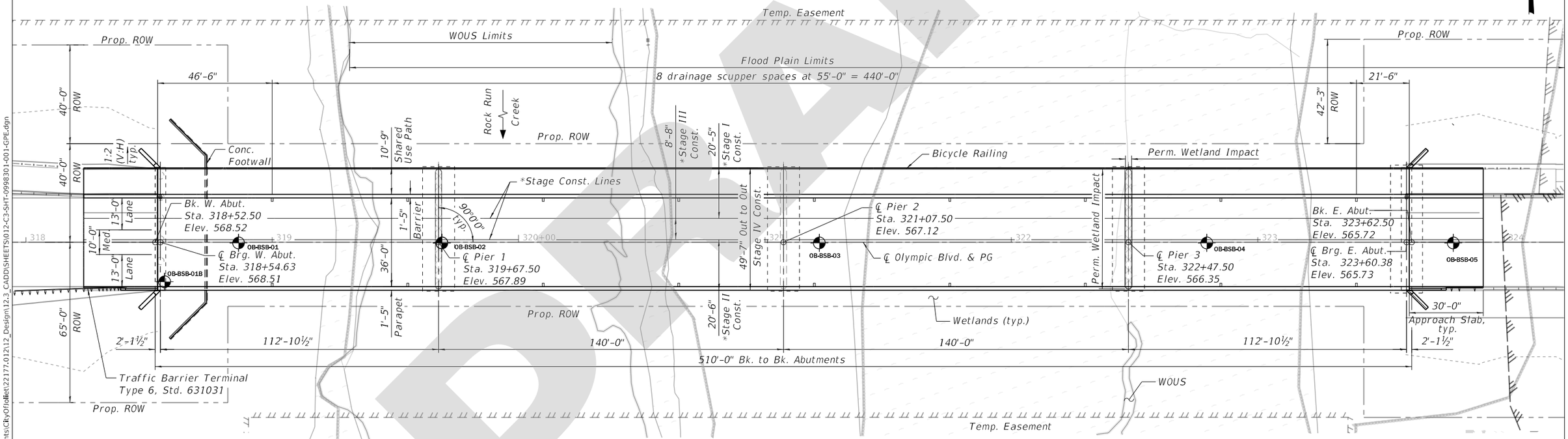
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.068g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.127g
Soil Site Class = C



* See sheet of for Superstructure Launching details.

ELEVATION



PLAN

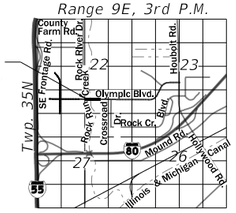
LEGEND

OB-BSB-00 — Boring Location
WOUS Limits
Wetlands

SOIL BORING LOCATION PLAN
4-SPAN PLATE GIRDER BRIDGE
SN: 099-8301
OLYMPIC BOULEVARD OVER RICK RUN CREEK
CITY OF JOLIET, WILL COUNTY, ILLINOIS
INTERRA PROJECT NO.: 8865
DRAWN BY: GAK. CHECKED BY: SB
DATE: 10/27/2021

Yinghong Cao P.E., S.E. Date
State of Illinois No. 081.008508
Expires 11/30/2022

Range 9E, 3rd P.M.



LOCATION SKETCH

GENERAL PLAN & ELEVATION
OLYMPIC BOULEVARD OVER ROCK RUN CREEK
MUN 904 – SECTION 21-00544-00-PV
WILL COUNTY
STATION 321+07.50
STRUCTURE NO. 099-8301

PV	REVISED	-
YC	REVISED	-
RMH	REVISED	-
YC	REVISED	-

CITY OF JOLIET

SHEET 1 OF 56 SHEETS

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904	21-00544-00-PV	WILL	51	1
		CONTRACT NO.		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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10/27/2021 12:18:50 PM

DRAFT

Appendix B

Soil Boring Logs

Interra, Inc.
600 Territorial Drive, Suite G
Bolingbrook, IL 60440
www.interraservices.com

SOIL BORING LOG

Date 6/28/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Abdu Sellah

SECTION 21-00544-00-PV **LOCATION** 1758467.303, 1024259.816

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-01B
Station 318+56
Offset 15.00ft RT
Ground Surface Elev. 560.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4' Black TOPSOIL				competent, slightly fractured.			
556.00				SHALE or CLAYSTONE, dark gray (N3), moderate to weak, fine grained, laminated to thinly bedded, fresh, competent, slightly fractured, with some evidence of deformed bedding surfaces.			
Very dense, yellowish brown SAND, Moist				536.00			
-5				SHALE or CLAYSTONE, dark gray (N3), mottled with greenish gray (5GY6/1) with light gray (N7), moderate to weak, fine grained, abundant turbidite fragments of shale with claystone, and minor argillaceous dolomite fragments that are resedimented and solidified into a fresh and competent bed, slightly fractured.			
553.00				-25			
WEATHERED BEDROCK.				532.00			
552.00				SHALE or CLAYSTONE, greenish gray (5G6/1) with some interbeded, strong, thin to medium bedded, light olive gray (5Y6/1) dolomite beds, moderate to weak, fine grained, laminated to thinly bedded, fresh to slightly decomposed, competent to slightly disintegrated, slightly fractured, some evidence of deformation.			
Top of competent rock ar 8.0'. DOLOMOITE, olive gray (5Y4/1), mottled with dark yellowish orange (10 YR 6/6), strong, microcrystalline to fine grained, moderately argillacious, thinly bedded, some laminations, moderately decomposed, slightly to moderately disintegrated and discolored along fracture faces, mostly horizontal fractures, with some clay filling in fractures, trace chert nodules.							
-10				-30			
-15				-35			
542.00							
DOLOMITE, olive gray (5Y4/1), strong, microcrystalline to fine grained, thinly beded to laminated, highly argillaceous, fresh,							
540.00 -20				-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 6/28/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Abdu Sellah

SECTION 21-00544-00-PV **LOCATION** 1758467.303, 1024259.816

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-01B
Station 318+56
Offset 15.00ft RT
Ground Surface Elev. 560.00 ft

Surface Water Elev. ____ ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)

518.00
DOLOMITE to DOLOMITIC LIMESTONE, strong, light olive gray (5Y6/1), mottled with light brownish gray (5YR6/1), fine grained to microcrystalline, thinly bedded with some greenish gray (5G 6/1) shale laminations and thin beds, fresh, slightly to moderately disintegrated, with pits and small vugs, trace secondary pyrite and calcite mineralization, slightly fractured.

-45

-50

-55

503.90
SHALE or CLAYSTONE, greenish gray (5G6/1), weak, fine grained, laminated to thinly bedded, some small dolomitic nodules and laminations, fresh, competent, unfractured.

502.00

-60

Very argillacious, shaley DOLOMITE to DOLOMITIC SHALE, dark gray (N3), strong with a few weak shale beds, fine grained, thinly bedded to laminated, fresh, competent, unfractured, very fossiliferous. *(continued)*

-65

492.00
End of boring at 68.0 feet.

-70

-75

-80

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

TOP



BOTTOM

OB-BSB-01B: RUN # 1: 8.0’ to 18.0’

TOP



BOTTOM

OB-BSB-01B: RUN # 2: 18.0’ to 28.0’

TOP



BOTTOM

OB-BSB-01B: RUN # 3: 28.0’ to 38.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

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PROJECT NO.: 8865

TOP



BOTTOM

OB-BSB-01B: RUN # 4: 38.0’ to 48.0’

TOP



BOTTOM

OB-BSB-01B: RUN # 5: 48.0’ to 58.0’

TOP



BOTTOM

OB-BSB-01B: RUN # 6: 58.0’ to 68.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

INTERRA, Inc.
PROJECT NO.: 8865

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SOIL BORING LOG

Date 5/5/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Eric Slusser

SECTION 21-00544-00-PV **LOCATION** 1758490.685, 1024288.635

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-01
Station 318+86
Offset 0.00ft CL
Ground Surface Elev. 551.05 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After 24 **Hrs.** 547.5 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
0	3		
	4		
	4		
547.55 ▽			
547.05	17		
	50/3"		
-5			
	50/5"		
	50/2"		
541.05 -10			
-15			
534.65			
533.15			
-20			

Loose, Black TOPSOIL

Medium Dense, Light Gray and Yellowish Brown SILT, Moist

Very Dense, Weathered BEDROCK

Auger Refusal at 10.0'

(10.0-16.4 feet) DOLOMITE, olive gray (5Y 4/1), strong, microcrystalline to fine grained, highly argillaceous, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous.

Rock Core Run 1, 10.1-18.5'
RQD=87.7%

(16.4-17.9 feet) DOLOMITE, light olive gray (5Y 6/1), strong, microcrystalline, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous, interbedded with a few thin beds of laminated greenish gray (5GY 6/1) SHALE or CLAYSTONE.

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
-25			
-30			
516.05 -35			
-40			

(17.9-35.0 feet) DOLOMITE to Dolomitic LIMESTONE, light olive gray (5Y 6/1) mottled with light brownish gray (5YR 6/1), strong, fine grained to microcrystalline, thinly bedded,slightly decomposed, moderately to intensely disintegrated, vuggy, pitted, intensely fractured, with greenish gray (5G 6/1) CLAY and CLAYSTONE filling fractures, and with secondary pyrite and calcite mineralization in voids and and on fracture faces, calcareous.

Note: From approximately 30.0 to 35.0 feet is mostly greenish gray (5G 6/1) laminated CLAYSTONE bed, or is filling a large void or fracture in rock as above 17.9 to 30.0 feet. There are a few interbedded thin beds of Dolomite or Dolomitic LIMESTONE or rock fragments in the Claystone matrix.

Rock Core Run 2, 18.5-25.0'
RQD=65.4%

Rock Core Run 3, 25.0-35.0'
RQD=42.5% for 25.0 to 30.0'
RQD=85.0% for 30.0 to 35.0'
(continued)

End of Boring at 35.0'
Backfilled boring with bentonite and soil cuttings.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

TOP



BOTTOM

OB-BSB-01: RUN # 1: 10.0’ to 18.5’

TOP



BOTTOM

OB-BSB-01: RUN # 2: 18.5’ to 25.0’

TOP



BOTTOM

OB-BSB-01: RUN # 3: 25.0’ to 35.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

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PROJECT NO.: 8865

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SOIL BORING LOG

Date 5/4/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Eric Slusser

SECTION 21-00544-00-PV **LOCATION** 1758491.949, 1024371.306

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-02
Station 319+69
Offset 0.00ft CL
Ground Surface Elev. 540.22 ft

Surface Water Elev. 542.72 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ **Hrs.** ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium dense, Black SILT, Wet	8		
	10		
538.72	8		
Very dense, Gray Shale (Weathered Bedrock) 538.22	50/4"		
Auger refusal at 2.0'			
(4.0-10.3 feet) DOLOMITE, olive gray (5Y 4/1), strong, microcrystalline to fine grained, highly argillaceous, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous.			
-5			
Rock Core Run 1, 2.0-8.0' RQD=42.4%			
-10			
529.92			
(10.3-12.6 feet) DOLOMITE, light olive gray (5Y 6/1), strong, microcrystalline, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous, interbedded with a few thin beds of laminated greenish gray (5GY 6/1) SHALE or CLAYSTONE. 527.62			
Note: Greenish gray (5G 6/1) Clay or Claystone bed from 12.4 to 12.6 feet).			
-15			
(12.6-20.0 feet) DOLOMITE to Dolomitic LIMESTONE, light olive gray (5Y 6/1) mottled with light brownish gray (5YR 6/1), strong, fine grained to microcrystalline, thinly bedded,slightly decomposed, moderately to intensely disintegrated, vuggy, pitted, moderately fractured, with greenish gray (5G 6/1) CLAY filling fractures, and with secondary pyrite and 520.22			
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
calcite mineralization, calcareous.			
Note: Fracture zone at top of interval from 12.6 to 14.0 feet. Fracture zone is not as fractured as in BSB-01.			
Note: Below 16.1 to 20.0 feet, rock appears relatively strong and competent.			
Rock Core Run 2, 10.0-20.0' RQD=90.6%			
-25			
End of Boring at 20.0' Backfilled boring with bentonite and soil cuttings.			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

TOP



BOTTOM

OB-BSB-02: RUN # 1: 4.0’ to 10.0’

TOP



BOTTOM

OB-BSB-02: RUN # 2: 10.0’ to 20.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

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SOIL BORING LOG

Date 5/3/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Eric Slusser

SECTION 21-00544-00-PV **LOCATION** 1758493.79, 1024524.45

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-03
Station 321+22
Offset 0.00ft CL
Ground Surface Elev. 546.02 ft

Surface Water Elev. ____ ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter 540.0 ft ▼
Upon Completion Dry ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Black TOPSOIL
545.02				
	2			Black TOPSOIL, Trace Gravel, Moist
544.02	5			
	7			Medium Dense , Pale Brown SAND, Trace Gravel, Moist
543.02				
	2			Medium Stiff, Light Gray and Yellowish Brown CLAY, Trace Gravel, Moist
	3			
-5	3	0.9 P		
540.52				
	3			Medium Dense, Pale Brown, SANDY LOAM, Clay Lenses, Wet ▼
	11			
	13			
538.02				
	15			Very Dense, Light Gray WEATHERED BEDROCK
	30			
-10	50			
	50/5"			
	50/2"			
-15				
530.52				
				Auger Refusal at 15.5'
				(13.5-20.2 feet) DOLOMITE, olive gray (5Y 4/1), strong, microcrystalline to fine grained, highly argillaceous, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous.
				Rock Core Run 1, 15.5-20.5' RQD=88.7%
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
525.82				(20.2-22.4 feet) DOLOMITE, light olive gray (5Y 6/1), strong, fine grained to microcrystalline, argillaceous, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous, interbedded with a few thin beds of laminated greenish gray (5GY 6/1) SHALE or CLAYSTONE.
523.62				(22.4-36.5 feet) DOLOMITE to Dolomitic LIMESTONE, light olive gray (5Y 6/1) mottled with light brownish gray (5YR 6/1), weak to strong, fine grained to microcrystalline, thinly bedded,slightly decomposed, moderately to intensely disintegrated, vuggy, pitted, moderately fractured, with greenish gray (5G 6/1) CLAY and CLAYSTONE filling fractures and voids, calcareous.
-25				
				Note: Fracture zone from 22.4 to 28.0 feet.
-30				
				Note: Rock is strong and competent below 28.0 feet.
				Rock Core Run 2, 20.5-30.5' RQD=52.9%
				Rock Core Run 3, 30.5-35.5' RQD=62.0%
-35				
509.52				
				End of Boring at 36.5' Backfilled boring with bentonite and soil cuttings.
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

TOP



BOTTOM

OB-BSB-03: RUN # 1: 13.5’ to 20.5’

TOP



BOTTOM

OB-BSB-03: RUN # 2: 20.5’ to 30.5’

TOP



BOTTOM

OB-BSB-03: RUN # 3: 30.5’ to 35.5’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

INTERRA, Inc.
PROJECT NO.: 8865

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SOIL BORING LOG

Date 5/3/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Eric Slusser

SECTION 21-00544-00-PV **LOCATION** 1758495.653, 1024681.654

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-04
Station 322+79
Offset 0.00ft CL
Ground Surface Elev. 543.96 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
542.96				Black Topsoil
	1			Very soft, Black CLAY, trace sand, trace roots, Moist
	1 1	0.3 P		
540.96				Very dense, Light Gray, WEATHERED BEDROCK
	9			
	24 50/3"			
538.96 -5				Auger Refusal at 5'
				(5.0-11.5 feet) DOLOMITE, olive gray (5Y 4/1), strong, microcrystalline to fine grained, highly argillaceous, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous.
				Rock Core Run 1, 5.0-15.0' RQD=32.5%
-10				
532.46				(11.5-13.5 feet) DOLOMITE, light olive gray (5Y 6/1), strong, microcrystalline, highly argillaceous, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous, interbedded with a few thin beds of greenish gray (5GY 6/1) SHALE or CLAYSTONE.
530.46				
-15				
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
523.56				(13.5-20.4 feet) SHALE or CLAYSTONE, greenish gray (5G 6/1) with some interbedded, strong, thin to medium bedded, light olive gray (5Y 6/1) Dolomite beds, moderate to weak, fresh, fine grained, laminated to thinly bedded, fresh to slightly decomposed, competent to slightly disintegrated, unfractured but but has evidence of deformation by bent and wavy laminations, calcareous.
522.46				
521.66				
-25				Rock Core Run 2, 15.0-25.0' RQD=89.6% *(continued)*
				(20.4-21.5 feet) DOLOMITE, olive gray (5Y 4/1) mottled with light olive gray (5Y 6/1), strong, microcrystalline to fine grained, highly argillaceous, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous, interbedded with greenish gray (5Y 6/1) SHALE or CLAYSTONE as above 13.5 to 20.4 feet.
514.96				
-30				(21.5-22.3 feet) CLAYSTONE, greenish gray (5G 6/1), very weak, fine grained, laminated to thinly bedded, fresh to slightly decomposed,slightly disintegrated, unfractured but breaks easily along bedding plane surfaces.
				(22.3- 29.0 feet) DOLOMITE to Dolomitic LIMESTONE, light olive gray (5Y 6/1) mottled with light brownish gray (5YR 6/1) and with greenish gray (5G 6/1), weak to strong, fine grained to microcrystalline, thinly bedded, slightly decomposed, moderately to intensely disintegrated, some pitting and vuggy, trace pyrite mineralization, intensely fractured with greenish gray Claystone filling fractures and voids.
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/3/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Eric Slusser

SECTION 21-00544-00-PV **LOCATION** 1758495.653, 1024681.654

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-04
Station 322+79
Offset 0.00ft CL
Ground Surface Elev. 543.96 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. ft

(29.0-44.0 feet) DOLOMITE to Dolomitic LIMESTONE, strong, light olive gray (5Y 6/1) mottled with light brownish gray (5YR 6/1), fine grained to microcrystalline, thinly bedded with some greenish gray (5G 6/1) SHALE laminations and thin beds, fresh, slightly disintegrated, with some pitting and vugs with trace secondary pyrite and calcite mineralization along bedding planes, slightly fractured, with a few healed subvertical fractures. *(continued)*

499.96

-45

-50

-55

-60

End of Boring at 44.0'
Backfilled boring with bentonite and soil cuttings.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

TOP



BOTTOM

OB-BSB-04: RUN # 1: 5.5’ to 14.0’

TOP



BOTTOM

OB-BSB-04: RUN # 2: 14.0’ to 24.0’

TOP



BOTTOM

OB-BSB-04: RUN # 3: 24.0’ to 34.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

INTERRA, Inc.
PROJECT NO.: 8865

TOP



BOTTOM

OB-BSB-04: RUN # 4: 34.0’ to 44.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

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SOIL BORING LOG

Date 5/4/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Eric Slusser

SECTION 21-00544-00-PV **LOCATION** 1758496.91, 1024781.73

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-05
Station 323+79
Offset 0.00ft CL
Ground Surface Elev. 560.62 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After 24 **Hrs.** 552.6 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Black TOPSOIL			
559.62			
Very Dense, Pale Brown SAND with Bedrock Cobbles	50/3"		
558.12			
Weathered BEDROCK			
556.62			
Auger Refusal at 4'			
-5			
(4.0-5.9 feet) DOLOMITE, dark yellowish orange (10YR 6/6), strong, microcrystalline to fine grained, argillaceous, laminated to thinly bedded, moderately decomposed, slightly to moderately disintegrated, fractured along horizontal bedding plane surfaces, calcareous.			
554.72			
552.72 ▽			
(5.9-7.9 feet) DOLOMITE, olive gray (5Y 4/1) mottled with dark yellowish orange (10YR 6/6), strong, microcrystalline to fine grained, moderately to highly argillaceous, laminated to thinly bedded, slightly decomposed along bedding plane fractures, slightly disintegrated, fractured along horizontal bedding plane surfaces, calcareous.			
-10			
(7.9-17.3 feet) DOLOMITE, olive gray (5Y 4/1) mottled with dark yellowish orange (10YR 6/6), strong, microcrystalline to fine grained, highly argillaceous, laminated to thinly bedded, fresh to slightly decomposed along bedding plane fractures, competent to slightly disintegrated, fractured along horizontal bedding plane surfaces and a few vertical fractures, slightly calcareous.			
-15			
543.32			
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
(17.3-39.4 feet) DOLOMITE, olive gray (5Y 4/1) mottled with light olive gray (5Y 6/1), strong, microcrystalline, laminated to thinly bedded, fresh, competent, unfractured, slightly calcareous, with a thin bed greenish gray (5GY 6/1) SHALE or CLAYSTONE.			
Note: At about 22.5 to 23.0 feet is a subvertical fracture filled with greenish gray clay.			
-25			
Note: No greenish gray Shale or Claystone fracture zone and no thick bed of greenish gray Shale or Claystone observed in this boring. *(continued)*			
-30			
-35			
521.22			
(39.4-41.6 feet) DOLOMITE, light			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/4/21

ROUTE Olympic Blvd (MUN 904) **DESCRIPTION** Olympic Blvd. Bridge over Rock Run Crk., Joliet, IL **LOGGED BY** Eric Slusser

SECTION 21-00544-00-PV **LOCATION** 1758496.91, 1024781.73

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. 099-8301
Station 321+07.50

BORING NO. OB-BSB-05
Station 323+79
Offset 0.00ft CL
Ground Surface Elev. 560.62 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After 24 **Hrs.** 552.6 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
olive gray (5Y 6/1), strong, fine grained to microcrystalline, argillaceous, laminated to thinly bedded, fresh, competent to slightly disintegrated with secondary pyrite mineralization along some bedding surfaces, unfractured, calcareous, interbedded with some thin beds and laminations of greenish gray (5GY 6/1) SHALE or CLAYSTONE. 519.02			
(39.4-41.6 feet) DOLOMITE, light olive gray (5Y 6/1), strong, fine grained to microcrystalline, argillaceous, laminated to thinly bedded, fresh, competent to slightly disintegrated with secondary pyrite mineralization along some bedding surfaces, unfractured, calcareous, interbedded with some thin beds and laminations of greenish gray (5GY 6/1) SHALE or CLAYSTONE. *(continued)* 518.32			
-45			
(41.6-42.3 feet) CLAYSTONE, greenish gray (5G 6/1), very weak, fine grained, laminated to thinly bedded, fresh, competent, slightly fractured with one subvertical fracture. 512.62			
-50			
(42.3-48.0 feet) DOLOMITE to Dolomitic LIMESTONE, weak to strong, light olive gray (5Y 6/1) mottled with light brownish gray (5YR 6/1) and with greenish gray (5G 6/1), fine grained to microcrystalline, thinly bedded, slightly decomposed, moderately to intensely disintegrated, some pitting and small vugs with trace pyrite mineralization, intensely fractured with greenish gray Clay and Claystone filling fractures and voids, trace pyrite mineralization on fracture faces.			
-55			
-60			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
(48.0-64.3 feet) DOLOMITE to to Dolomitic LIMESTONE, strong, light olive gray (5Y 6/1) mottled with light brownish gray (5YR 6/1), fine grained to microcrystalline, thinly bedded with some greenish gray (5G 6/1) SHALE laminations and thin beds, fresh, slightly disintegrated, with some pitting and vugs with trace secondary pyrite and calcite mineralization, slightly fractured. *(continued)* 496.32			
-65			
(64.3-66.4 feet) SHALE AND CLAYSTONE, greenish gray (5GY 6/1), moderate to weak, fine grained, thinly bedded to laminated, fresh, competent, unfractured, fossiliferous. 494.22			
(66.4-68.0 feet) DOLOMITE,olive gray (5Y 4/1), strong, fine grained to microcrystalline, highly argillaceous, laminated to thinly bedded, fresh, competent, unfractured, very fossiliferous. 492.62			
-70			
End of Boring at 68.0' Backfilled boring with bentonite and soil cuttings.			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

TOP



BOTTOM

OB-BSB-05: RUN # 1: 4.0’ to 14.0’

TOP



BOTTOM

OB-BSB-05: RUN # 2: 14.0’ to 23.0’

TOP



BOTTOM

OB-BSB-05: RUN # 3: 23.0’ to 33.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

INTERRA, Inc.
PROJECT NO.: 8865

TOP



BOTTOM

OB-BSB-05: RUN # 4: 33.0’ to 43.0’

TOP



BOTTOM

OB-BSB-05: RUN # 5: 43.0’ to 49.0’

TOP



BOTTOM

OB-BSB-05: RUN # 6: 49.0’ to 59.0’

BEDROCK CORE OLYMPIC BOULEVARD BRIDGE OVER ROCK RUN CREEK JOLIET, WILL COUNTY, ILLINOIS	INTERRA, Inc. PROJECT NO.: 8865

TOP



BOTTOM

OB-BSB-05: RUN # 7: 59.0’ to 68.0’

BEDROCK CORE
OLYMPIC BOULEVARD BRIDGE OVER
ROCK RUN CREEK
JOLIET, WILL COUNTY, ILLINOIS

INTERRA, Inc.
PROJECT NO.: 8865

INTERRA
Engineering • Inspection • Testing

600 Territorial Drive, Suite G
Bolingbrook, IL 60440

p: 630-754-8700
f: 630-754-8705

To: Mr. Jarrod Cebulski, PE
Patrick Engineering, Inc.
4970 Varsity Drive
Lisle, IL 60532-7200

From: Sanjeev Bandi, Ph.D, PE
Interra, Inc.
600 Territorial Drive, Suite G
Bolingbrook, IL 60440

Date: 6/10/2022

Subject: Geotechnical Report, Rock Run Trail Pedestrian Bridge Over Creek, Joliet, Illinois

1.0 INTRODUCTION

The new Rock Run Trail Bridge is a pedestrian bridge spanning a creek measuring 62'-6" back-to-back of abutments and 14' clear width. The bridge deck loading is expected to be 90psf and H10 with an estimated factored applied bearing pressure of 3700 psf. The bottom of the south abutment is anticipated at an elevation of 560.20 and that of the north abutment at 559.57. Appendix A contains the Site Location Map of the bridge and the General Plan and Elevation provided by the Client.

Please refer to the Structure Geotechnical Report of the Olympic Road Bridge over Rock Run Creek dated 11/18/2021 for Site Description, General Geology, and seismic considerations, Climatic conditions.

2.0 FIELD INVESTIGATION

Two borings have been performed for the bridge foundations. The locations of the borings were determined after consultations with the CONSULTANT. The boring locations were established in

the field as shown in the boring location plan in Appendix B. Geocon Professional Services (GEOCON), a sub-contractor to Interra was tasked to drill the borings. GEOCON contacted the local one-call utility clearance service (JULIE) to clear underground utilities. Diedrick D-50 Turbo ATV drill rig was used for drilling.

The borings were drilled and samples were tested in general accordance with the guidelines in the IDOT Geotechnical Manual. Soil sampling was performed per AASHTO T-206, "Penetration Test and Split Barrel Sampling of Soils". Sampling was performed at 2.5 foot. The soil samples were taken in conjunction with the Standard Penetration Test where a driving resistance to a standard 2" split-spoon samples indicates relative density of granular materials and consistency of cohesive soils. RIMAC tests were performed on intact recovered cohesive soil samples. Pocket penetrometer tests were performed on cohesive samples where RIMAC tests were not feasible.

Bedrock was encountered at depths ranging from 7 feet at the south boring to 8.5 feet at the north boring as determined by auger refusal. No bedrock coring was performed. The boreholes were backfilled with soil auger cuttings, followed by bentonite chips.

3.0 LABORATORY TESTING

Laboratory testing was performed in accordance with IDOT and/or AASHTO standard methods for testing. Moisture content tests were performed for all soil samples. The boring logs include the results of the laboratory testing. Boring logs are included in the Appendix B of this report.

4.0 SUBSURFACE CONDITIONS

Subsurface soil conditions encountered are presented below:

- Location of PDB-01 had 1 foot of black topsoil followed by 1 foot of hard black clay loam fill. Then Clay loam fill is underlain by very dense weathered bedrock to a depth of 7.0 feet below ground surface. Auger refusal was encountered at 7.0 feet depth.

- Location of PDB-02 had 1-foot black topsoil followed by 2 feet of hard black clay loam fill. The clay loam fill is underlain by very dense weathered bedrock to a depth of 8.5 feet below ground surface. Auger refusal was encountered at 8.5 feet depth.

5.0 ANALYSIS AND RECOMMENDATIONS

The anticipated reactions at the abutments by the Client is factored bearing pressure of 3700psf. The foundation options considered are shallow foundations, drilled shafts and H-piles. Of these the shallow foundations are considered feasible and economical because of the relatively low estimated bearing pressures and the shallow depth of the very dense weathered bedrock in relation to the proposed bottom elevations of the abutments.

Shallow Foundations

The Shallow foundation option is considered feasible because of the shallow depth to very dense weathered bedrock and competent bedrock below. Both the abutments could be supported on shallow foundations set into the weathered bedrock which is an Intermediate Geo Material (IGM) or into parent bedrock. Both the weathered bedrock and the parent bedrock will have a Factored Resistance Available of 5000 psf with a resistance factor of 0.45. If the footings are placed in the weathered bedrock, they should be placed at a minimum of four feet below final grade for frost protection.

Shallow foundations should be designed to resist overturning so that eccentricities of loading at the strength limit state will not exceed 3/8 of the corresponding footing dimensions. Foundations should also be designed to resist sliding caused by lateral or eccentric loading. Sliding friction between the footing and the IGM or bedrock as the case may be, will provide resistance to sliding. Resistance to sliding can also be provided by the passive pressure in front of the footing if the footing is keyed into the bedrock. To count on this passive resistance, the footing should be set in rock excavated with near-vertical sides and the footing is cast against undisturbed bedrock surface. To calculate the resistance to sliding, an unfactored (nominal) coefficient of sliding friction of 0.55 and a resistance factor of 0.8 are recommended. If the footing to be

founded on bedrock, it is recommended that the footing is keyed in at least 18 inches into the competent bedrock with the final 12 inches of the excavation to neat lines of the footing. A nominal passive resistance equivalent fluid pressure 350 pcf and a resistance factor of 0.50 are recommended for the keyed in portion of the footing. The spread foundations will undergo negligible settlement (less than 1 inch).

Scour Potential

No scour elevations were provided by the Client.

6.0 CONSTRUCTION CONSIDERATIONS

The construction monitoring shall be in accordance with the IDOT Standard Specifications, Special Provisions and Contract Plans. Local, state and federal regulations and IDOT guidelines shall be followed for all excavations and construction.

Excavation for Foundations

In general, the surficial soils consisted of topsoil followed, medium sand or silt followed by partially weathered rock (PWR) underlain by parent bedrock. The depth to parent bedrock varied from 7 feet 8.5 feet below ground surface. The average thickness of the PWR was about 5 feet. Auger refusal during the subsurface investigation is assumed to be indicative of parent bedrock. SPT sampling performed within the PWR registered blow counts between 50/3" to 50/2".

It is our opinion that the PWR would likely be rippable, although rippability greatly depends on the size of excavator, bucket and ripping claws. PWR with SPT N-value of up to 50/4"can generally be loosened and ripped using a D-8 or similar dozer equipped with a single-tooth ripper. In confined excavations, the PWR may be removed with a CAT 330 or equivalent excavator equipped with rock teeth. PWR exhibiting an N-value of above 50/3" will likely require rock excavation methods.

For excavation below the level of auger or spoon refusal, rock excavation methods such as

blasting or pneumatic equipment may be required.

7.0 LIMITATIONS

The analysis and recommendations submitted in this report are based upon the data obtained from two (2) soil borings performed at the locations indicated on the Borehole Location Plan and from any other information discussed in this report. This report does not reflect any variations that may occur between these boreholes. In performing subsurface explorations, specific information is obtained at specific locations at specific times. It is a well-known fact that variations in soil and rock conditions exist on most sites between borehole locations. Also, groundwater levels vary from time to time. The nature and extent of variations may not become evident until the course of construction. If variations then appear evident, it will be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during construction period and noting the characteristics of any variations.

We appreciate the opportunity to be of service to you. Should you need additional information or clarifications, please call us at (630) 754-8700.

Yours truly,

Interra, Inc.

Ashok Guntaka, EI
Project Engineer

Reshma Chirakkara, Ph.D.
Staff Engineer

Sanjeev Bandi, Ph.D., PE
Principal Engineer

06/10/22

STATE OF ILLINOIS
SANJEEVAREDDY
BANDI
062-051187
LICENSED
PROFESSIONAL ENGINEER

8.0 REFERENCES

- AASHTO , LRFD Bridge Design Specifications, 9th Edition 2020, American Association of State Highway and Transportation Officials, Washington, DC.

- IDOT 2020, Geotechnical Manual, Illinois Department of Transportation.

- IDOT 2016, Standard Specifications for Road and Bridge Construction. Illinois Department of Transportation.

- Structure Geotechnical Report, Olympic Boulevard Bridge Over Rock Run Creek, Structure No. 099-8301, City of Joliet, Illinois, dated 11/18/2021.

Appendix A

Site Location Map

General Plan and Elevation

LEGEND

- PR SHARED-USE PATH (ALTERNATE 1)
- PR SHARED-USE PATH (ALTERNATE 2)
- EX WETLAND

ROCK RUN BRIDGE

ROCK RUN

PROPERTY LOT LINE

200+00

PR BIKE PATH ℄

205+00

PROPERTY LOT LINE

PR OLYMPIC BLVD ℄

325+00

10' SHARED-USE PATH

ALTERNATE 1 (RECOMMENDED ALTERNATE)

210+00

PROPOSED PEDESTRIAN BRIDGE

EXISTING OVERFLOW WEIR WITH LOW-FLOW CULVERT

EXISTING DETENTION POND

ROCK RUN TRAIL

PROPERTY LOT LINE

10' SHARED-USE PATH

ALTERNATE 2

EX FIRE HYDRANT

EX FENCE

PROPERTY LOT LINE

13.3'

13.3'

5.6'

OLYMPIC BOULEVARD

330+00

CITY OF JOLIET

OLYMPIC BOULEVARD
(ROCK RUN BRIDGE TO HOUBOLT ROAD)

PROPOSED SHARED-USE PATH ALTERNATES

CIVILTECH

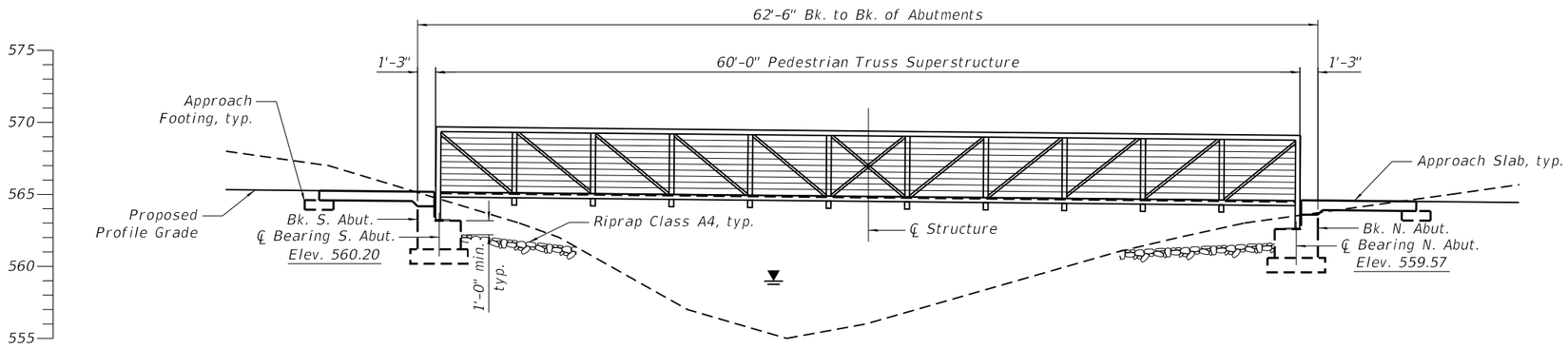
EXHIBIT A

Date: 06/14/21
Scale: 1" = 40'

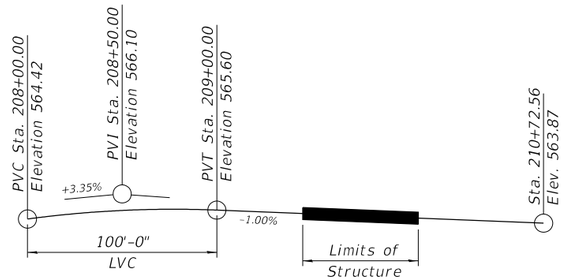
Benchmark:

Existing Structure: None.

Salvage: None.



ELEVATION



PROFILE GRADE

(Along ~ US Route 14)

PEDESTRIAN BRIDGE LOADING 90 PSF
LOADING H10

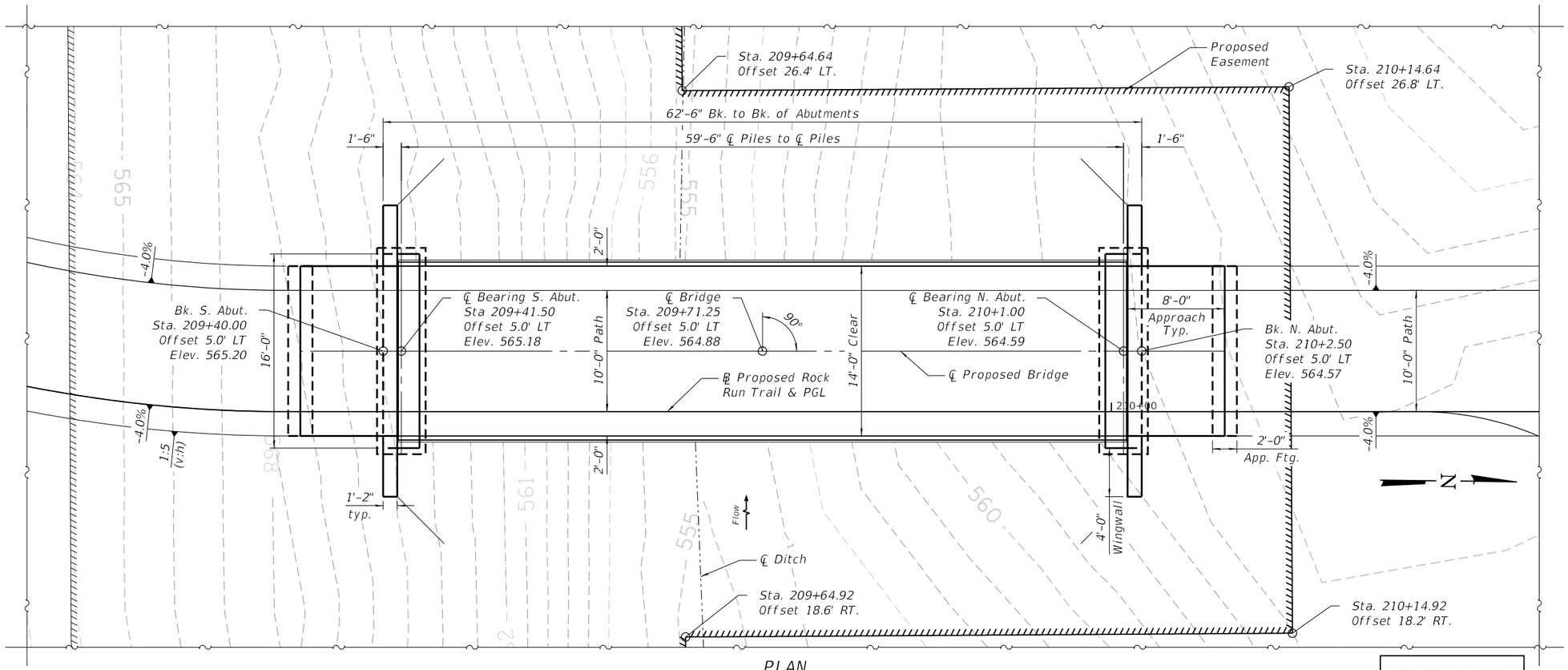
INDEX OF SHEETS

1. General Plan and Elevation
2. General Details
3. Bridge Approach Slab Details
4. Abutment Details
5. Boring Logs

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

2009 LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition with 2015 Interims



PLAN

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi

fy = 60,000 psi (Reinforcement)

fy = 50,000 psi (m270 Grade 50W)

DRAFT

GENERAL PLAN & ELEVATION
PATH OVER CREEK
SECTION 21-00544-00PV
WILL COUNTY
STATION 209+71.25

PLOT DRIVER = $PLTDRVLS
PEN TABLE = $PENTBLLS
FILE NAME = $FILELS

CIVILTECH

USER NAME = $USER$	DESIGNED - MPR	REVISED -	
	DRAWN - MPR	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - GJH	REVISED -	
PLOT DATE = $DATE$	DATE - $DATE	REVISED -	

CITY OF JOLIET

OLYMPIC BOULEVARD ROADWAY IMPROVEMENTS
ROCK RUN TRAIL BRIDGE – GENERAL PLAN AND ELEVATION

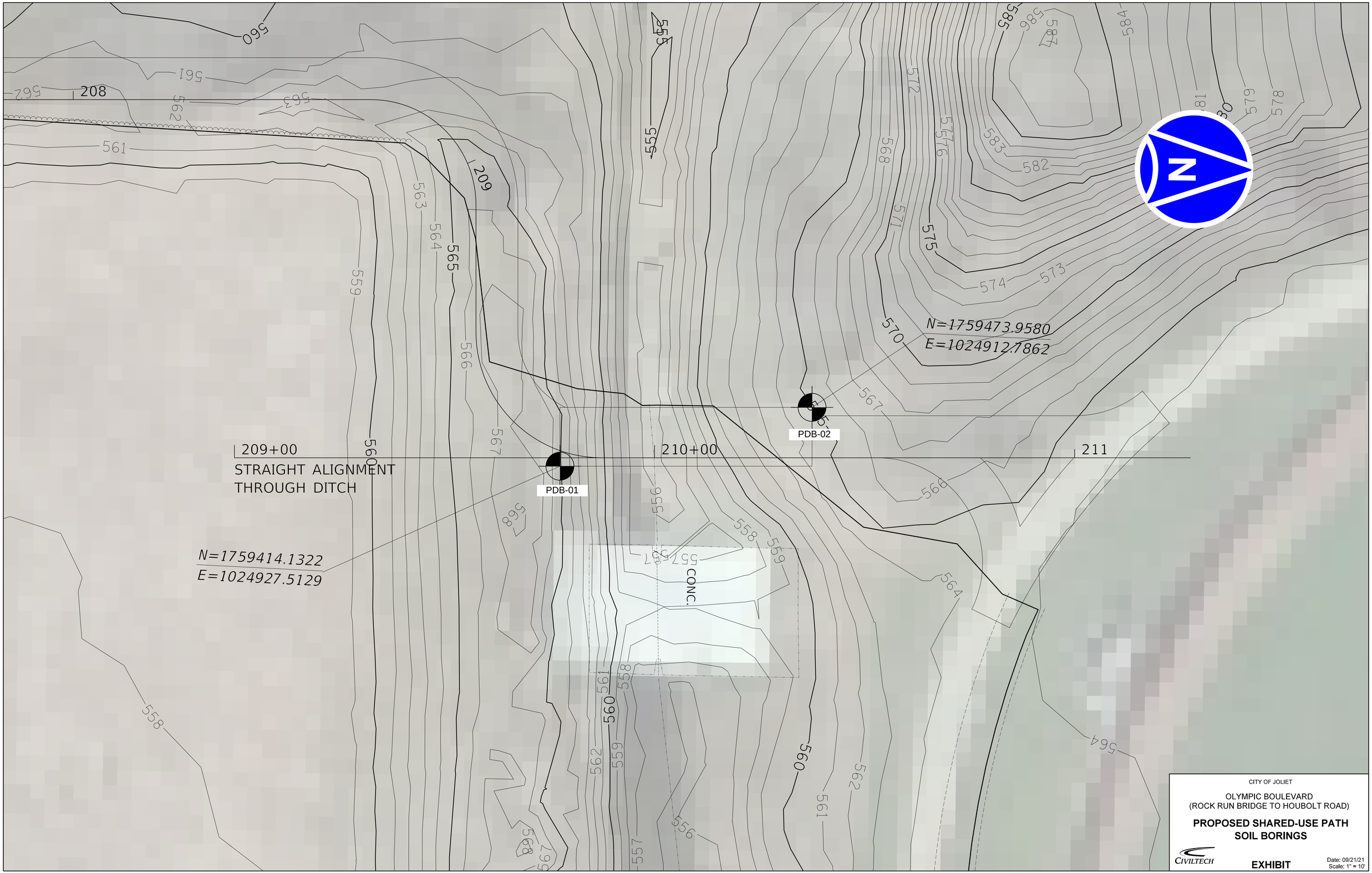
SCALE: 1" = 5' | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	21-00544-00-PV	WILL	STOT	SC2ST-01
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

Appendix B

Boring Location Plan

Soil Boring Logs



CITY OF JOLIET

OLYMPIC BOULEVARD
(ROCK RUN BRIDGE TO HOUBOLT ROAD)

PROPOSED SHARED-USE PATH
SOIL BORINGS

CIVILTECH

EXHIBIT

Date: 09/21/21
Scale: 1" = 10'

Interra, Inc.
600 Territorial Drive, Suite G
Bolingbrook, IL 60440
www.interraservices.com

SOIL BORING LOG

Date 10/8/21

ROUTE Olympic Blvd **DESCRIPTION** Olympic Blvd Phase II Geotechnical **LOGGED BY** Abdesslam

SECTION Pedestrian Bridge **LOCATION** 1759414.1322,1024927.5129

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** Auto

STRUCT. NO. _____
Station _____

BORING NO. PDB-01
Station _____
Offset 10.00ft South
Ground Surface Elev. 564.00 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ **Hrs.** _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
TOPSOIL (12") 563.00				
Hard, black CLAY LOAM FILL. Moist. 562.00	3			
	4		20.2	
Very dense, yellow LIMESTONE.	4	5.0 B		
	50/2"			
-5				
558.50				
Very dense light gray WEATHERED BEDROCK (dolomite). 557.00	50/2"			
WEATHERED BEDROCK. Auger refusal at 7.0'. End of Boring @ 7.0'.				
-10				
-15				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

Interra, Inc.
600 Territorial Drive, Suite G
Bolingbrook, IL 60440
www.interraservices.com

SOIL BORING LOG

Date 10/8/21

ROUTE Olympic Blvd **DESCRIPTION** Olympic Blvd Phase II Geotechnical **LOGGED BY** Abdesslam

SECTION Pedestrian Bridge **LOCATION** 1759473.958,1024912.7862

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** Auto

STRUCT. NO. _____
Station _____

BORING NO. PDB-02
Station _____
Offset 5.00ft South
Ground Surface Elev. 564.20 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ **Hrs.** _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
TOPSOIL (12")				
563.20				
Hard, black CLAY LOAM FILL, trace of gravel and roots. Moist.	7			
	12		20.6	
	16	4.5		
		P		
561.20				
Very dense, yellow LIMESTONE.	50/3"			
-5				
	50/2"			
556.20				
Very dense, yellow LIMESTONE and Light gray crushed rock(dolomite). 555.50	50/2"			
BEDROCK at 8.5'. Auger refusl at 8.5.				
-10				
End of boring @ 8.7'.				
-15				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

ROADWAY GEOTECHNICAL REPORT
OLYMPIC BOULEVARD FROM
I-55 EAST FRONTAGE ROAD TO HOUBOLT ROAD
CITY OF JOLIET, ILLINOIS

Prepared: 7/6/2021

INTERRA, INC.
600 Territorial Drive, Suite G, Bolingbrook, IL 60440
Phone: (630) 754-8700, Fax: (630) 754-8705
By: Sanjeev Bandi
Email: sbandi@interraservices.com
www.interraservices.com

Prepared for:

Patrick Engineering
4970 Varsity Drive
Lisle, Illinois 60532

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4.0 Field Investigation 2
5.0 Laboratory Testing 3
6.0 Summary of Climatic Conditions 4
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AAPPENDICES

Appendix A - Project Location Map; Borehole Location Plan

Appendix B - Soil Boring Logs

Appendix C - Laboratory Test Reports

Appendix D - Pavement Core Logs

Appendix E - Soil Erosion Factors and Hazard Ratings

ROADWAY GEOTECHNICAL REPORT

OLYMPIC BOULEVARD

I-55 EAST FRONTAGE ROAD TO HOUBOLT ROAD

CITY OF JOLIET, ILLINOIS

1.0 INTRODUCTION

Patrick Engineering Inc. was tasked by City of Joliet Division of Transportation to provide engineering services for improvements and extension of Olympic Boulevard, between Houbolt Road and I-55 Frontage Road in Joliet, Will County, Illinois. The project also includes improvements to Houbolt Road between Olympic Boulevard and Rock Creek Boulevard. Interra, Inc. (INTERRA) was contracted as the Geotechnical Engineering sub-consultant to perform subsurface soil exploration, laboratory testing and prepare the Roadway Geotechnical Report (RGR).

This roadway geotechnical report presents the results of Interra Inc.'s (INTERRA) subsurface investigation, laboratory testing, groundwater conditions and geotechnical evaluations performed, recommendations and construction considerations.

Project Description

The City of Joliet is a community of about 147,800 located south-west side of Chicago. Olympic Boulevard is an east-west road, connecting Houbolt Road and the proposed I-55 Frontage road. The proposed improvements include the extension of Olympic Boulevard from Crossroad Drive to I-55 Frontage Road, construction of a detention pond northwest of the intersection of Olympic Boulevard & Crossroad Drive and intersection improvements at Olympic Boulevard & Houbolt Road, and Houbolt Road and Rock Creek Boulevard.

The logical termini of the Olympic Boulevard Project are as follows:

- West Terminus – I-55 East Frontage Road
- East Terminus along Olympic Boulevard – existing intersection with Houbolt Road
- North Terminus along Houbolt Road – 500 feet north of Olympic Boulevard
- South Terminus along Houbolt Road – 300 feet south of Rock Creek Boulevard

The project location map is presented in Exhibit 1.

2.0 PROJECT SCOPE

Interra's initial scope of work included drilling a total of thirteen (13) roadway geotechnical borings and seven (7) full depth pavement cores. Two (2) additional roadway borings and four (4) bedrock depth verification borings in detention pond areas were added to the scope. The roadway borings were proposed to a depth of 10.0 feet each. The scope also included collecting two (2) bulk soil samples for performing laboratory tests. Laboratory testing scope on the bulk samples included testing moisture content, grainsize analysis, Atterberg limits, Proctor and Illinois Bearing Ratio.

3.0 SITE DESCRIPTION

The project site is located in Will County, within the limits of City of Joliet. The site is located at the north-east quadrant, of the intersection of I-80 and I-55. The site is within Troy Township defined as T35N R9E of the Third Principal Meridian. The approximate coordinates at the west end of the project are 42.068934 N and 87.702674 W and the east end are 42.059726 N and 87.694958 W. The ground surface elevation varies from 558 feet to 603 feet.

4.0 FIELD INVESTIGATION

The soil boring locations were marked in the field by Patrick Engineering and Ruettiger, Tonelli & Associates Inc. surveyors. Geocon Professional Services (GEOCON), a sub-contractor to INTERRA was tasked to drill the borings. Prior to drilling, GEOCON contacted the local one-call

underground utility clearance service (J.U.L.I.E.) to identify underground utilities.

Initial drilling of the roadway borings was performed on 5/5/21 and 5/6/21. The two additional roadway borings and detention pond borings were drilled on 5/20/2021. A Diedrick D-50 turbo ATV drill rig was used for drilling. Drilling, sampling and field testing of the samples was performed in accordance with the IDOT's Geotechnical Manual (2015), All Geotechnical Manual Users (AGMU) memoranda and AASHTO guidelines.

Site location map and borehole location plans are presented in Appendix A of this report.

Soil sampling was performed as per AASHTO T-206, "Penetration Test and Split Barrel Sampling of Soils". In addition to the split spoon samples, two (2) bulk samples were collected from approximately 2.0 feet (below surface) to 5.0 feet depth at borehole locations HR-SGB-01 and HR-SGB-04 for performing laboratory tests.

Soil specimens from the borings were visually classified and logged in the field per IDOT textural classification system by INTERRA's professional geologist. Unconfined compressive strength tests were performed in the field using a RIMAC tester on the recovered cohesive samples. Pocket penetrometer tests were performed in the field on soil boring cohesive soil samples that could not be tested with RIMAC. Field borehole logs as required are edited and presented in Appendix B. All split-spoon soil samples were placed in glass jars, labelled, and transported to INTERRA's laboratory for further testing. Groundwater levels were measured during and immediately after completion of the drilling.

5.0 LABORATORY TESTING

Laboratory testing included moisture content tests on all recovered split-spoon soil samples. Illinois Bearing Ratio (IBR) tests, Atterberg Limits, Grainsize Analysis, Moisture Content and

Standard Proctor tests were performed on the bulk soil samples. Summary of laboratory testing and laboratory test reports are presented in Appendix C.

The soil from HR-SGB-01 was identified as a Clay Loam (A-7-6(17)) with a liquid limit of 46 and a plastic limit of 22. The grain size analysis was 12.8 % gravel, 15.8 % sand, 47.8 % silt and 23.6 % clay. The IBR results from the two prepared samples had swell measurements as 2.76 and 2.61 %, and IBR value (at 0.2 inches in penetration) as 3.7 % to 3.4 % respectively. The Subgrade Support Rating for the HR-SGB-01 sample was POOR. The Subgrade Support Rating chart is presented in Appendix C.

The soil from HR-SGB-04 was identified as a Sandy Loam (A-2-6(0)) with a liquid limit of 29 and a plastic limit of 18. The grain size analysis was 47.7 % gravel, 20.9 % sand, 22.6 % silt and 8.8 % clay. The IBR results from the two prepared samples had swell measurements as 0.45 and 0.40 %, and IBR value (at 0.2 inches in penetration) as 7.5 % to 8.7 % respectively. The Subgrade Support Rating for the HR-SGB-04 sample was GRANULAR. Laboratory test repots and Subgrade Support Rating chart is presented in Appendix C.

6.0 SUMMARY OF CLIMATIC CONDITIONS

Table 1 indicates the total precipitation in the month of drilling along with three preceding months obtained for the City of Joliet, IL. These observations were obtained from the Chicago Midway International Airport Weather Station - KILCHICA656 (Weather Underground) located in Illinois.

Table 1: Precipitation Data

Month	Monthly Total, inches	Monthly Average, inches
February, 2021	0.64	0.02
March, 2021	0.97	0.03
April, 2021	1.40	0.05

May, 2021	2.84	0.09

7.0 SUBSURFACE CONDITIONS

Table 2.0 summarizes the boring depth, depth of auger refusal, groundwater depth and information of the type of soil encountered while drilling. Detailed description of soil stratification is provided in the boring logs (Appendix B)

Table 2 –Summary of Subsurface Conditions

Boring No.	Surface Elevation (feet)	Depth (feet)	Auger Refusal (feet)	Groundwater During Drilling (feet)	Groundwater After Drilling (feet)	Soil Types Encountered
OB-SGB-01B	563..800	5.0	5.0	Dry	Dry	Topsoil, silty loam, sand, weathered bedrock
OB-SGB-01A	558..490	11	11.0	6.5	6.5	Topsoil, sand, weathered bedrock
OB-SGB-01	590.920	5.0	5.0	Dry	Dry	Topsoil, weathered bedrock
OB-SGB-02	568.190	5.5	5.5	Dry	Dry	Topsoil, Sand fill, weathered bedrock
OB-SGB-03	567.351	9.0	9.0	9.0	9.0	Topsoil, Sand and clay fill, weathered bedrock
OB-SGB-04	601.362	15.0	NA	9.0	Dry	Topsoil, Sandy loam fill, sand, clay
OB-SGB-05	598.885	10.0	NA	Dry	Dry	Topsoil, Clay, sandy clay, silty loam, sandy loam
OB-SGB-06	600.937	10.0	NA	Dry	Dry	Topsoil, Silty loam, sandy loam, sand
HR-SGB-01	603.122	10.0	NA	Dry	Dry	Topsoil, Silty loam, clay loam, sand
HR-SGB-02	601.016	15.0	NA	Dry	Dry	Topsoil, Sandy loam fill, sandy loam, sand
HR-SGB-03	598.886	10.0	NA	Dry	Dry	Topsoil, Sand fill, sand
HR-SGB-04	596.106	10.0	NA	Dry	Dry	Topsoil, Sandy loam fill, clay fill, clay
HR-SGB-05	595.215	15.0	NA	Dry	Dry	Topsoil, Silty loam fill,

						clay loam fill, sandy loam, clay loam
HR-SGB-06	592.525	10.0	NA	Dry	Dry	Topsoil, Silty loam fill, sand fill, sand, weathered bedrock
HR-SGB-07	590.964	10.0	NA	Dry	Dry	Topsoil, Silty loam fill, sandy loam, weathered bedrock

NA: Not Applicable. Auger refusal was not encountered.

Groundwater Conditions

Groundwater levels were recorded during drilling, and immediately after completion of drilling at all the boring locations. None of the borings other than OB-SGB-03 and OB-SGB-04 encountered groundwater during or after completion of drilling. Groundwater was encountered in OB-SGB-03 at a depth of 9.0'. This level remained the same upon completion of drilling. Perched water was encountered at 9.0' depth for OB-SGB-04. This water drained out and the borehole was dry upon completion of boring.

It should be noted that fluctuations in groundwater levels may occur due to seasonal variations, rainfall, or other climatic conditions. Hence, the water levels reported may not represent the long-term groundwater levels.

Pavement Cores

A total of seven (7) pavement cores were recovered from Olympic Boulevard, Houbolt Road and Rock Creek Boulevard to determine the existing pavement thickness and condition. On Olympic Boulevard, the pavement thickness varied between 8.6 inches and 9.1 inches, and the crushed aggregate subgrade thickness varied between 4 inches and 6 inches. On Houbolt Road, the pavement thickness varied between 10.2 inches and 12.0 inches, and the crushed aggregate subgrade thickness was noted to be 6 inches. One pavement core recovered from Rock Creek Boulevard noted a pavement thickness of 7.65 inches and subgrade thickness of 6 inches. Pavement core photo logs are presented in Appendix D of this report.

8.0 CONCLUSIONS AND RECOMMENDATIONS

In general, below the topsoil, loose to medium dense silty loam, sandy loam and stiff to hard clay loam were encountered. Boring OB-SGB-01B and OB-SGB-01, OB-SGB-02 were terminated at a depth of approximately 5 feet, OB-SGB-03 at a depth of 9 feet and Boring HR-SGB-06 at 10 feet due to auger refusal in weathered bedrock.

8.1 *Subgrade Preparation - General*

Subgrade preparation should be performed in accordance with Article 301 of the IDOT Standard Specifications. All new pavements should be supported on 12 inches of improved subgrade, per the District One Aggregate Subgrade Improvement Special Provision.

Topsoil

All the borings during geotechnical investigation were drilled within the roadway areas and topsoil was encountered. Topsoil should be completely stripped and removed from the proposed pavement areas. The actual need for topsoil removal should be determined in the field. We recommend that all the topsoil that is stripped be stockpiled, sorted, and reused for the proposed landscaping improvements. We recommend that a plan note containing the stockpiling information be included in the contract documents.

Proofrolling

Proof rolling should be performed in accordance with section 3.3 of IDOT Subgrade Stability Manual to identify unstable/unsuitable subgrade soils. The top eight (8) inches of the subgrade should be air dried, disked and recompacted to achieve the required density and stability. After compaction, the subgrade should have a minimum dry density of 95 percent of standard laboratory dry density and a minimum IBV 3.0 as it is assumed plans include 12 inches of improved subgrade. A minimum IBV of 8.0 should be achieved if the plans do not include 12 inches of improved subgrade. Moisture sensitive soils such as silts were generally not

encountered in the proposed roadway areas in the upper 3 feet.

8.2 *Removal and Replacement of Unstable Soils*

Based on the field investigation and laboratory test results, we do not anticipate undercuts in roadway areas. However, if unsuitable soils are encountered during construction, they should be removed and replaced with material meeting the requirements of the District One Aggregate Subgrade Improvement Special Provision. The actual need for removal and replacement with Aggregate Subgrade Improvement should be determined in the field at the time of construction by the Geotechnical Engineer or soils inspector. All potentially unstable soils should be tested with a cone penetrometer and treated in accordance with Article 301 .04 of the SSRBC and the undercut guidelines in the lDOT Subgrade Stability Manual. We recommend placing geotextile fabric at the base of undercut areas where low strength subgrade soils are encountered. The 12 inches of improved subgrade is not considered an undercut, and we do not recommend using it below the proposed 12 inch improved subgrade layer unless it is determined to be necessary to achieve stability by the Geotechnical Engineer or soils inspector at the time of construction. Fabric should meet the requirements of Article 210, Fabric for Ground Stabilization, of the SSRBC.

8.3 *Pavement Design*

In the Pavement design, both Illinois Bearing Ratio (IBR) and Subgrade Support Rating (SSR) values should be taken into consideration. Based on the general inconsistency of existing fill materials, we recommend using a maximum IBR value of 3.5. Based on the laboratory test results, we recommend an SSR of “POOR” for the design of the proposed pavement section.

Underdrains

To provide drainage for the proposed pavement areas, we recommend installing longitudinal pipe underdrains under the edge of new pavement in widening areas and both longitudinal and transverse drains in full width pavement reconstruction areas. The drains should also be installed in low areas and at the base of any undercuts. The underdrains should tie into the

existing storm water drainage system. The underdrains should be installed per Article 601 in the lDOT Standard Specifications and consist of Type 2 underdrains (Adopted April 1, 2016).

8.4 *Stability Analysis*

No embankments greater than 15 feet are proposed to be constructed. Hence, slope stability analyses were not performed.

8.5 Earthwork Quantity Calculations

A shrinkage factor of 15% should be used in calculating borrowed and furnished quantities.

8.6 Detention Pond

The bottom of the detention pond is anticipated at an elevation of 551 feet. The four verification borings drilled in the detention pond area indicated bedrock to be between 538 feet and 554 feet. Based on these borings, rock excavation of up to 3 feet should be anticipated during the construction of the detention pond.

9.0 CONSTRUCTION CONSIDERATIONS

- Temporary excavations should be sloped no greater than 1V:2H. Excavations steeper or deeper than 4 feet should be analyzed individually. Potential for ground movements due to excavation on open roadways and utilities should be considered. All excavations should be performed in accordance with local, state and federal regulations.
- Excavated materials free from debris can be reused upon approval by Engineer.
- Groundwater was not observed in any of the boreholes within 5 feet of the existing grade. If any water is accumulated during construction, it can be removed using sump pump method. To facilitate dewatering, surface runoff and ditches should be directed away from excavations.
- It is anticipated that the project will need to apply for a NPDES storm water permit for construction site activities. Soil erosion factors (K factors) and erosion hazard ratings for

each of the soil types within the project limits were obtained from NRCS website and presented in Appendix E.

10.0 CONSTRUCTION MONITORING

Construction monitoring shall be in accordance with IDOT Standard Specifications, Special Provisions and Contract Plans. No special monitoring is anticipated. Construction monitoring shall be performed by an experienced geotechnical engineer or soils technician to monitor earthwork operations, soils compaction, and suitability of subgrade soils, location and depths of undercuts and to advise Engineer of actual soil conditions that differ from those in the geotechnical investigation report.

11.0 CLOSURE

The analysis and recommendations submitted in this report are based upon the data obtained from fifteen (15) soil boreholes performed at the locations indicated on the location plan. This report does not reflect any variations that may occur between these boreholes. In performing subsurface explorations, specific information is obtained at specific locations at specific times. It is a well-known fact that variations in soil and rock conditions exist on most sites between borehole locations. Also, groundwater levels vary from time to time. The nature and extent of variations may not become evident until the course of construction. If variations then appear evident, it will be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during construction period and noting the characteristics of any variations.

We appreciate the opportunity to be of service to you. Should you need additional information or clarifications, please call us at (630) 754-8700.

Yours truly,

Interra, Inc.

Ashok Guntaka, EI
Project Manager

Reshma Chirakkara, Ph.D.
Sr. Staff Engineer

Sanjeev Bandi, Ph.D., PE
Principal Engineer

REFERENCES

IDOT 2020. Geotechnical Manual, Illinois Department of Transportation.

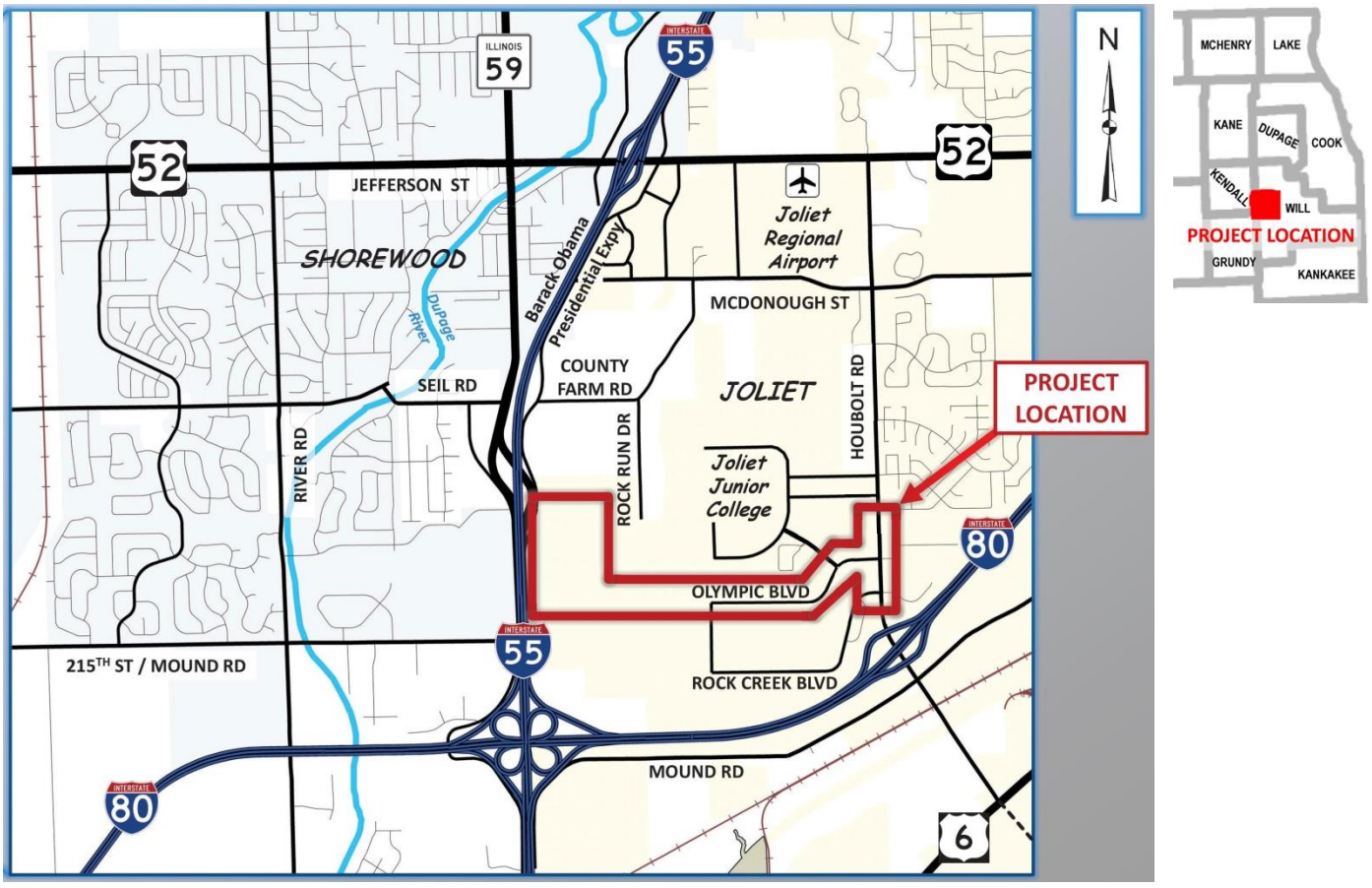
IDOT 2012. Standard Specifications for Road and Bridge Construction. Illinois Department of Transportation.

Appendix A

Site Location Map

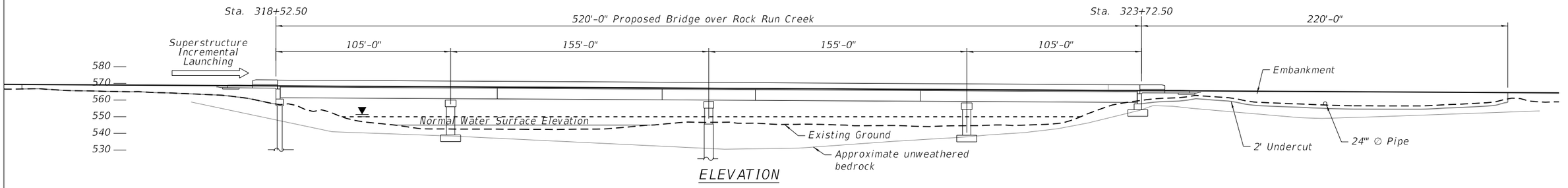
Borehole Location Plan

PROJECT LOCATION MAP
OLYMPIC BOULEVARD OVER RICK RUN CREEK
CITY OF JOLIET, WILL COUNTY, ILLINOIS
INTERRA PROJECT NO.: 8865
DRAWN BY: GAK. CHECKED BY: SB
DATE: 6/23/2021

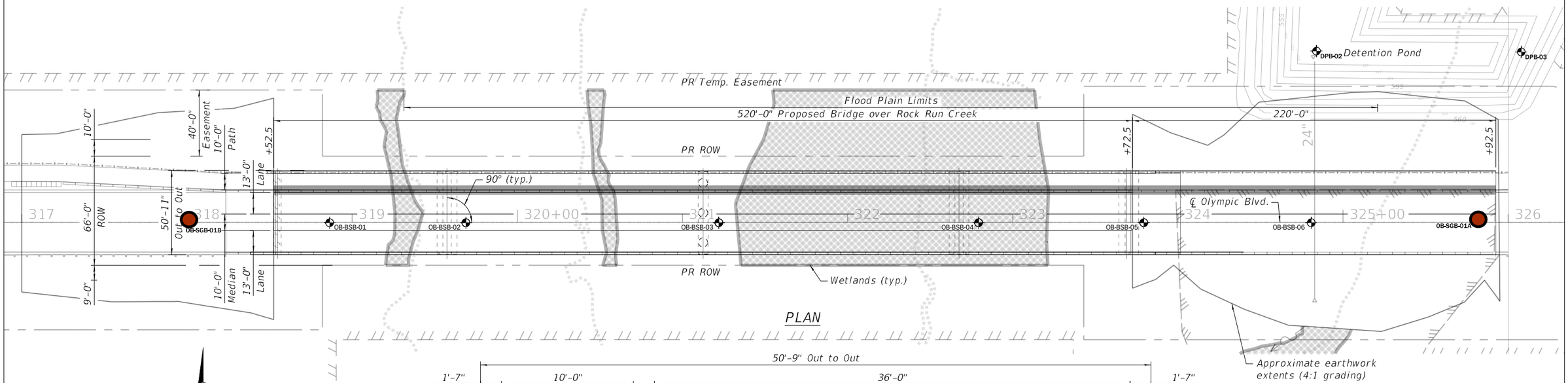


Illinois Department of Transportation

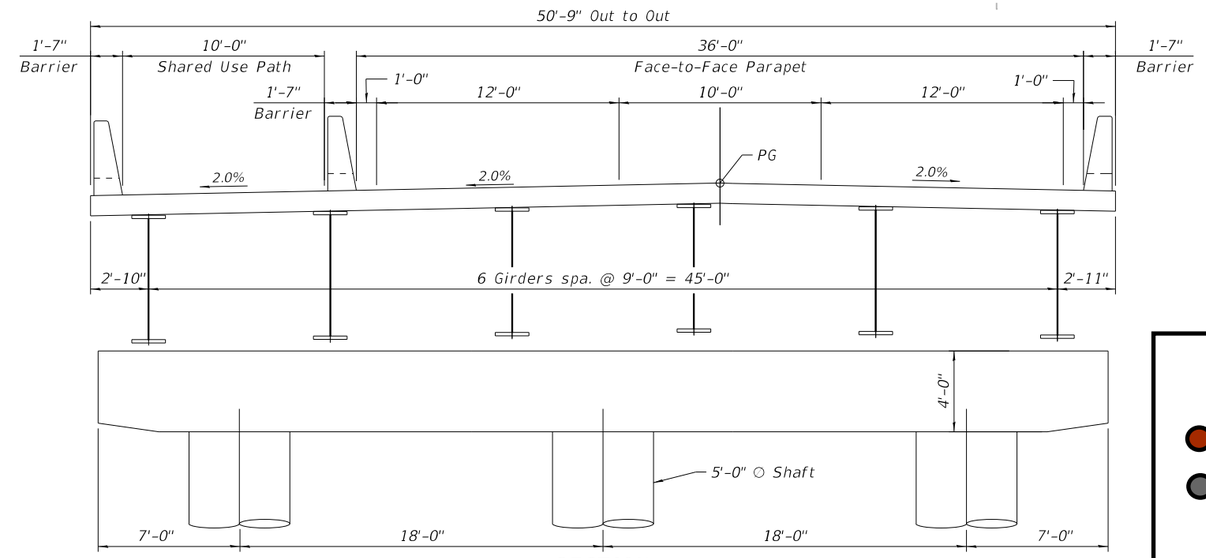
JOLIET



ELEVATION



PLAN



SECTION
(Looking East)

Note:
All splice locations, superstructure geometry and construction easements/staging area are subject to change in Phase II.

SOIL BORING LOCATION PLAN

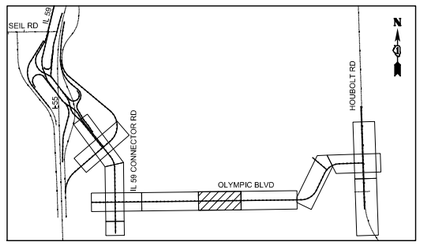
OLYMPIC BOULEVARD FROM
I-55 EAST FRONTAGE ROAD TO HOUBOLT ROAD
INTERRA PROJECT NO.: 8865
DRAWN BY: GAK. CHECKED BY: SB
DATE: 7/6/2021

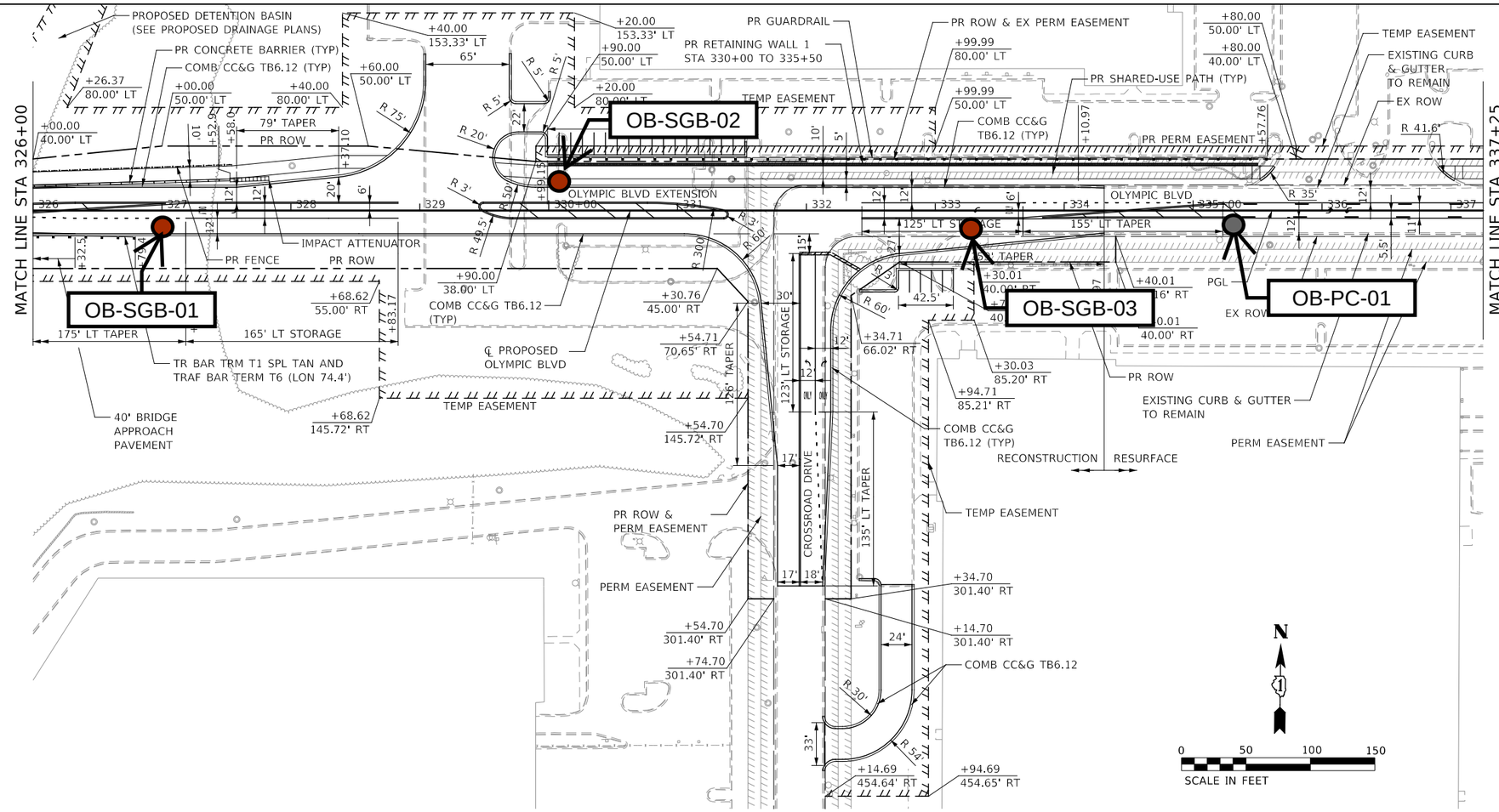
LEGEND

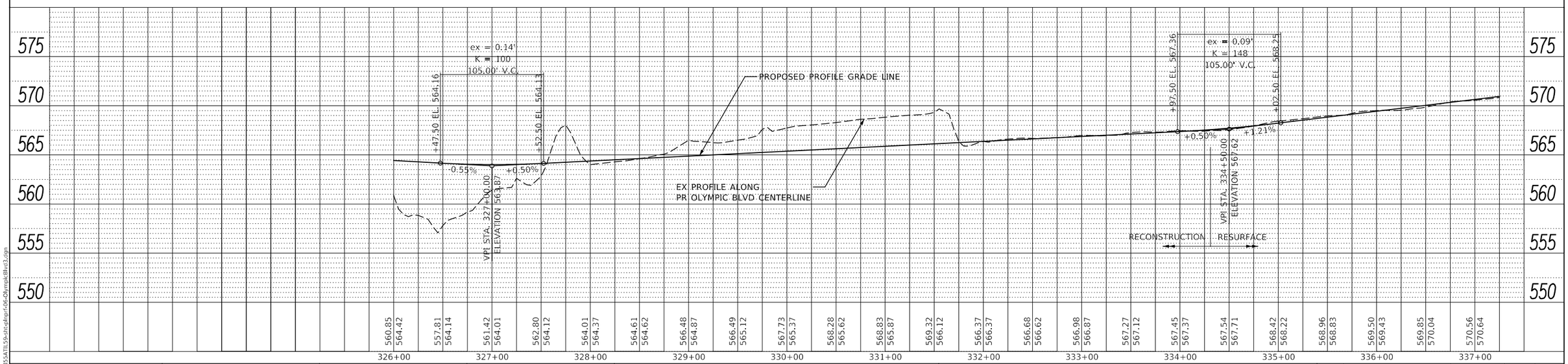
- **ROADWAY BORING**
- **PAVEMENT CORE**

PLAN
SURVEYED
PLOTTED
ASSIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
DATE
BY

PROFILE
SURVEYED
PLOTTED
ASSIGNMENT CHECKED
B.M. NOTED
STRUCTURE NO.
DATE
BY







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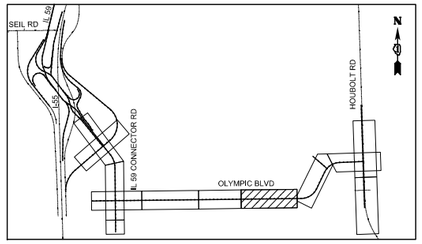
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PR ROW & PERM EASEMENT
PERM EASEMENT
TEMP EASEMENT
COMB CC&G TB6.12 (TYP)
℄ PROPOSED OLYMPIC BLVD
EX ROW
R 50'
R 36.6'
R 30'
R 40'
PR SHARED-USE PATH (TYP)
PGL
OB-PC-03
MATCH LINE STA 337+25
MATCH LINE STA 352+00
5.4'
10'
5.3'
OLYMPIC BLVD
12'
11'
5.5'
R 8'
16'
EX ROW
PERM EASEMENT
OB-PC-02
EXISTING CURB & GUTTER TO REMAIN
338 | 339 | 340+00 | 341 | 342 | 343 | 344 | 345+00 | 346 | 347 | 348 | 349 | 350+00 | 351

N

0 50 100 150
SCALE IN FEET



ex = 0.60'
K = 153
271.80' V.C.

ex = 0.22'
K = 104
135.00' V.C.

+32.50' EL. 575.86
+67.50' EL. 578.37
+64.10' EL. 587.62
VPI STA. 342+00.00
ELEVATION 576.68
VPI STA. 345+12.28
ELEVATION 584.50
VPI STA. 351+00.00
ELEVATION 588.56
+59.78' EL. 583.19
+64.78' EL. 584.86
+1.21%
+2.50%
+0.69%
+2.47%
PROPOSED PROFILE GRADE LINE
EX PROFILE ALONG
PR OLYMPIC BLVD CENTERLINE
ex = -0.24'
K = 58
105.00' V.C.

600 595 590 585 580 575 570 565 560

338+00	339+00	340+00	341+00	342+00	343+00	344+00	345+00	346+00	347+00	348+00	349+00	350+00	351+00	352+00
571.28 / 571.24	571.73 / 571.85	572.54 / 572.45	573.01 / 573.06	573.60 / 573.66	574.36 / 574.26	574.87 / 574.87	575.48 / 575.47	576.07 / 576.09	576.97 / 576.90	577.88 / 577.95	579.14 / 579.18	580.56 / 580.44	581.62 / 581.69	583.06 / 582.94	584.04 / 584.05	584.68 / 584.74	584.99 / 585.11	585.45 / 585.45	585.52 / 585.80	585.83 / 586.14	586.45 / 586.49	586.93 / 586.83	587.20 / 587.18	587.40 / 587.52	587.76 / 587.91	588.45 / 588.45	589.00 / 589.16	589.96 / 590.03	591.30

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE – OLYMPIC BOULEVARD
OLYMPIC BOULEVARD

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		CONTRACT NO.		
		ILLINOIS	FED. AID PROJECT	P-91-021-19

MATCH LINE STA 352+00

R 30'

+13.38
40.00' LT

+13.38
50.00' LT

R 25'

PC Sta 353+13.38

PERM EASEMENT

PROP. CURVE CURPROLYMP02A
PI STA. = 355+92.50
Δ = 63° 37' 15" (LT)
D = 12° 43' 57"
R = 450.00' (EXISTING)
T = 279.12'
L = 499.68'
E = 79.54'
e = N.C. (EXISTING)
P.C. STA. = 353+13.38
P.T. STA. = 358+13.05

PR ROW & PERM EASEMENT

℄ PROPOSED OLYMPIC BLVD

TEMP EASEMENT

R 20'

R 20'

+13.05
50.00' LT

+13.05
40.00' LT

PT Sta 358+13.05

COMB CC&G TB6.12 (TYP)

R 30'

R 40'

PERM EASEMENT

PROP. CURVE CURPROLYMP02A

OLYMPIC BLVD

EX ROW

PI Sta 355+92.50

OB-PC-04

PGL

EXISTING CURB & GUTTER TO REMAIN

PROP. CURVE CURPROLYMP03A
PI STA. = 365+74.78
Δ = 62° 11' 02" (RT)
D = 12° 35' 33"
R = 455.00' (EXISTING)
T = 274.39'
L = 493.82'
E = 76.33'
e = N.C. (EXISTING)
P.C. STA. = 363+00.39
P.T. STA. = 367+94.21

PR SHARED-USE PATH (TYP)

+89.52
50.00' LT

+94.49
40.00' LT

+77.53

+73.03
60.00' LT

+00.39
60.00' LT

57' TAPER

+33.36

+00.39
56.93' LT

PC Sta 363+00.39

EX ROW

R 40'

155' LT TAPER

125' LT STORAGE

+57.28

+83.35

+02.28

℄ STA 364+19.16 PR OLYMPIC BLVD =
℄ STA 10+00.00 PR CENTENNIAL DR

TEMP EASEMENT

+99.44
50.60' LT

℄ PROPOSED CENTENNIAL DR

CENTENNIAL DRIVE

LIMIT OF IMPROVEMENT
STA 11+93.64

+93.64

55' RT STORAGE

90' RT TAPER

+99.45
44.41' RT

COMB CC&G TB6.12

+52.31

+57.09
60.00' LT

85' TAPER

PR ROW

COMB CC&G TB6.12 (TYP)

OB-SGB-04

PI Sta 10+00.00

R 130'

R 50'

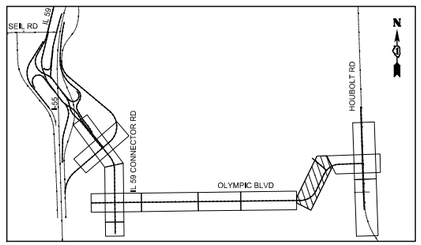
R 3.5

POT Sta 10+00.00

MATCH LINE STA 366+00

PROP. CURVE CURPROLYMP03A

0 50 100 150
SCALE IN FEET



615 610 605 600 595 590 585 580 575

+35.90 EL. 591.91

+55.90 EL. 594.04

ex = -1.82'
K = 165
490.00' V.C.

+45.00 EL. 599.66

+2.47%

-0.50%

VPI STA. 356+00.00
ELEVATION 600.88

PROPOSED PROFILE GRADE LINE

EX PROFILE ALONG
PR OLYMPIC BLVD CENTERLINE

+13.02 EL. 598.32

ex = 0.16'
K = 67
93.96' V.C.

+06.98 EL. 598.51

-0.50%

+0.90%

VPI STA. 361+60.00
ELEVATION 598.08

℄ CENTENNIAL DRIVE
STA 10+00.00

+51.64 EL. 600.71

+0.90%

1.00%

VPI STA. 365+04.14
ELEVATION 601.18

ex = -0.25'
K = 55
105.00' V.C.

+56.64 EL. 600.66

591.30 591.06 | 592.62 592.25 | 593.64 593.49 | 595.05 594.72 | 596.33 595.89 | 597.65 596.91 | 598.48 597.78 | 598.89 598.50 | 599.19 599.07 | 599.45 599.48 | 599.63 599.75 | 599.49 599.86 | 599.56 599.82 | 599.40 599.63 | 599.38 599.38 | 599.23 599.13 | 598.96 598.88 | 598.91 598.63 | 598.69 598.38 | 598.34 598.24 | 598.42 598.45 | 598.78 598.89 | 599.38 599.34 | 599.57 599.79 | 600.43 600.24 | 600.91 600.69 | 600.93 600.93 | 600.78 600.72 | 600.36 600.22

352+00 353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE – OLYMPIC BOULEVARD
OLYMPIC BOULEVARD

SCALE: AS SHOWN | SHEET 5 OF 6 SHEETS | STA. | TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904		WILL	13	8
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT	P-91-021-19	

OB-SGB-05

OB-SGB-06

℄ PROPOSED OLYMPIC BLVD

SEE HOUBOLT RD PLAN & PROFILE SHEETS FOR DETAILS

+37.18 98.89' LT

+26.29 67.46' LT

+94.21 60.00' LT

+25.69

COMB CC&G TB6.12

PR SHARED-USE PATH

WIDEN/RESURFACE RECONSTRUCTION

+00.00 60.00' LT

TEMP EASEMENT

COMB CC&G TB6.24

HOUBOLT ROAD

EX ROW

POT Sta 374+34.01

PR SIDEWALK

COMB CC&G TB6.24

PR ROW

PERM EASEMENT

PR ROW

PGL

183' LT TAPER

334' LT STORAGE

320' RT TAPER

TAPER

342' RT STORAGE

PT Sta 367+29.22

+37.40

10'

5'

R 60'

4'

90°14'04.90"

135' LT STORAGE

100' LT TAPER

R 70'

4'

R 2.5'

R 135'

12'

12'

15'

17'

OLYMPIC BLVD

MATCH LINE STA 366+00

366

367

368

369

370+00

371

372

373

374

R 3'

R 5'

12'

24'

10'

6'

35'

4'

63'

EX ROW

OLYMPIC BLVD

10:1 TAPER

+45.03

+99.91

R 3706'

340' RT STORAGE

155' RT TAPER

LANDSCAPE MEDIAN

+00.05 42.10' RT

+00.00 50.00' RT

+67.76

R 700'

R 100'

10'

+65.26 70.99' RT

25'

10'

COMB CC&G TB6.12

LANDSCAPE MEDIAN

COMB CC&G TB6.24

PR ROW

℄ STA 374+16.06 PR OLYMPIC BLVD =
℄ STA 124+82.74 PR HOUBOLT RD

EXISTING CURB & GUTTER TO REMAIN

COMB CC&G TB6.12

PERM EASEMENT

WIDEN/RESURFACE RECONSTRUCTION

+05.93

COMB CC&G TB6.24

PR SHARED-USE PATH

SEE HOUBOLT RD PLAN & PROFILE SHEETS FOR DETAILS

HOUBOLT ROAD

EX ROW

123

124

125

125+00

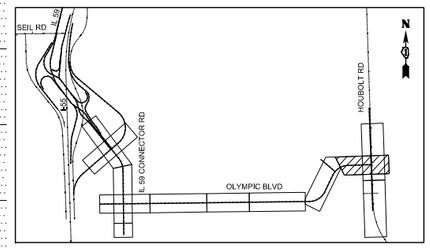
126

127

N

0 50 100

SCALE IN FEET



620
615
610
605
600
595
590
585
580

ex = 0.39'
K = 129
200.00' V.C.

+00.00 EL. 599.22

+00.00 EL. 598.77

PROPOSED PROFILE GRADE LINE

601.27

-1.00%

+0.55%

VPI STA. 368+00.00
ELEVATION 598.22

EX PROFILE ALONG PR OLYMPIC BLVD CENTERLINE

℄ PR HOUBOLT ROAD
STA 124+82.74

600.36	599.56	599.18	598.79	598.68	598.85	599.17	599.54	599.65	600.27	600.81	601.52	602.45	602.61	602.71	602.03	601.37
600.22	599.72	599.22	598.82	598.61	598.59	598.77	599.05	599.32	599.59	599.87	600.14	600.42	600.69	600.97	601.24	

366+00 367+00 368+00 369+00 370+00 371+00 372+00 373+00 374+00

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	DRAWN - GS, PAS	REVISED -	
PLOT SCALE = 1:100	CHECKED - MJM	REVISED -	
PLOT DATE = 7/22/2020	DATE - 07/22/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE – OLYMPIC BOULEVARD
OLYMPIC BOULEVARD

SCALE: AS SHOWN | SHEET 6 OF 6 SHEETS | STA. | TO STA.

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904		WILL	13	9
		CONTRACT NO.		
		ILLINOIS	FED. AID PROJECT	P-91-021-19

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., BY, DATE

FILE NAME: D:\SSATE\I-59-sht-plhpr\I-09-OlympicBlvd6.dgn

HR-PC-01

HR-SGB-01

HR-SGB-02

HR-PC-02

HR-SGB-03

℄ EXISTING HOUBOLT RD

℄ PROPOSED HOUBOLT RD

LIMIT OF IMPROVEMENT

EX ROW

RAISED MEDIAN

PGL

COMB CC&G TB6.24

200' LT TAPER

45:1 TAPER

HOUBOLT ROAD

PR SIDEWALK

200' RT TAPER

285' RT STORAGE

70.00' RT

WIDEN/RESURFACE

RECONSTRUCTION

+86.84

OLYMPIC BLVD

+53.63
110.40' LT

+23.20
74.84' LT

185' LT STORAGE

PR ROW

R 70'

142'

R 100'

R 2'

R 135'

90°14'04.90"

R 1.5'

R 80'

374'

LIMIT OF IMPROVEMENT

+15.20
137.95' LT

+20.20
137.95' LT

+25.00
107.95' LT

+41.03

TEMP EASEMENT

+33.03
113.17' LT

+33.03
73.90' LT

+83.03
113.17' LT

+83.03
74.02' LT

+56.03

315' LT STORAGE

14' 14'

300' LT TAPER

200' RT TAPER

+74.16

+45.00

COMB CC&G TB6.12

MEDIAN

EX ROW

R 30'

MATCH LINE STA 129+00

46:1 TAPER

10:1 TAPER

COMB CC&G TB6.24

PR SHARED-USE PATH

200' LT TAPER

℄ STA 374+16.06 PR OLYMPIC BLVD =
℄ STA 124+82.74 PR HOUBOLT RD

+56.03

+62.34

+51.37

+05.07

R 60'

R 100'

PERM EASEMENT

SEE OLYMPIC BLVD
PLAN & PROFILE SHEETS
FOR DETAILS

0 50 100 150
SCALE IN FEET

601.50

+1.63%

-0.88%

VPI STA. 118+50.00
ELEVATION 607.37

+00.00 EL. 604.92

+00.00 EL. 606.05

ex. ≡ -0.94'
K = 120
300.00' V.C.

PROPOSED PROFILE GRADE LINE

EX PROFILE ALONG
EX HOUBOLT RD CENTERLINE

℄ OLYMPIC BLVD
STA 374+16.06

SEIL RD

IL 59

IL 59 CONNECTOR RD

OLYMPIC BLVD

HOUBOLT RD

N

615	610	605	600	595	590	585	580	575

115+00	116+00	117+00	118+00	119+00	120+00	121+00	122+00	123+00	124+00	125+00	126+00	127+00	128+00	129+00
601.86 / 601.66	602.63 / 602.48	603.45 / 603.29	604.27 / 604.11	605.06 / 604.92	605.65 / 605.63	606.21 / 606.14	606.56 / 606.43	606.34 / 606.51	606.29 / 606.39	606.17 / 606.05	605.74 / 605.61	604.97 / 605.17	604.52 / 604.73	604.12 / 604.29	603.57 / 603.85	603.21 / 603.41	602.77 / 602.97	602.36 / 602.54	601.62 / 602.10	601.45 / 601.66	601.00 / 601.22	601.05 / 600.78	600.56 / 600.34	599.98 / 599.90	599.51 / 599.46	599.03 / 599.02	598.62 / 598.58	597.91 / 598.14

PLAN — SURVEYED | PLOTTED | ALIGNMENT CHECKED | RT. OF WAY CHECKED | CADD FILE NAME | NOTE BOOK | NO. | DATE | BY

PROFILE — SURVEYED | PLOTTED | GRADES CHECKED | B.M. NOTED | STRUCTURE NO/TATNS CHKD | NOTE BOOK | NO. | DATE | BY

FILE NAME: D:\SSATE\59-sht-ghpnf-10-Houbolt01.dgn

USER NAME = psiders	DESIGNED - GS	REVISED -	
	DRAWN - GS, PAS	REVISED -	
PLOT SCALE = 1:100	CHECKED - MJM	REVISED -	
PLOT DATE = 7/22/2020	DATE - 07/22/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE – OLYMPIC BOULEVARD
HOUBOLT ROAD

SCALE: AS SHOWN | SHEET 1 OF 2 SHEETS | STA. | TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904		WILL	13	10
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		P-91-021-19

HR-SGB-04

HR-SGB-05

HR-SGB-06

HR-SGB-07

HR-PC-03

MATCH LINE STA 129+00

ROCK CREEK BLVD

HOUBOLT ROAD

I-80 WB EXIT RAMP

I-80 WB ENTRANCE RAMP

POT Sta 14+07.88

LIMIT OF IMPROVEMENT

PI Sta 132+41.13

℄ STA 132+41.13 PR HOUBOLT RD =
℄ STA 12+42.88 PR ROCK CREEK BLVD

℄ EXISTING HOUBOLT RD

PR SHARED-USE PATH

COMB CC&G TB6.24

℄ PROPOSED HOUBOLT RD

RAISED MEDIAN

END IMPROVEMENT
CONNECT TO HOUBOLT ROAD DIVERGING
DIAMOND INTERCHANGE BY OTHERS

℄ STA 136+96.44 PR HOUBOLT RD =
℄ STA 136+48 08.88' LT EX HOUBOLT RD

EXIST. CURVE CUR-HOUB-CL-9
PI STA. = 4198+28.43
Δ = 32° 15′ 42″ (RT)
D = 3° 15′ 00″
R = 1,763.00′
T = 509.89′
L = 992.70′
E = 72.25′
e = 2.0%
P.C. STA. = 4193+18.54
P.T. STA. = 4203+11.23

EXISTING PATH RELOCATED
TO EAST SIDE BY OTHERS
(HOUBOLT RD DDI PROJECT)

0 50 100 150
SCALE IN FEET

PROPOSED PROFILE GRADE LINE

EX PROFILE ALONG
EX HOUBOLT RD CENTERLINE

℄ ROCK CREEK BLVD
STA 12+42.88

591.56

600 595 590 585 580 575

597.91 598.14 | 597.94 597.70 | 597.23 597.26 | 596.74 596.82 | 596.36 596.38 | 595.57 595.94 | 595.40 595.50 | 594.98 595.06 | 594.51 594.62 | 594.24 594.18 | 593.59 593.75 | 593.33 593.31 | 592.88 592.87 | 592.61 592.43 | 592.35 591.99 | 592.24

129+00 130+00 131+00 132+00 133+00 134+00 135+00 136+00

SEIL RD
I-80
I-39 CONNECTOR RD
HOUBOLT RD
OLYMPIC BLVD

USER NAME = psiders	DESIGNED - GS	REVISED -	
	DRAWN - GS, PAS	REVISED -	
PLOT SCALE = 1:100	CHECKED - MJM	REVISED -	
PLOT DATE = 7/22/2020	DATE - 07/22/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE – OLYMPIC BOULEVARD
HOUBOLT ROAD

SCALE: AS SHOWN | SHEET 2 OF 2 SHEETS | STA. | TO STA.

M.U.N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
904		WILL	13	11
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		P-91-021-19

PLAN: SURVEYED, PLOTTED, CROSS CHECKED, BM. NOTED, STRUCTURE NOTATNS CHKD, RT. OF WAY CHECKED, ALIGNMENT CHECKED, CADD FILE NAME, NOTE BOOK, NO., DATE, BY

PROFILE: SURVEYED, PLOTTED, CROSS CHECKED, BM. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO.

FILE NAME: D115ATIL59-alt-plan*-11-Houbolt02.dgn

Appendix B

Soil Boring Logs

Interra, Inc.
600 Territorial Drive, Suite G
Bolingbrook, IL 60440
www.interraservices.com

SOIL BORING LOG

Date 5/20/21

ROUTE Olympic Blvd, Houbolt Road **DESCRIPTION** Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois **LOGGED BY** Abdu Sellah

SECTION _____ **LOCATION** 1758491, 1024204

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-01B
Station _____
Offset _____
Ground Surface Elev. 563.80 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ **Hrs.** _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL				
562.72				
		3		
Very Dense, yellow, brown and gray SILTY LOAM, trace large gravel, pieces of broken cobbles, Moist		13 55		9.3
560.80				
Very Dense, yellowish brown Sand, course to fine, some large to fine gravel, Moist		50		
		50 50		5.8
558.80	-5			
Auger refusal at 5.0 feet (Weathered Bedrock)				
End of Boring @ 5.0 feet				
Backfill boring with soil cuttings				
	-10			
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

Interra, Inc.
600 Territorial Drive, Suite G
Bolingbrook, IL 60440
www.interraservices.com

SOIL BORING LOG

Date 5/20/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois LOGGED BY Abdu Sellah

SECTION _____ LOCATION 1758500, 1024983

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-01A
Station _____
Offset _____
Ground Surface Elev. 558.49 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 552.0 ft
Upon Completion 552.0 ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL				
557.49				
Loose to Medium Dense, yellowish brown SAND, course to fine, some large to fine gravel, Moist		3		
		3 6		6.7
		13		
	-5	10 6		6.6
552.99				
Dense, gray SAND, course to fine, some large to fine gravel, Saturated at 6.5 feet ▼		8		
		23 17		8.3
550.49				
Very Dense, light gray and gray WEATHERED BEDROCK (dolomite)		21		
		50/1"		7.7
	-10			
547.49				
Auger Refusal at 11.0 feet End of Boring @ 11.0 feet Backfill boring with soil cuttings		50/0"		
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/5/21

ROUTE Olympic Blvd, Houbolt Road **DESCRIPTION** Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois **LOGGED BY** Eric Slusser

SECTION _____ **LOCATION** 1758491.624, 1025105.482

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-01
Station _____
Offset _____
Ground Surface Elev. 560.92 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ **Hrs.** _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	3			Very Stiff, black TOPSOIL, Moist
558.72	4 4	2.5 P		Very Stiff, dark gray CLAY, roots, Moist
557.92	50/2"			Very Dense, yellowish brown and light gray WEATHERED BEDROCK(dolomite)
555.92 -5				Auger refrusal at 5.0 feet End of Boring at 5.0 feet Backfill boring with soil cuttings and bentonite chips
-10				
-15				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/5/21

ROUTE Olympic Blvd, Houbolt Road **DESCRIPTION** Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois **LOGGED BY** Eric Slusser

SECTION _____ **LOCATION** 1758526.828, 1025406.121

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-02
Station _____
Offset _____
Ground Surface Elev. 568.19 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ **Hrs.** _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				TOPSOIL
567.19				
	7			Medium dense, yellowish brown SAND FILL, medium to fine, cobble pieces, Moist
	8		4.9	
	6			
565.19				
	7			Very Dense, yellowish brown and light gray WEATHERED BEDROCK(dolomite)
	50/2"		6.5	
-5				
562.69				
				Auger refusal and 5.5 feet End of Boring @ 5.5 feet Backfill boring with soil cuttings and bentonite chips
-10				
-15				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/5/21

ROUTE Olympic Blvd, Houbolt Road **DESCRIPTION** Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois **LOGGED BY** Eric Slusser

SECTION _____ **LOCATION** 1758488.292, 1025729.405

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-03
Station _____
Offset _____
Ground Surface Elev. 567.35 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 558.4 ft ▼
Upon Completion 558.4 ft ▽
After _____ **Hrs.** _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 566.85				
CRUSHED ROCK AGGREGATE (sub-base) 566.35		6		
Dense, light gray SAND FILL, medium to fine, Moist		9 22		7.3
564.35				
Medium Dense black SAND AND CLAY mixed FILL, sand medium to fine, Moist		8		
		5 5		6.3
	-5			
561.85				
Loose, yellowish brown SAND FILL with bedrock chips, course to fine, Moist		2		
		2 3		5.8
559.35				
Very Dense, WEATHERED BEDROCK (dolomite), light gray, Saturated at 9.0 feet 558.35 ▼		5		
		5 50/5"		7.3
Auger refusal and 9.0 feet End of Boring @ 9.0 feet	-10			
Backfill boring with soil cuttings and bentonite chips				
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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Bolingbrook, IL 60440
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SOIL BORING LOG

Date 5/5/21

ROUTE Olympic Blvd, Houbolt Road **DESCRIPTION** Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois **LOGGED BY** Eric Slusser

SECTION _____ **LOCATION** 1759413.961, 1028429.37

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-04
Station _____
Offset _____
Ground Surface Elev. 601.36 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 592.4 ft ▼
Upon Completion Dry ft
After _____ **Hrs.** _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL				
600.36				
Loose to Very Loose, brown SANDY LOAM FILL, course to fine, trace fine gravel, Moist		5		
		3 3		15.0
		2		
		1 2		15.3
	-5	1		
		1 2		20.2
593.36				
Mediun Dense to Dense, brown SAND, course to fine, trace fine gravel, Moist ▼		2		
		3 7		7.0
trace to little medium to fine gravel in 11.0-12.5 ft sample	-10	7		
		26 17		5.1
588.36				
Very Stiff, brown CLAY, trace fine gravel, Moist		4		
		5 7	2.4 B	23.5
586.36	-15			
End of Boring 15.0 feet Backfill boring with soil cuttings and bentonite	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1759524.075, 1028725.56

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-05
Station _____
Offset _____
Ground Surface Elev. 598.89 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 597.89				
Very Stiff, brown CLAY, trace fine gravel, Moist		3		
		4 5	3.4 B	19.5
595.89				
Stiff, grayish brown SANDY CLAY, trace fine gravel, Moist		2		
		2 2	1.0 B	20.2
593.89	-5			
Medium Dense, redish brown SILTY LOAM, trace fine gravel, Moist		3		
		4 10		13.4
590.89				
Medium Dense, pale brown SANDY LOAM, course to fine, little medium to fine gravel, Moist		7		
		9 10		11.6
588.89	-10			
End of Boring 10.0 feet Backfill boring with soil cuttings and bentonite	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Olympic Blvd., from I-55 Frontage to Houbolt Rd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1759534.433, 1029027.892

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. OB-SGB-06
Station _____
Offset _____
Ground Surface Elev. 600.94 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 599.94				
Loose, brown and black SILTY LOAM, trace medium to fine gravel, Moist		5 4 3		15.9
597.94				
Loose, brown SANDY LOAM, medium to fine, trace to little fine gravel, Moist		2		
	-5	2 3		19.0
595.44				
Medium dense, pale brown SAND, medium to fine, trace to little fine gravel, Moist		10 12 12		6.8
592.94				
Medium Dense pale brown SANDY LOAM, course to fine, trace to little fine gravel, Moist		15 16 12		5.6
590.94	-10			
End of Boring 10.0 feet Backfill boring with soil cuttings and bentonite	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Houbolt Rd. from Olympic Blvd. to Rock Creek Blvd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1759869.079, 1029275.679

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. HR-SGB-01
Station _____
Offset _____
Ground Surface Elev. 603.12 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 602.12				
Medium Dense, brown SILTY LOAM, trace fine gravel, Moist		4		
		7		15.8
		5		
600.12				
Very Stiff, brown CLAY LOAM, trace fine gravel, Moist		2		
		3		22.2
	-5	5	3.0 P	
597.62				
Medium Dense, pale brown SAND, course to fine, trace to little fine gravel, Moist		8		
		9		6.2
		10		
		17		
		19		4.9
593.12	-10	16		
End of Boring at 10.0 feet Backfill boring with soil cuttings and bentonite chips	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road **DESCRIPTION** Houbolt Rd. from Olympic Blvd. to Rock Creek Blvd., Joliet, Illinois **LOGGED BY** Eric Slusser

SECTION _____ **LOCATION** 1759590.951, 1029396.945

COUNTY Will **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** AUTO

STRUCT. NO. _____
Station _____

BORING NO. HR-SGB-02
Station _____
Offset _____
Ground Surface Elev. 601.02 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ **Hrs.** _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL				
600.02				
Medium Dense, brown SANDY LOAM FILL, medium to fine, trace to little medium to fine gravel, pieces of concrete, Moist		7		
		7 9		14.3
598.02				
Loose, brown SANDY LOAM, course to fine, trace to little medium to fine gravel, Moist		5		
		5		9.7
	-5	4		
595.52				
Dense to Medium Dense, redish brown and pale brown SAND, course to fine, little medium to fine gravel, Moist		9		
		16 18		6.5
		6		
		7		8.4
	-10	9		
		16		
		17 22		5.5
		15		
		20		4.9
586.02	-15	22		
End of Boring at 15.0 feet Backfill boring with soil cuttings and bentonite chips	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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Bolingbrook, IL 60440
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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Houbolt Rd. from Olympic Blvd. to Rock Creek Blvd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1759282.222, 1029286.954

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. HR-SGB-03
Station _____
Offset _____
Ground Surface Elev. 598.89 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL				
597.89				
Medium Dense to Dense, brown SAND FILL, medium to fine, trace to little large to fine gravel, Moist		8		
		6 5		4.9
pieces of plastic from 3,5-5,0 ft sample		30		
		19 11		9.9
	-5			
593.39				
Medium Dense to Very Dense pale brown SAND, medium to fine, trace fine gravel, Moist		11		
		12 11		5.9
Color change to redish brown in 8.5-10.0 ft sample, trace to little large to fine gravel from 8.5-10.0 ft sample		7		
		15 50/4"		5.2
588.89	-10			
End of Boring at 10.0 feet Backfill boring with soil cuttings and bentonite chips				
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

Interra, Inc.
600 Territorial Drive, Suite G
Bolingbrook, IL 60440
www.interraservices.com

SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Houbolt Rd. from Olympic Blvd. to Rock Creek Blvd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1759021.381, 1029419.211

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. HR-SGB-04
Station _____
Offset _____
Ground Surface Elev. 596.11 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 595.11				
Medium Dense, brown SANDY LOAM FILL, course to fine, trace to little medium to fine gravel, pieces of concrete, Moist		6 10 9		8.6
593.11				
Stiff, gray CLAY FILL, trace fine gravel, Moist		7		
	-5	8 9	1.3 P	15.0
590.61				
Stiff, yellowish brown and light gray CLAY, Moist		6		
		6 7	1.9 B	20.7
		4		
586.11	-10	4 5	242.0 B	21.6
End of Boring at 10.0 feet Backfill boring with soil cuttings and bentonite chips	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Houbolt Rd. from Olympic Blvd. to Rock Creek Blvd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1758823.44, 1029284.068

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. HR-SGB-05
Station _____
Offset _____
Ground Surface Elev. 595.22 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 594.22			
Medium Dense, brown and gray SILTY LOAM FILL, trace fine gravel, pieces of concrete, Moist	3		
	12 6		21.3
592.22			
Stiff, brown and gray CLAY LOAM FILL, trace fine gravel, Moist	4		
	4		21.1
-5	4	1.5 P	
589.72			
Stiff to Hard, Gray(8.5-10.0'), llght gray and brown(11.0-12.5') CLAY LOAM, trace medium to fine gravel, scattered interbedded silt lenses (0.01-0,05'), moist	4		
	6 8		14.6
Color change to pale brown(13.5-14.5') gray (14.5-15.0')	2		
	2		23.9
-10	4	155.0 B	
	2		
	1		24.8
	2	1.2 B	
	2		
	3		17.1
580.22 -15	7	5.3 B	
End of Boring at 15.0 feet Backfill boring with soil cuttings and bentonite chips			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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600 Territorial Drive, Suite G
Bolingbrook, IL 60440
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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Houbolt Rd. from Olympic Blvd. to Rock Creek Blvd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1758592.237, 1029422.691

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. HR-SGB-06
Station _____
Offset _____
Ground Surface Elev. 592.53 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 591.53				
Medium Dense, black and brown silTY LOAM FILL, trace large to fine gravel, Moist 590.03		8 7 7		20.1
Medium dense, black SAND FILL, medium to fine, Moist 589.03		9		
Medium Dense, pale brown SAND FILL, course to fine, trace fine gravel, Moist	-5	10 9		4.8
587.03				
Medium Dense, yellowish brown and pale brown SAND, fine to very fine, Moist		6 10 11		4.5
584.53				
Dense, WEATHERED BEDROCK (dolomite)		11		
582.53	-10	18 27		
Auger Refusal at 10.0 feet End of Boring at 10.0 feet Backfill boring with soil cuttings and bentonite chips	-15 -20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

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Bolingbrook, IL 60440
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SOIL BORING LOG

Date 5/6/21

ROUTE Olympic Blvd, Houbolt Road DESCRIPTION Houbolt Rd. from Olympic Blvd. to Rock Creek Blvd., Joliet, Illinois LOGGED BY Eric Slusser

SECTION _____ LOCATION 1758355.012, 1029329.405

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO. _____
Station _____

BORING NO. HR-SGB-07
Station _____
Offset _____
Ground Surface Elev. 590.96 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL 589.96				
Medium Dense, brown and black SILTY LOAM FILL, trace to little large to fine gravel, Moist		4 6 7		18.6
587.96				
Loose, brown SANDY LOAM FILL, course to fine, little medium to fine gravel, Moist		3 3 6		24.6
	-5			
585.46				
Medium Dense to Dense, WEATHERED BEDROCK (dolomite) with some pale sand		9 12 11		
		9		
		19 26		
580.96	-10			
End of Boring at 10.0 feet Backfill boring with soil cuttings and bentonite chips	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

Appendix C

Laboratory Test Reports

INTERRA
Engineering • Inspection • Testing

Interra File No.: 8865

SOIL TEST RESULTS

PROJECT: Olympic Boulevard from I-55 East Frontage Road to Houbolt Road

Route: Olympic Boulevard from I-55 East Frontage Road to Houbolt Road
County: Will, Illinois

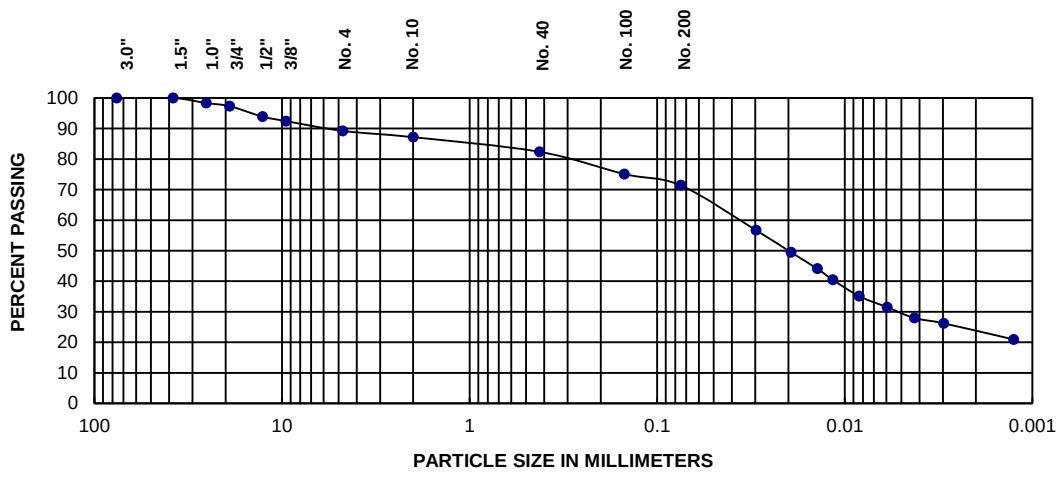
BORING LOCATION	HR-SGB-01	HR-SGB-04
Depth	2.0'-5.0'	2.0'-5.0'
AASHTO CLASSIFICATION (AASHTO M 145)	A-7-6(17)	A-2-6(0)
ILLINOIS TEXTURAL CLASSIFICATION	CLAY LOAM	SANDY LOAM
GRADATION-PASSING 1" SIEVE %	98.4	98.1
" 3/4" " %	97.3	94.5
" 1/2" " %	93.9	79.2
" NO. 4 " %	89.2	59.3
" NO. 10 " %	87.2	52.3
" NO. 40 " %	82.4	39.8
" NO. 100 " %	75.1	33.5
" NO. 200 " %	71.4	31.4
GRAVEL (AASHTO T88) %	12.8	47.7
SAND (AASHTO T88) %	15.8	20.9
SILT (AASHTO T88) %	47.8	22.6
CLAY (AASHTO T88) %	23.6	8.8
LIQUID LIMIT (AASHTO T89) %	46	29
PLASTICITY INDEX (AASHTO T90) %	24	11
STD. DRY DENSITY (IL MOD AASHTO T 99) PCF	106.6	127.9
OPTIMUM MOISTURE (IL MOD AASHTO T 99)%	17.3	10.5
SUBGRADE SUPPORT RATING	POOR	GRANULAR
IN SITU MOISTURE (AASHTO T 265)%	17.2	9.2
ORGANIC MATTER IN SOIL (AASHTO T 194)%	2.66	1.79
IBR (Each sample was tested twice, according to IDOT geotech. manual recommendation)		
Sample 1 0.1 in. penetration %	4.3	9.0
Sample 1 0.2 in. penetration %	3.7	7.5
Sample 2 0.1 in. penetration %	3.9	10.8
Sample 2 0.2 in. penetration %	3.4	8.7
Sample 1 swell %	2.76	0.45
Sample 2 swell %	2.61	0.40
REMARKS		

INTERRA Engineering • Inspection • Testing

GRAIN SIZE ANALYSIS
AASHTO T 88

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB01	**Date Tested**	5/17/2021	**Tested by**	BKP
						Qc by	RC

Date Sample Received:	5/6/2021
Sample Location	HR-SGB-01
Sample Description	Dark brown clay loam



			Fines	
% + 3"	**% Gravel**	**% Sand**	**% Silt**	**% Clay**
0.0	12.8	15.8	47.8	23.6

For coarse-grained soils with <12% Fines	D60(mm)	D30(mm)	D10(mm)	Cu	Cc

Sieve Size	**Percent Passing**
3.0"	100.0
1.5"	100.0
1.0"	98.4
3/4"	97.3
1/2"	93.9
3/8"	92.4
No. 4	89.2
No. 10	87.2
No. 40	82.4
No. 100	75.1
No. 200	71.4

Liquid Limit, L_L	**Plastic Limit, PL**	**Plasticity Index, PI**
46	22	24

AASHTO Classification:	A-7-6(17)
IDH Classification:	Clay Loam

Remarks:	

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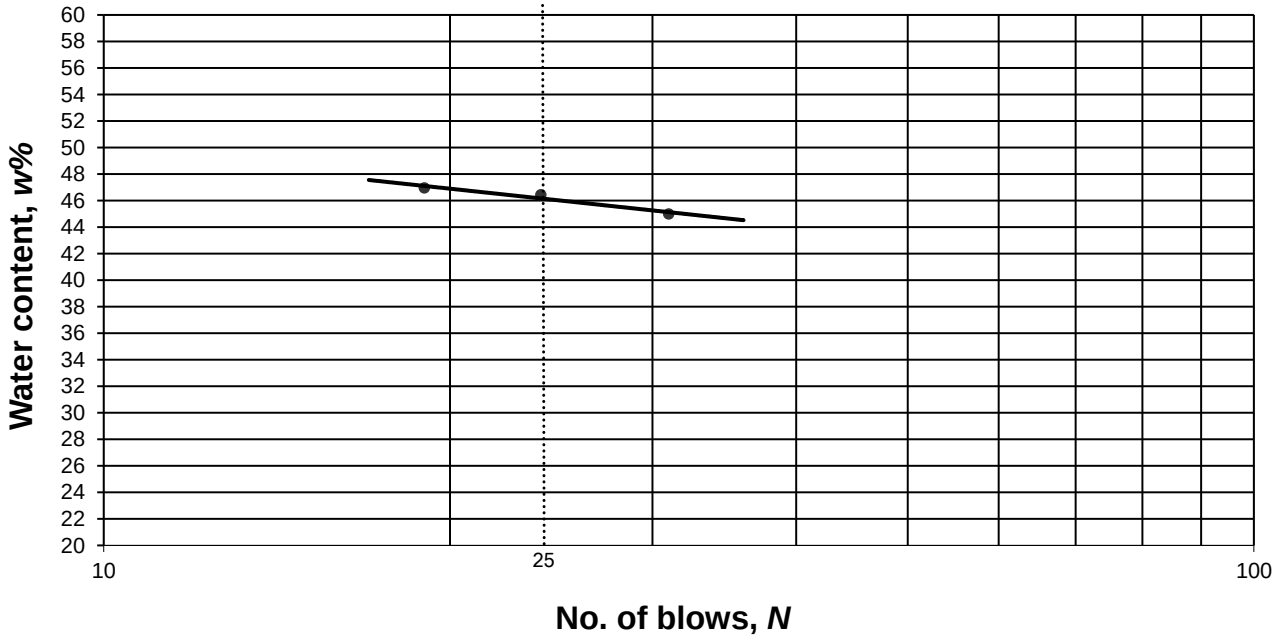
Atterberg Limits

AAASHTO T 89,90

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB01	**Date Tested**	5/14/2021	**Tested By**	DG
						Qc By	RC

Date Sample Recd.	5/6/2021
Sample Location	HR-SGB-01
Sample Description	Dark brown clay loam

LIQUID LIMIT DETERMINATION



Results

Liquid Limit, LL	**46**	**Plastic Limit, PL**	**22**	**Plasticity Index, PI**	**24**

Remarks

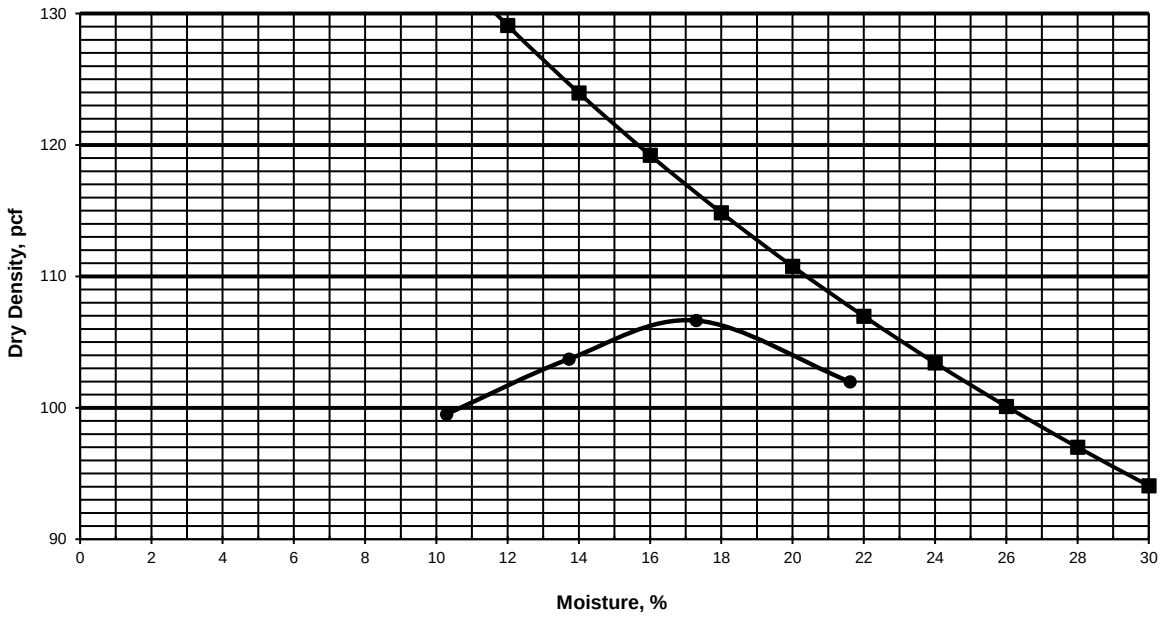
INTERRA
Engineering • Inspection • Testing

MOISTURE - DENSITY RELATIONSHIP CURVE

AASHTO T 99

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB01	**Date Tested**	5/13/2021	**Tested By**	DG
						Qc By	RC

Date Sample Recd.	5/6/21								
Sample Location	HR-SGB-01								
Sample Description	Dark brown clay loam								
Type of Proctor	Standard	**Method:**	C	**Mold Size, in.**	4	**Hammer Weight, lb.**	5.5	**Drop, in.**	12
No. of Layers	3	**No. of Blows per Layer**		25					



Zero Air Void Curve Specific Gravity: 2.75

Results

Maximum Dry Density, pcf	**106.6**	**Optimum Moisture Content, %**	**17.3**	**Natural Moisture Content, %**	**17.2**
Corrected Max. Dry Density, pcf		**Corrected Optimum Moisture Content, %**			

Remarks

www.interraservices.com

Test ID	65435

INTERRA
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Moisture Content
AASHTO T265

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB01	**Date Tested**	5/11/2021	**Tested By**	DG
						Qc By	RC

Date Sample Received	5/6/2021
Sample Location	HR-SGB-01
Sample Description	Dark brown clay loam

Can Number :	18	
Can Weight :	370.20	gm
Can + Wet Sample Weight :	974.30	gm
Can + Dry Sample Weight :	885.60	gm
Moisture Content :	**17.21**	%

Remarks

INTERRA
Engineering • Inspection • Testing

Determination of Organic Matter in Soils by Wet Combustion AASHTO T194-97

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc.-Lisle, IL						
File #	8865	**Date Tested**	5/20/2021	**Tested by:**	BKP	**Checked by:**	RC
Sample ID:	HR-SGB01		**Location**	HR-SGB-01			
Date Recd.	5/6/2021		**Description**	Dark brown clay loam			

Mass of the sample	0.788	g
Sample Titre	14.40	ml
Blank Titre	20.50	ml
Easily oxidised carbon, Percentage	1.19	%
Organic Matter, Percent	2.66	%

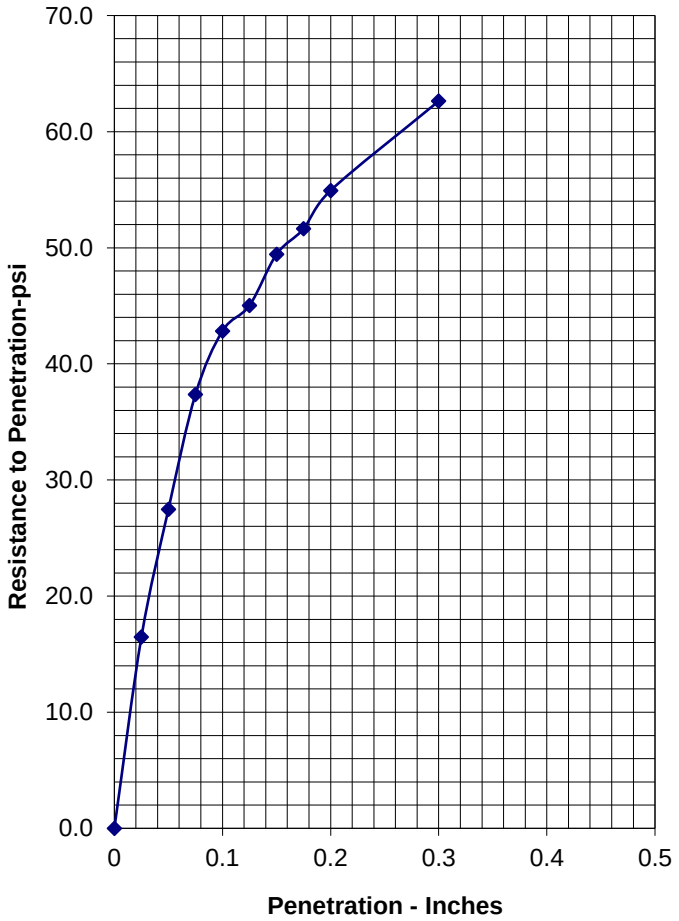
Remarks:

Interra, Inc.
600 Territorial Drive, Ste G, Bolingbrook, IL-60440
Ph: 630-754-8700 ; Fax 630-754-8705

ILLINOIS BEARING RATIO
AASHTO T-193

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois								
Client	Patrick Engineering, Inc.-Lisle, IL								
File No	8865	**Sample No**	HR-SGB01 (1)	**Date Tested**	5/21/21	**Tested By**	DG	**QC By**	RC

Date Recvd.	5/6/21								
Location	HR-SGB-01								
Description	Dark brown clay loam					**LL**	46	**PI**	24
Method	AASHTO T 193	**Opt. Moisture**	17.30%	**Hammer wt, lb**		**Drop, in**			
No. of Layers	1	**No. of Blows/Layer**	--	**Max. Dry Density**	106.6 pcf				



Condition of sample	Soaked
Dry Density (pcf), before soaking	107.9
Dry Density (pcf), after soaking	109.0

Moisture Content of sample(%)

Before compaction 17	After compaction 16.2
Top 1" After Test 25.1	Average After Test 19.3

Surcharge Weight, lbs	10

Swell (% of initial height)	**2.76**
IBR (at 0.1 in penetration)	4.3
IBR (at 0.2 in penetration)	**3.7**

Corrected IBR

IBR (at 0.1 in penetration)	4.3
IBR (at 0.2 in penetration)	**3.7**

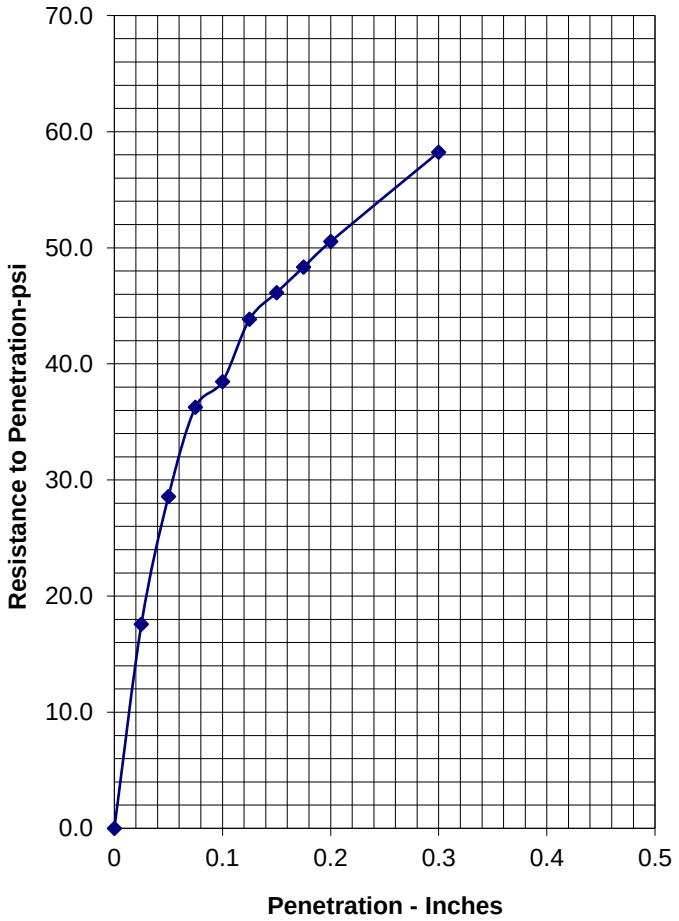
Remarks

Interra, Inc.
600 Territorial Drive, Ste G, Bolingbrook, IL-60440
Ph: 630-754-8700 ; Fax 630-754-8705

ILLINOIS BEARING RATIO
AASHTO T-193

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois								
Client	Patrick Engineering, Inc.-Lisle, IL								
File No	8865	**Sample No**	HR-SGB01 (2)	**Date Tested**	5/21/21	**Tested By**	DG	**QC By**	RC

Date Recvd.	5/6/21								
Location	HR-SGB-01								
Description	Dark brown clay loam					**LL**	46	**PI**	24
Method	AASHTO T 193	**Opt. Moisture**	17.30%	**Hammer wt, lb**		**Drop, in**			
No. of Layers	1	**No. of Blows/Layer**	--	**Max. Dry Density**	106.6 pcf				



Condition of sample	Soaked
Dry Density (pcf), before soaking	106.9
Dry Density (pcf), after soaking	108.8

Moisture Content of sample(%)

Before compaction 17.8	After compaction 17.1
Top 1" After Test 24.9	Average After Test 19.3

Surcharge Weight, lbs	10

Swell (% of initial height)	**2.61**
IBR (at 0.1 in penetration)	3.8
IBR (at 0.2 in penetration)	**3.4**

Corrected IBR

IBR (at 0.1 in penetration)	3.9
IBR (at 0.2 in penetration)	**3.4**

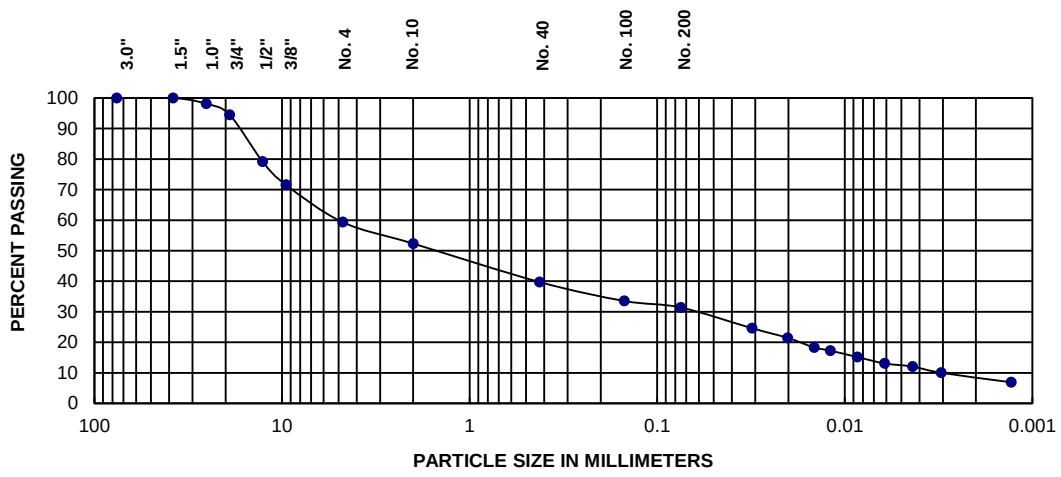
Remarks

INTERRA Engineering • Inspection • Testing

GRAIN SIZE ANALYSIS
AASHTO T 88

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB04	**Date Tested**	5/17/2021	**Tested by**	BKP
						Qc by	RC

Date Sample Received:	5/6/2021
Sample Location	HR-SGB-04
Sample Description	Brown sandy loam



			Fines	
% + 3"	**% Gravel**	**% Sand**	**% Silt**	**% Clay**
0.0	47.7	20.9	22.6	8.8

For coarse-grained soils with <12% Fines	D60(mm)	D30(mm)	D10(mm)	Cu	Cc

Sieve Size	**Percent Passing**
3.0"	100.0
1.5"	100.0
1.0"	98.1
3/4"	94.5
1/2"	79.2
3/8"	71.6
No. 4	59.3
No. 10	52.3
No. 40	39.8
No. 100	33.5
No. 200	31.4

Liquid Limit, L_L	**Plastic Limit, PL**	**Plasticity Index, PI**
29	18	11

AASHTO Classification:	A-2-6(0)
IDH Classification:	Sandy Loam

Remarks:	

Test ID	65441

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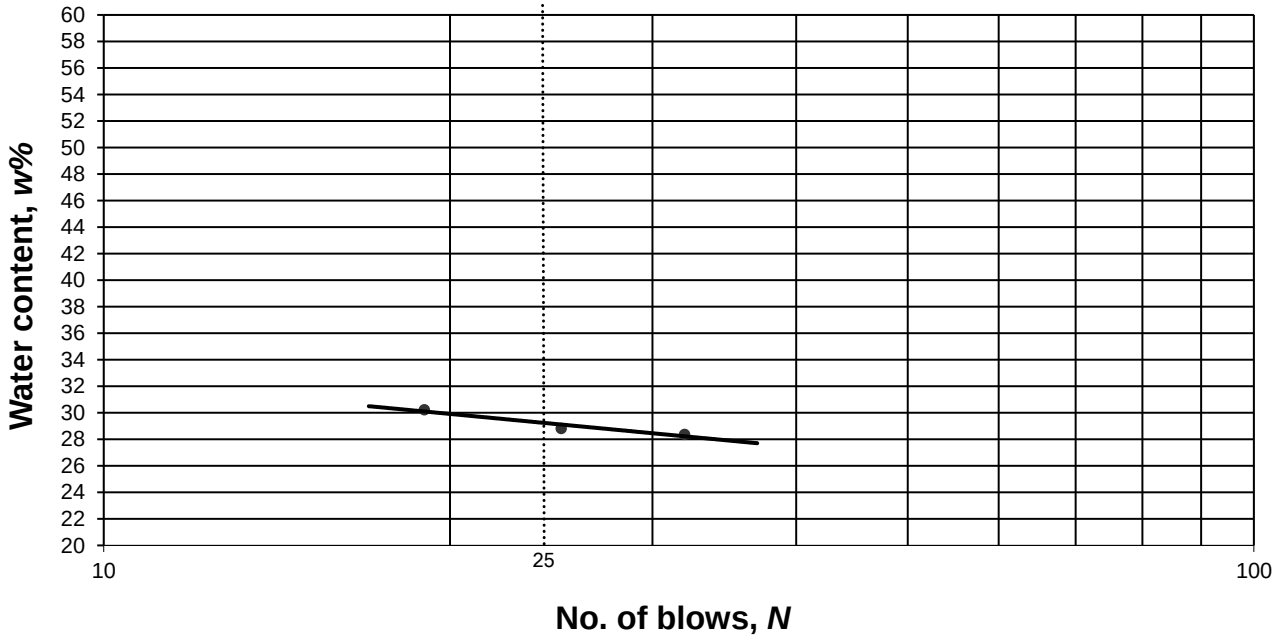
Atterberg Limits

AAASHTO T 89,90

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB04	**Date Tested**	5/14/2021	**Tested By**	DG
						Qc By	RC

Date Sample Recd.	5/6/2021
Sample Location	HR-SGB-04
Sample Description	Brown sandy loam

LIQUID LIMIT DETERMINATION



Results

Liquid Limit, LL	**29**	**Plastic Limit, PL**	**18**	**Plasticity Index, PI**	**11**

Remarks

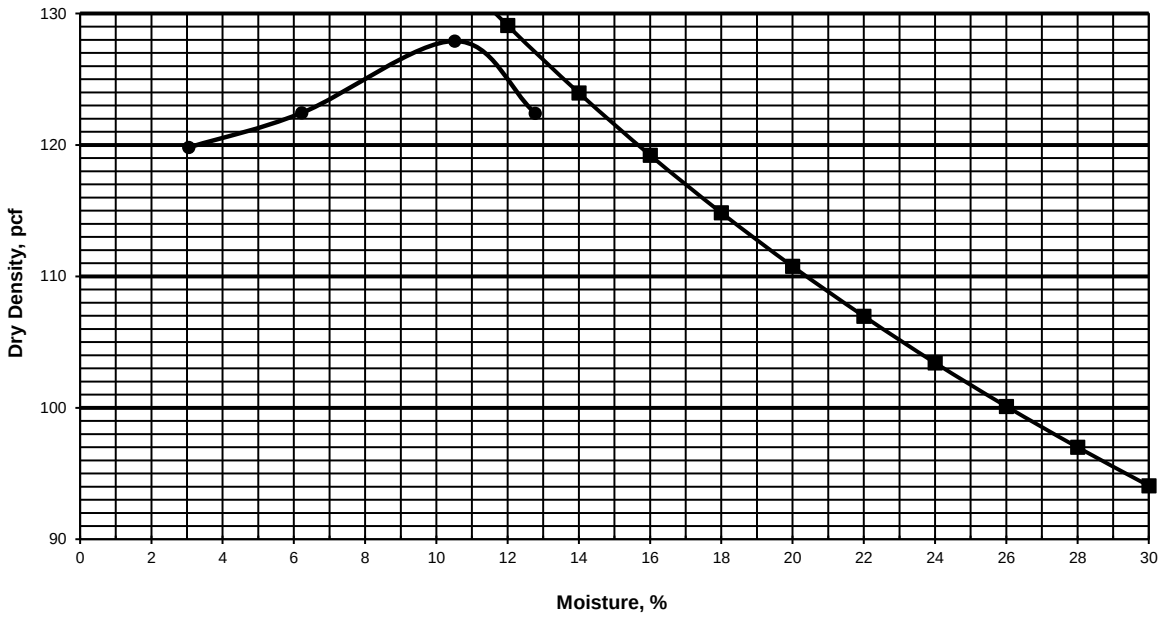
INTERRA
Engineering • Inspection • Testing

MOISTURE - DENSITY RELATIONSHIP CURVE

AASHTO T 99

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB04	**Date Tested**	5/13/2021	**Tested By**	DG
						Qc By	RC

Date Sample Recd.	5/6/21								
Sample Location	HR-SGB-04								
Sample Description	Brown sandy loam								
Type of Proctor	Standard	**Method:**	C	**Mold Size, in.**	4	**Hammer Weight, lb.**	5.5	**Drop, in.**	12
No. of Layers	3	**No. of Blows per Layer**		25					



Zero Air Void Curve Specific Gravity: 2.75

Results

Maximum Dry Density, pcf	**127.9**	**Optimum Moisture Content, %**	**10.5**	**Natural Moisture Content, %**	**9.2**
Corrected Max. Dry Density, pcf		**Corrected Optimum Moisture Content, %**			

Remarks

Test ID	65442

INTERRA
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Moisture Content
AASHTO T265

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
File No.	8865	**Sample #**	HR-SGB04	**Date Tested**	5/11/2021	**Tested By**	DG
						Qc By	RC

Date Sample Received	5/6/2021
Sample Location	HR-SGB-04
Sample Description	Brown sandy loam

Can Number :	6	
Can Weight :	307.72	gm
Can + Wet Sample Weight :	1204.67	gm
Can + Dry Sample Weight :	1128.90	gm
Moisture Content :	**9.23**	%

Remarks

INTERRA
Engineering • Inspection • Testing

Determination of Organic Matter in Soils by Wet Combustion AASHTO T194-97

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois						
Client	Patrick Engineering, Inc.-Lisle, IL						
File #	8865	**Date Tested**	5/20/2021	**Tested by:**	BKP	**Checked by:**	RC
Sample ID:	HR-SGB04	**Location**	HR-SGB-04				
Date Recd.	5/6/2021	**Description**	Brown sandy loam				

Mass of the sample	0.883	g
Sample Titre	15.90	ml
Blank Titre	20.50	ml
Easily oxidised carbon, Percentage	0.80	%
Organic Matter, Percent	1.79	%

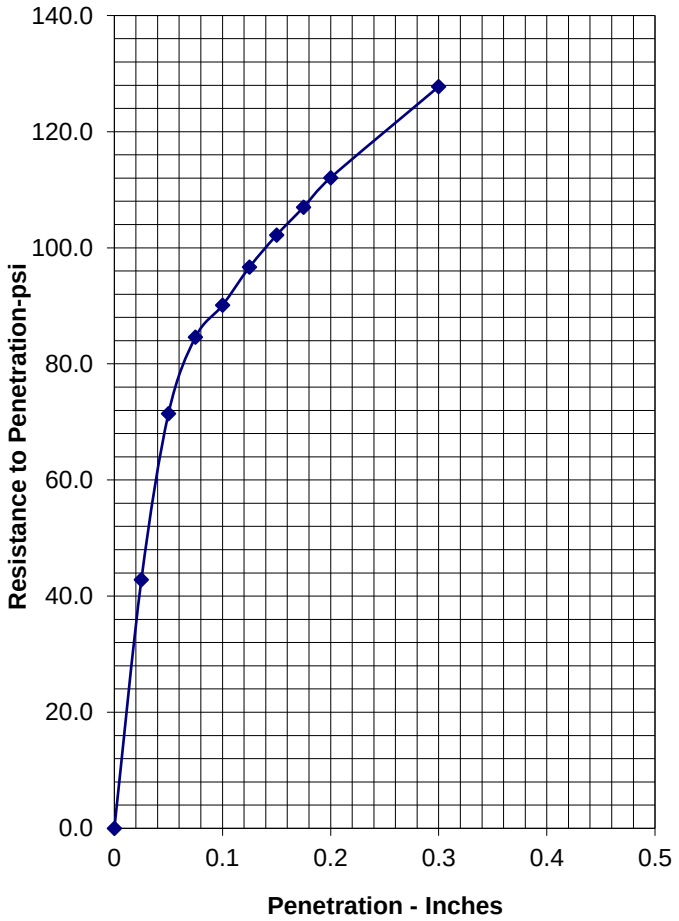
Remarks:

Interra, Inc.
600 Territorial Drive, Ste G, Bolingbrook, IL-60440
Ph: 630-754-8700 ; Fax 630-754-8705

ILLINOIS BEARING RATIO
AASHTO T-193

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois								
Client	Patrick Engineering, Inc.-Lisle, IL								
File No	8865	**Sample No**	HR-SGB04 (1)	**Date Tested**	5/21/21	**Tested By**	DG	**QC By**	RC

Date Recvd.	5/6/21								
Location	HR-SGB-04								
Description	Brown sandy loam						**LL**	29	**PI** 11
Method	AASHTO T 193	**Opt. Moisture**	10.50%	**Hammer wt, lb**			**Drop, in**		
No. of Layers	1	**No. of Blows/Layer**	--	**Max. Dry Density**	127.9 pcf				



Condition of sample	Soaked
Dry Density (pcf), before soaking	128.4
Dry Density (pcf), after soaking	129.3

Moisture Content of sample(%)

Before compaction 9.5	After compaction 10.6
Top 1" After Test 12.8	Average After Test 10.3

Surcharge Weight, lbs	10

Swell (% of initial height)	**0.45**
IBR (at 0.1 in penetration)	9.0
IBR (at 0.2 in penetration)	**7.5**

Corrected IBR

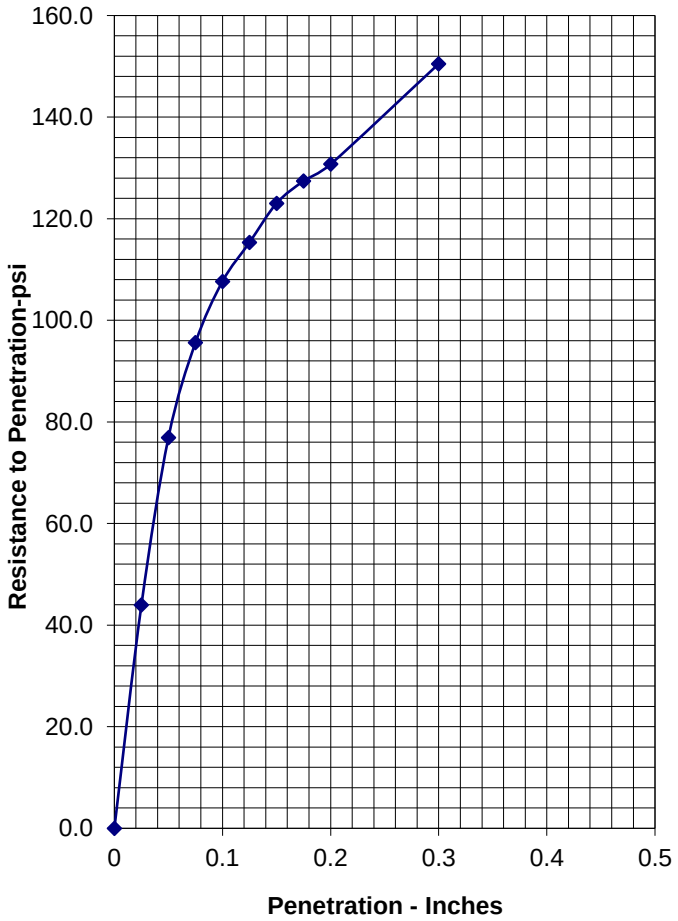
IBR (at 0.1 in penetration)	9.0
IBR (at 0.2 in penetration)	**7.5**

Remarks

Interra, Inc. 600 Territorial Drive, Ste G, Bolingbrook, IL-60440 Ph: 630-754-8700 ; Fax 630-754-8705	**ILLINOIS BEARING RATIO** AASHTO T-193

Project	Olympic Blvd Phase II Geotechnical, Joliet, Illinois								
Client	Patrick Engineering, Inc.-Lisle, IL								
File No	8865	**Sample No**	HR-SGB04 (2)	**Date Tested**	5/21/21	**Tested By**	DG	**QC By**	RC

Date Recvd.	5/6/21								
Location	HR-SGB-04								
Description	Brown sandy loam					**LL**	29	**PI**	11
Method	AASHTO T 193	**Opt. Moisture**	10.50%	**Hammer wt, lb**		**Drop, in**			
No. of Layers	1	**No. of Blows/Layer**	--	**Max. Dry Density**	127.9 pcf				



Condition of sample	Soaked
Dry Density (pcf), before soaking	128.1
Dry Density (pcf), after soaking	129.1

Moisture Content of sample(%)

Before compaction	After compaction
10.9	10.3
Top 1" After Test	Average After Test
12.3	10.5

Surcharge Weight, lbs	10

Swell (% of initial height)	**0.40**
IBR (at 0.1 in penetration)	10.8
IBR (at 0.2 in penetration)	**8.7**

Corrected IBR

IBR (at 0.1 in penetration)	10.8
IBR (at 0.2 in penetration)	**8.7**

Remarks

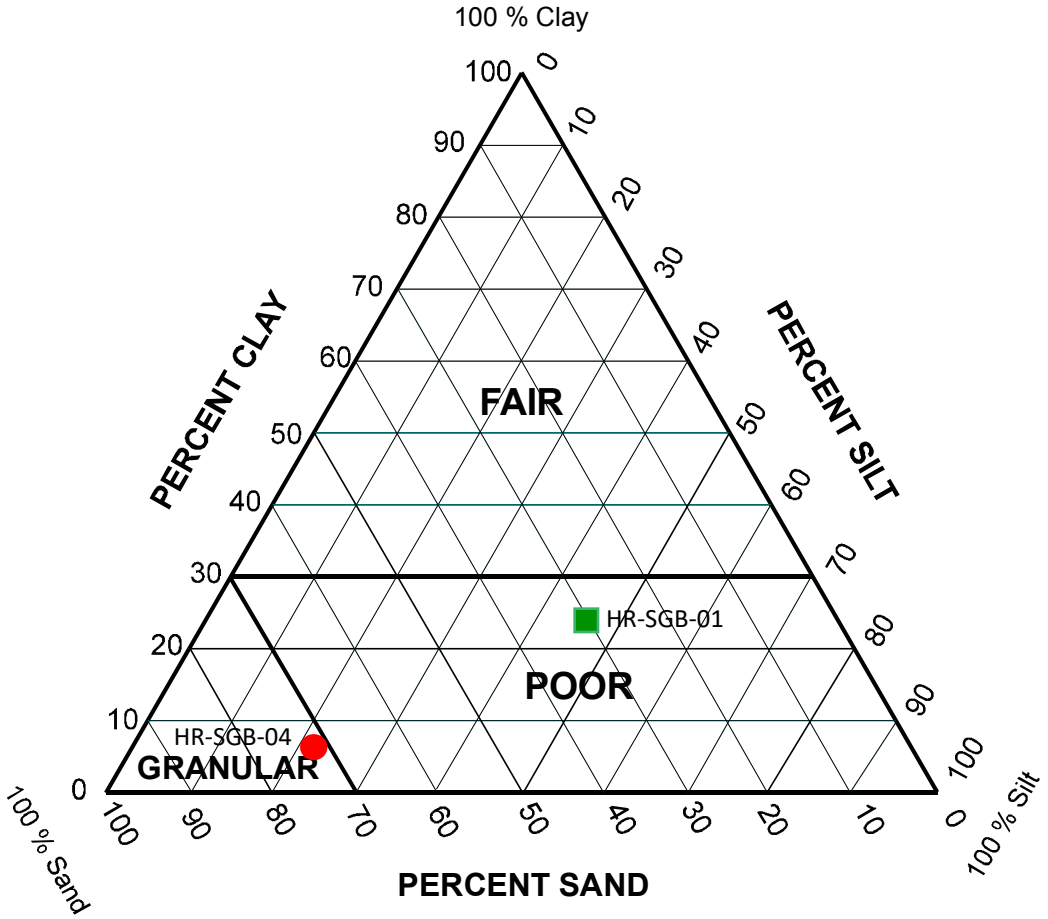
OLYMPIC BOULEVARD

FROM I-55 EAST FRONTAGE ROAD TO HOUBOLT ROAD

CITY OF JOLIET

WILL COUNTY, IL

INTERRA PROJ. NO. 8865



Subgrade Support Rating (SSR Chart)

Appendix D

Pavement Core Logs

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Engineering • Inspection • Testing

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Bolingbrook, IL 60440
ph: 630-754-8700 web: www.interraservices.com

PAVEMENT CORE LOG

File No.:	8865	**Project Name:**	Olympic Boulevard from I-55 Frontage Road to Houbolt Road, Joliet, Illinois				
Client:	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
Core No.	OB-PC-01	**Date Cored:**	5/5/2021	**Cored By:**	Geocon	**Measured By:**	Bipin Patel
Core Location:	Olympic Boulevard Westbound Lane - 6' RT of CL						
Core Diameter (in):	3.70	**Core Height (in):**	8.84	**Notes:**			



Asphalt Surface - 1.75"

Ashalt Binder - 1.75"

Ashalt Binder - 5.34"

Crushed aggregate subbase - 6.00 "

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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PAVEMENT CORE LOG

File No.:	8865	**Project Name:**	Olympic Boulevard from I-55 Frontage Road to Houbolt Road, Joliet, Illinois				
Client:	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
Core No.	OB-PC-02	**Date Cored:**	5/5/2021	**Cored By:**	Geocon	**Measured By:**	Bipin Patel
Core Location:	Olympic Boulevard Eastbound Lane - 6' LT of CL						
Core Diameter (in):	3.70	**Core Height (in):**	9.10	**Notes:**			

Asphalt Surface - 2.25"

Ashalt Binder - 1.85"

Ashalt Binder - 5.00"

Crushed aggregate subbase - 4.00 "



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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Bolingbrook, IL 60440
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PAVEMENT CORE LOG

File No.:	8865	**Project Name:**	Olympic Boulevard from I-55 Frontage Road to Houbolt Road, Joliet, Illinois				
Client:	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
Core No.	OB-PC-03	**Date Cored:**	5/5/2021	**Cored By:**	Geocon	**Measured By:**	Bipin Patel
Core Location:	Olympic Boulevard Westbound Lane - 6' LT of CL						
Core Diameter (in):	3.70	**Core Height (in):**	9.10	**Notes:**			

Asphalt Surface - 1.55"

Ashalt Binder - 1.85"

Ashalt Binder - 5.00"

Crushed aggregate subbase - 4.00 "



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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Bolingbrook, IL 60440
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PAVEMENT CORE LOG

File No.:	8865	**Project Name:**	Olympic Boulevard from I-55 Frontage Road to Houbolt Road, Joliet, Illinois				
Client:	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
Core No.	OB-PC-04	**Date Cored:**	5/5/2021	**Cored By:**	Geocon	**Measured By:**	Bipin Patel
Core Location:	Olympic Boulevard CL						
Core Diameter (in):	3.70	**Core Height (in):**	8.60	**Notes:**			



Asphalt Surface - 1.75"

Ashalt Binder - 1.75"

Ashalt Binder - 5.10"

Crushed aggregate subbase - 5.00 "

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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Bolingbrook, IL 60440
ph: 630-754-8700 web: www.interraservices.com

PAVEMENT CORE LOG

File No.:	8865	**Project Name:**	Olympic Boulevard from I-55 Frontage Road to Houbolt Road, Joliet, Illinois				
Client:	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
Core No.	HR-PC-01	**Date Cored:**	5/6/2021	**Cored By:**	Geocon	**Measured By:**	Bipin Patel
Core Location:	Houbolt Road Southbound Lane 2 - 6' LT of CL						
Core Diameter (in):	3.70	**Core Height (in):**	12.00	**Notes:**			



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PAVEMENT CORE LOG

File No.:	8865	**Project Name:**	Olympic Boulevard from I-55 Frontage Road to Houbolt Road, Joliet, Illinois				
Client:	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
Core No.	HR-PC-02	**Date Cored:**	5/6/2021	**Cored By:**	Geocon	**Measured By:**	Bipin Patel
Core Location:	Houbolt Road Northbound Lane 2 - 6' LT of CL						
Core Diameter (in):	3.70	**Core Height (in):**	10.20	**Notes:**			

Asphalt Surface - 1.50"

Ashalt Binder - 1.60"

Ashalt Binder - 3.00"

Ashalt Binder - 4.10"

Crushed aggregate subbase - 6.00 "



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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PAVEMENT CORE LOG

File No.:	8865	**Project Name:**	Olympic Boulevard from I-55 Frontage Road to Houbolt Road, Joliet, Illinois				
Client:	Patrick Engineering, Inc., 4970 Varsity Drive, Lisle, IL 60532						
Core No.	HR-PC-03	**Date Cored:**	5/6/2021	**Cored By:**	Geocon	**Measured By:**	Bipin Patel
Core Location:	Rock Run Boulevard Westbound Lane - 3' RT of median						
Core Diameter (in):	3.70	**Core Height (in):**	7.65	**Notes:**			

Asphalt Surface - 2.75"

Ashalt Binder - 4.90"

Crushed aggregate subbase - 6.00 "

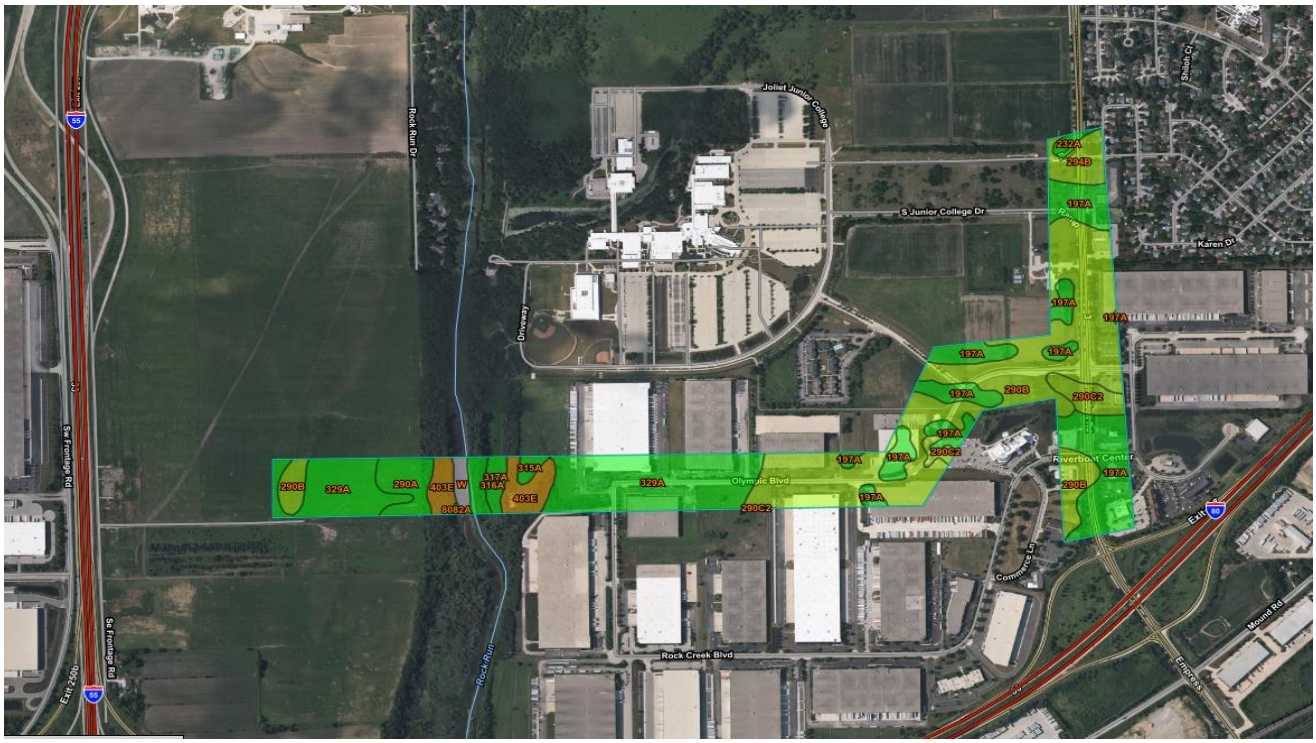


0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Appendix E

Soil Erosion Factors and Hazard Ratings

Soil Types for Erosion Factors and Hazard Rating



Hazard Rating and Soil Erosion Factors

Map unit symbol	Map unit name	Soil Erosion Factor, k	Hazard Rating
197A	Troxel silt loam, 0 to 2 percent slopes	0.32	Slight
232A	Ashkum silty clay loam, 0 to 2 percent slopes	0.2	Slight
290A	Warsaw silt loam, 0 to 2 percent slopes	0.32	Slight
290B	Warsaw silt loam, 2 to 4 percent slopes	0.32	Moderate
290C2	Warsaw silt loam, 4 to 6 percent slopes, eroded	0.43	Moderate
294B	Symerton silt loam, 2 to 5 percent slopes	0.24	Moderate
315A	Channahon silt loam, 0 to 2 percent slopes	0.32	Slight
316A	Romeo silt loam, 0 to 2 percent slopes	0.32	Slight
317A	Millsdale silty clay loam, 0 to 2 percent slopes	0.32	Slight
329A	Will silty clay loam, 0 to 2 percent slopes	0.28	Slight
403E	Elizabeth silt loam, 12 to 20 percent slopes	0.37	Severe
8082A	Millington silt loam, 0 to 2 percent slopes, occasionally flooded	0.32	Slight
W	Water		Not Rated

PRELIMINARY SITE INVESTIGATION

OLYMPIC BOULEVARD AND HOUBOLT ROAD
CITY OF JOLIET, WILL COUNTY, ILLINOIS

PREPARED BY:
PATRICK ENGINEERING INC.
4970 VARSITY DRIVE
LISLE, ILLINOIS 60532

PATRICK PROJECT NO. 22177.012

AUGUST 2022

PATRICK

EXECUTIVE SUMMARY

This report presents the results of a Preliminary Site Investigation (PSI) for the Olympic Boulevard Project in Joliet, Illinois. This PSI was performed along the far west side of the vacant field south of Joliet Junior College, along Olympic Boulevard to the intersection of Olympic Boulevard and Houbolt Road; and along Houbolt Road from just south of Longford Drive to just north of the entrance ramp to westbound Interstate 80, hence referred to as the Project Corridor. The scope of the project includes: the extension of Olympic Boulevard west to the I-55 East Frontage Road, the widening of Houbolt Road, installation of a shared use path along the north side of Olympic Boulevard and on the west side of Houbolt Road, milling and resurfacing of Olympic Boulevard from Crossroads Drive to Houbolt Road, and various intersection improvements at Olympic Boulevard and Houbolt Road.

A Preliminary Environmental Site Assessment (PESA) was conducted by the Illinois State Geological Survey (ISGS) in January 2019. The PESA concluded that twenty-nine (29) properties adjoining the Project Corridor contained recognized environmental conditions (RECs). Soil borings were advanced at thirty-three (33) locations within the existing right-of-way (ROW) on October 28 and 29, 2021, with an additional fifteen (15) soil borings conducted on June 8, 2022, to address the potential residential and construction worker safety, soil handling, and soil disposal issues. A summary of the sites that contained RECs is included in the following table.

Table 1: The following sites along the project were determined to contain RECs:

Property name IDOT parcel #	**ISGS site #**	**REC(s), including de minimis conditions**	**Regulatory database(s)**	**Land use**
ROW NA	3656-1	Spill; natural gas pipelines; potential ACM	IEMA	Transportation
Rock Run NA	3656-9	Non-attainment of water quality	None	Stream
Vacant land NA	3656-12	Potential former chemical use	BOL	Vacant
Ecolab NA	3656-13	Evidence of chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Commercial building NA	3656-14	Potential UST(s); evidence of chemical use; potential ACM and lead paint	RCRA, BOL	Commercial

Joliet Township High School Transportation NA	3656-15	Potential UST(s); evidence of former chemical use; potential chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Municipal
Blue Ribbon Products NA	3656-16	AST; potential former chemical use; potential ACM and lead paint	BOL	Commercial
Water tower NA	3656-17	Potential UST(s); potential AST(s); potential chemical use; potential ACM and lead paint	BOL	Municipal
Unisource Distribution NA	3656-18	Evidence of chemical use; potential ACM and lead paint	RCRA, BOL	Commercial
Crown Lift Trucks NA	3656-19	Potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Vacant lot NA	3656-20	Potential former chemical use	BOL	Vacant
Medtronic NA	3656-21	AST; evidence of former chemical use; spill; transformer; potential ACM and lead paint	RCRA, BOL, IEMA	Commercial
Commercial building NA	3656-22	Potential former chemical use; potential ACM and lead paint	BOL	Commercial
Joliet Junior College NA	3656-24	ASTs; former UST with a documented release; potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint; potential herbicide and/or fertilizer presence	RCRA, LUST, UST, BOL, IEMA	Commercial

ROW NA	3656-26	Spill	IEMA	Transportation
Commercial building NA	3656-28	Potential former chemical use; potential ACM and lead paint	None	Commercial
Commercial building NA	3656-30	Potential UST(s); evidence of former chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Holiday Inn NA	3656-33	Potential former chemical use; transformer; potential ACM and lead paint	BOL	Commercial
Vacant land NA	3656-34	Potential former chemical use; likely past pesticide and/or herbicide use	BOL	Vacant
Burger King NA	3656-36	Potential UST(s); potential former chemical use; transformer; potential ACM and lead paint	UST, BOL	Commercial
BP gasoline station NA	3656-37	USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint	RCRA, UST, BOL	Commercial
7-Eleven NA	3656-38	USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint	RCRA, UST, BOL	Commercial
McDonald's NA	3656-39	Potential UST(s); transformers; potential ACM and lead paint	UST	Commercial

Vacant land NA	3656-41	Potential former chemical use; likely past pesticide and/or herbicide use	BOL	Vacant
Comfort Inn NA	3656-43	Potential former chemical use; transformers; potential ACM and lead paint	BOL	Commercial
Heroes West Sports Bar and Grill NA	3656-44	Potential former chemical use; transformer; potential ACM and lead paint	BOL	Commercial
ROW NA	3656-45	Former solid waste; fill; potential ACM	BOL	Transportation

Samples were selected from each of the borings for analysis of the contaminants of concern (COCs) that would be associated with each of the specific RECs for that property. All samples were also analyzed for pH to assess potential disposal of soils at a clean construction and demolition debris (CCDD) facility.

The results of the laboratory analysis of the selected soil samples indicates that the soils within the Project Corridor are below the Tier 1 Remedial Objectives (35 Illinois Administrative Code Part 742) for the residential ingestion and inhalation, construction worker ingestion and inhalation, industrial/commercial ingestion and inhalation, only three samples exceeded the residential ingestion standard for manganese, they were B7, B22 and B34. A majority of the samples exceeded their maximum allowable concentrations (MACs) for CCDD disposal for iron and/or manganese; only the sample borings B3, B6, B10, B11, B14, B29, B30, B33, B38, and B39 achieved all the MAC standards for all COC's. The results for SVOCs indicated an exceedance of Benzo(a)pyrene in sample B20.

Based on the investigation presented in this PSI, soils within the vicinity of borings B3, B6, B10, B11, B14, B29, B30, B33, B38, and B39 can be either utilized on-site or are eligible for CCDD disposal using a LPC 663 form certified by an Illinois Licensed Professional Engineer or Professional Geologist. The remainder of the soils within the Project Corridor can be either utilized on-Site or will require disposal as non-special waste at a licensed Subtitle D landfill. The results of the soil characterization are illustrated on Figure 3.

INTRODUCTION

Project Location and Proposal Improvements. This report presents the results of a Preliminary Site Investigation (PSI) for the Olympic Boulevard Project in Joliet, Illinois. This PSI was performed starting along the far west side of the vacant field south of Joliet Junior College, along Olympic Boulevard to the intersection of Olympic Boulevard and Houbolt Road; and along Houbolt Road from just south of Longford Drive to just north of the entrance ramp to westbound Interstate 80, hence referred to as the Project Corridor. The project location is illustrated on Figure 1.

The scope of the project includes: the extension of Olympic Boulevard west to the I-55 East Frontage Road, the widening of Houbolt Road, installation of a shared use path, milling and resurfacing of Olympic Boulevard from Crossroads Drive to Houbolt Road, and various intersection improvements at Olympic Boulevard and Houbolt Road.

Based on the findings of the PESA conducted in January 2019, Patrick installed thirty-three (33) soil borings to assess the soils within the project limits for residential, industrial/commercial, and construction worker safety and to address disposal considerations.

Purpose of Investigation. The ISGS completed a PESA for the Project Corridor in January 2019. The 2019 report identified 29 sites as containing RECs with a potential for impacting the soils within the project limits for the planned improvements. The identified RECs are summarized in the following table:

Table 1: Sites along the project that were determined to contain RECs

Property name IDOT parcel #	ISGS site #	REC(s), including de minimis conditions	Regulatory database(s)	Land use
ROW NA	3656-1	Spill; natural gas pipelines; potential ACM	IEMA	Transportation
Rock Run NA	3656-9	Non-attainment of water quality	None	Stream
Vacant land NA	3656-12	Potential former chemical use	BOL	Vacant
Ecolab NA	3656-13	Evidence of chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Commercial building NA	3656-14	Potential UST(s); evidence of chemical use; potential ACM and lead paint	RCRA, BOL	Commercial
Joliet Township High School Transportation NA	3656-15	Potential UST(s); evidence of former chemical use; potential chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Municipal

Blue Ribbon Products NA	3656-16	AST; potential former chemical use; potential ACM and lead paint	BOL	Commercial
Water tower NA	3656-17	Potential UST(s); potential AST(s); potential chemical use; potential ACM and lead paint	BOL	Municipal
Unisource Distribution NA	3656-18	Evidence of chemical use; potential ACM and lead paint	RCRA, BOL	Commercial
Crown Lift Trucks NA	3656-19	Potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Vacant lot NA	3656-20	Potential former chemical use	BOL	Vacant
Medtronic NA	3656-21	AST; evidence of former chemical use; spill; transformer; potential ACM and lead paint	RCRA, BOL, IEMA	Commercial
Commercial building NA	3656-22	Potential former chemical use; potential ACM and lead paint	BOL	Commercial
Joliet Junior College NA	3656-24	ASTs; former UST with a documented release; potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint; potential herbicide and/or fertilizer presence	RCRA, LUST, UST, BOL, IEMA	Commercial
ROW NA	3656-26	Spill	IEMA	Transportation
Commercial building NA	3656-28	Potential former chemical use; potential ACM and lead paint	None	Commercial

Commercial building NA	3656-30	Potential UST(s); evidence of former chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Holiday Inn NA	3656-33	Potential former chemical use; transformer; potential ACM and lead paint	BOL	Commercial
Vacant land NA	3656-34	Potential former chemical use; likely past pesticide and/or herbicide use	BOL	Vacant
Burger King NA	3656-36	Potential UST(s); potential former chemical use; transformer; potential ACM and lead paint	UST, BOL	Commercial
BP gasoline station NA	3656-37	USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint	RCRA, UST, BOL	Commercial
7-Eleven NA	3656-38	USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint	RCRA, UST, BOL	Commercial
McDonald's NA	3656-39	Potential UST(s); transformers; potential ACM and lead paint	UST	Commercial
Vacant land NA	3656-41	Potential former chemical use; likely past pesticide and/or herbicide use	BOL	Vacant
Comfort Inn NA	3656-43	Potential former chemical use; transformers; potential ACM and lead paint	BOL	Commercial

Heroes West Sports Bar and Grill NA	3656-44	Potential former chemical use; transformer; potential ACM and lead paint	BOL	Commercial
ROW NA	3656-45	Former solid waste; fill; potential ACM	BOL	Transportation

SUBSURFACE INVESTIGATION

Contaminants of Concern. Samples were selected from each of the borings for analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals. All samples were also analyzed for pH to assess potential disposal of soils at a clean construction and demolition debris (CCDD) facility. Samples that indicated an exceedance of the MAC standards for total iron and manganese were also analyzed for synthetic precipitation leachate procedure (SPLP) iron and manganese. No samples were collected for potential asbestos containing material (ACM) or lead-based paint as no building demolition will occur as part of this project; additionally, no samples were analyzed for pesticides or herbicides as no project work will occur in areas where their use would be expected.

Sampling Methodology. The soil borings were installed on October 28 and 29, 2021 and June 8, 2022, by Cabeno Environmental Field Services under supervision by an experienced Patrick engineer using a track-mounted direct-push drill rig (with the exception of B34 through B37 which were installed by hand auger). Soil boring locations are illustrated in Figure 2. The borings were advanced to a depth of 12 feet bgs (or to refusal) and samples were collected continuously. Samples were screened both visually and with a photoionization detector (PID) for signs of potential contamination. The sample interval exhibiting the highest PID reading was selected for laboratory analysis and the PID readings are included on the boring logs in Appendix A (When the PID readings were all zero, the first sampling interval was tested). All non-disposable downhole equipment was decontamination in between each sampling interval and between borings.

Soil samples selected for laboratory analyses were collected in either glass jars (for SVOC, metal, and pH analysis) or 40 mL vials with preservative (VOC) in the field. The containers were placed immediately in a cooler with ice and were transported to the laboratory at the end of the day under chain-of-custody procedures. A copy of the chain-of-custody is included in Appendix C.

Surficial Geology. The surficial geology was described in the 2019 PESA as glacially deposited silts and clays to depth of 20 to 50 feet below ground surface. The soil boring results were generally consistent with this description as the materials within the top 12 feet of the subsurface generally consisted of silt and clays with occasional layers of sand along with some gravelly artificial fill layers. Soil boring logs are included in Appendix A.

SAMPLE RESULTS AND DISCUSSION

Assessment Methodology. Soil analytical results were compared to the Illinois Environmental Protection Agency's (IEPA's) Tiered Approach to Corrective Action Objectives, also known as TACO, Remedial Objectives (ROs). The TACO exposure pathways that were considered for this assessment are the Tier 1 residential ingestion and inhalation, industrial/commercial ingestion inhalation, construction worker ingestion and inhalation, and the Class I soil component of the groundwater ingestion exposure route (SCGIER). For the purposes of this project, the results were also compared to the MACs to determine the disposal requirements for any excavated soils.

Sample Results. The analytical results are included in Appendix B; copies of the analytical laboratory reports are included in Appendix C.

VOCs. VOCs were not detected in any of the soil samples.

SVOCs. SVOCs were only detected in one of the soil samples. Benzo(a)pyrene was detected at a concentration of 0.102 mg/kg in boring B20, which exceeds the Residential Ingestion standard of 0.09 mg/kg.

Metals. Total iron and manganese were detected in all of the borings; total iron exceeded its MAC standard in 39 of the 48 borings and total manganese exceeded its MAC standard in 18 of the borings. Total manganese also exceeded its TACO residential ingestion standard in borings B7, B22 and B34. SPLP analysis was performed on all of the metals samples that indicated an exceedance of the total MAC standards; only samples B10, B11 and B43 were below the SPLP standard for iron.

pH. The pH for boring B38 was 9.2 which exceeds the range of pH values required for CCDD disposal (6.25-9.0).

Results Discussion. The results of the laboratory analysis of the selected soil samples indicates the soils within the Project Corridor are below the Tier 1 Remedial Objectives (35 Illinois Administrative Code Part 742) for the residential ingestion and inhalation, construction worker ingestion and inhalation, industrial/commercial ingestion and inhalation, only three samples exceeded the residential ingestion standard for manganese, they were B7, B22 and B34. A majority of the samples exceeded their maximum allowable concentrations (MACs) for CCDD disposal for iron and/or manganese; only the samples from borings B3, B6, B10, B11, B14, B29 and B33 achieved all the MAC standards for all COC's. Total iron exceeded the non-MSA MAC in boring B30 but was below the MSA MAC; therefore soil from the area surrounding B30 can be disposed of as CCDD only in an MSA County if removed from the Site.

SOIL MANAGEMENT

Based on the investigation presented in this PSI, soils within the vicinity of borings B3, B6, B10, B11, B14, B29, B30, B33, B38 and B39 can be either utilized on-site or are eligible for CCDD disposal using a LPC 663 form certified by an Illinois Licensed Professional Engineer or Professional Geologist. The remainder of the soils within the Project Corridor can be either utilized on-Site or will require disposal as non-special waste at a licensed Subtitle D landfill. The results of the soil characterization are illustrated on Figure 3.

Soil that achieves the MACs, but contains glass, wood, or other debris may not be accepted by CCDD facilities. Soils that are not representative of those encountered during the PSI activities (odors, visual indicators of contamination, debris, etc.) will need to be reassessed prior to disposal at a CCDD facility. Any impacted soils that are discovered during construction are not certified for CCDD disposal and may require disposal at a Subtitle D landfill as non-special waste.

CONCLUSIONS

This report presents the results of a Preliminary Site Investigation (PSI) for the Olympic Boulevard Project in Joliet, Illinois. This PSI was performed starting along the far west side of the vacant field south of Joliet Junior College, along Olympic Boulevard to the intersection of Olympic Boulevard and Houbolt Road; and along Houbolt Road from just south of Longford Drive to just north of the entrance ramp to westbound Interstate 80. The scope of the project includes: the extension of Olympic Boulevard west to the I-55 East Frontage Road, the widening of Houbolt Road, installation of a shared use path, milling and resurfacing of Olympic Boulevard from Crossroads Drive to Houbolt Road, and various intersection improvements at Olympic Boulevard and Houbolt Road.

Based on the investigation presented in this PSI, soils within the vicinity of borings B3, B6, B10, B11, B14, B29, B30, B33, B38, and B39 can be either utilized on-site or are eligible for CCDD disposal using a LPC 663 form certified by an Illinois Licensed Professional Engineer or Professional Geologist. The remainder of the soils within the Project Corridor can be either utilized on-Site or will require disposal as non-special waste at a licensed Subtitle D landfill. The results of the soil characterization are illustrated on Figure 3.

Soil that achieves the MACs, but contains glass, wood, or other debris may not be accepted by CCDD facilities. Should soils that are not representative of those encountered during the PSI activities (odors, visual indicators of contamination, debris, etc.) will need to be reassessed prior to disposal at a CCDD facility. Any impacted soils that are discovered during construction are not certified for CCDD disposal and may require disposal at a Subtitle D landfill as non-special waste.

ENDORSEMENTS

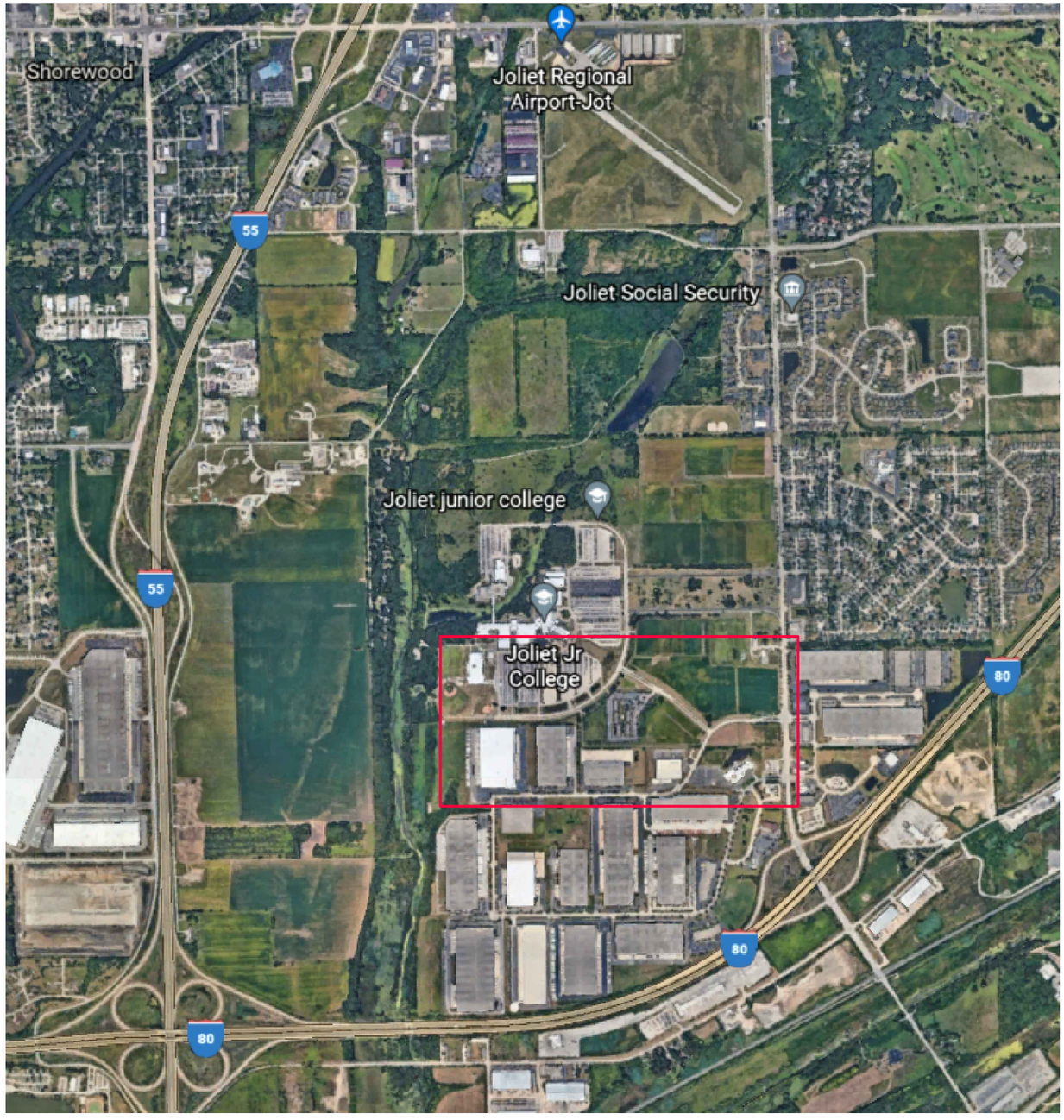
The observations and results reported herein are considered sufficient in detail and scope to form an informed and professional opinion as to the obvious potential environmental hazards within the Project Corridor. This assessment is complete and believed to be accurate. Patrick Engineering, Inc. cannot guarantee or warrant that the information provided is fully representative of all conditions along the entire Project Corridor.

Project Manager: _____ **Date:** 08/10/2022

Steven E. Kroll, P.G.

Senior Engineer: _____ **Date:** 08/10/2022

Jeffrey C. Schuh, P.E.



REV.	DATE	DESCRIPTION
–	–	–

ISSUES & REVISIONS

THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR USE ON THIS PROJECT ONLY

Owner/Client:

CITY OF JOLIET

PATRICK ENGINEERING
4970 Varsity Drive
Lisle, IL 60532
TEL. (630) 795-7200
FAX (630) 724-1681
www.patrickco.com

Project:

OLYMPIC BLVD

Sheet Title:

OVERALL SITE LOCATION

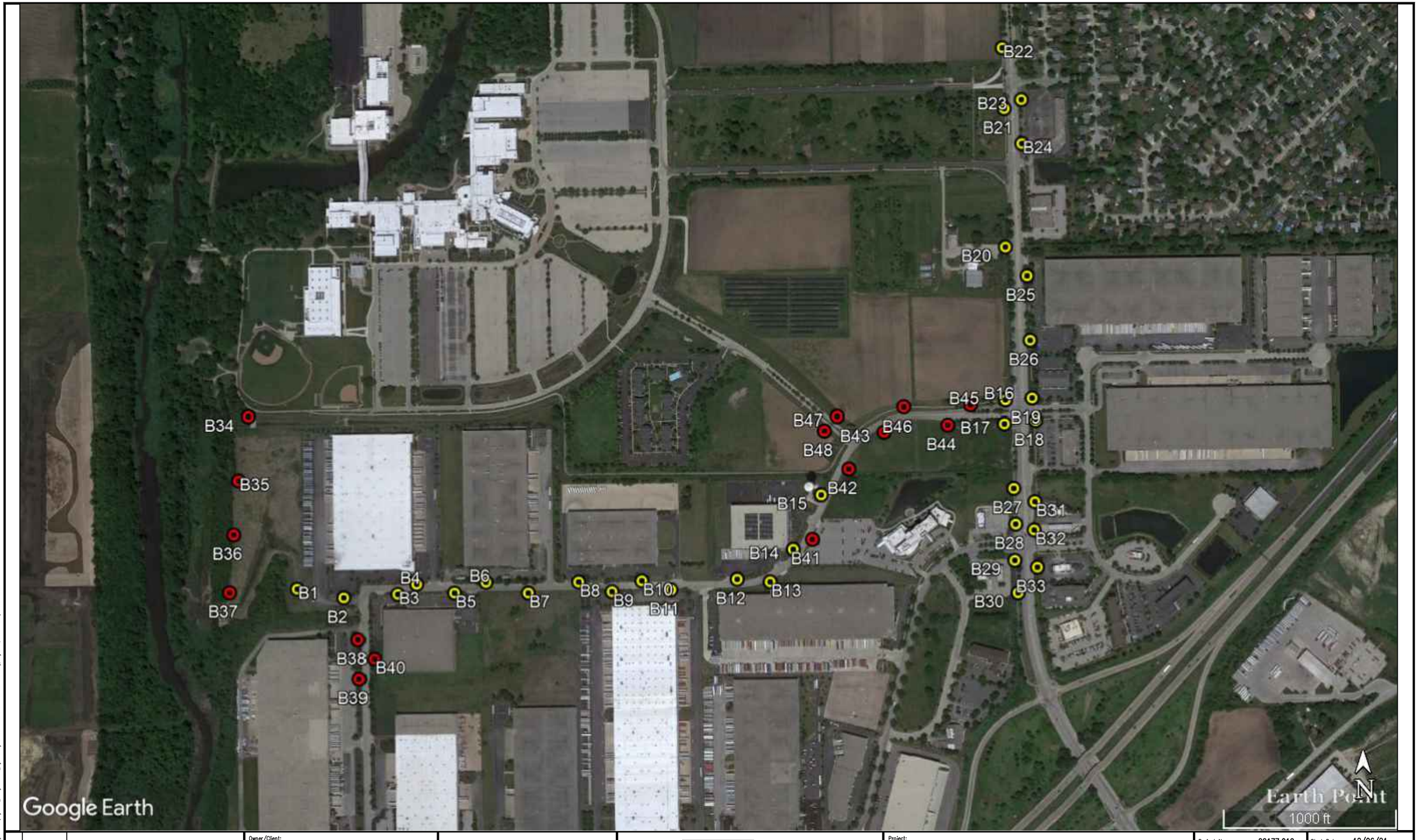
Project No.:	22177.012
Designed By:	SK
Drawn By:	CA
Checked By:	SK
Approved By:	SK

Start Date: 12/06/21

FIG. 1

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FILE NAME: O:\Joliet\Olympic Blvd\PDF\C1.01 Boring Locations_Figure 1.dwg LAYOUT NAME: C1.01 PLOTTED: Monday, February 21, 2022 - 2:25pm USER: conmelo



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REV.	DATE	DESCRIPTION

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Owner/Client:

CITY OF JOLIET

PATRICK ENGINEERING

4970 Varsity Drive
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www.patrickco.com

Project: **OLYMPIC BLVD**

Sheet Title: **BORING LOCATIONS**

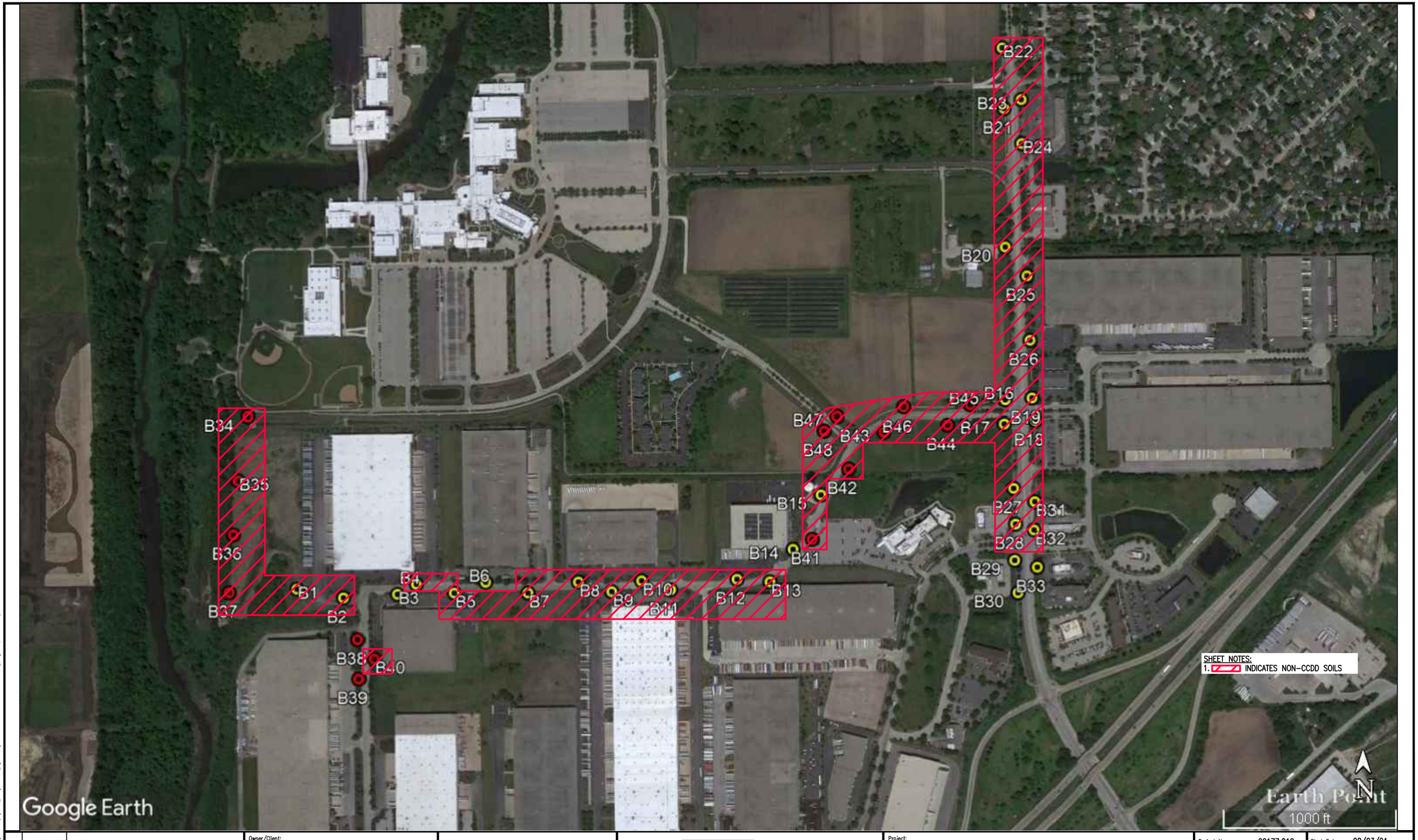
Project No.:	22177.012
Designed By:	SK
Drawn By:	CA
Checked By:	SK
Approved By:	SK

Start Date: 12/06/21

FIG. 2

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FILE NAME: G:\Jolie\Olympic Blvd\VSP\Drawings\August 2022\Aug-2022_Boring Locations_Figure 2.dwg LAYOUT NAME: C1.01 PLOTTED: Wednesday, August 03, 2022 - 2:09pm USER: EBeck



REV.	DATE	DESCRIPTION
–	–	–

ISSUES & REVISIONS

THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR USE ON THIS PROJECT ONLY

Owner/Client:

CITY OF JOLIET

PATRICK ENGINEERING

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www.patrickco.com

Project:

OLYMPIC BLVD

Sheet Title:

NON-CCDD SOILS

Project No.:	22177.012
Designed By:	SK
Drawn By:	CA
Checked By:	SK
Approved By:	SK

Start Date: 08/03/21

FIG. 3

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FILE NAME: G:\Joliet\Olympic Blvd\VSP\Drawings\August 2022\Aug-2022_Boring Locations_Figure 3.dwg LAYOUT NAME: C1.01 PLOTTED: Wednesday, August 03, 2022 - 2:08pm USER: EBeck

APPENDIX A

BORING LOGS

PATRICK ENGINEERING INC.

BORING NUMBER **B-1-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		6"TOPSOIL,	GP-1 0.0-4.0			
			dark brown, SILTYCLAY, w/some gravel and peat				Sampled 1'-4'
				GP-2 4.0-6.0			PID=0 ppm
	5.0		light brown, SILTYCLAY				
	6.0		End of Boring at 6'				Refusal @ 6'

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
▽
▼
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PATRICK ENGINEERING INC.

BORING NUMBER **B-2-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		6"TOPSOIL	GP-1 0.0-2.0			
			brown, SILTY CLAY, w/some gravel				Sampled 1'-3'
	2.0		light brown, SILTY CLAY, w/some gravel				
	3.0		End of Boring at 3'				Refusal @ 3'
				GP-2 4.0-6.0			

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-3-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		6"TOPSOIL	GP-1 0.0-4.0			
	0.5		gray, GRAVEL, w/some silt				
	1.0		light gray, SILTY CLAY				Sampled 1'-4'
	2.0		light brown, SILTY CLAY, w/some gravel				
				GP-2 4.0-8.0			PID=0 ppm
				GP-3 8.0-10.0			PID=0 ppm
	10.0						

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-4-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	1.0		dark brown, SILTY CLAY, w/some gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	8.0		gray, GRAVEL, w/some silt	GP-3 8.0-10.0			PID=0 ppm
	9.0		gray, SILT and GRAVEL				
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-5-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	0.5		brown, SILTY CLAY, w/some gravel				Sampled 1'-4'
	3.0		light brown, SILTY CLAY and GRAVEL	GP-2 4.0-8.0			PID=0 ppm
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-6-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	1.0		dark brown, SILTY CLAY				Sampled 1'-4'
	2.0		light brown, SILTY CLAY, w/some gravel				
				GP-2 4.0-8.0			PID=0 ppm
	7.0		brown, CLAY, w/some silt and gravel				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-7-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ – – – ○ – – – △ LL (10 20 30 40 50) Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			dark brown, CLAY, w/some gravel and silt				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
				GP-3 8.0-10.0			PID=0 ppm
	9.0		gray, SILTY CLAY and gravel				
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-8-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPOSOIL	GP-1 0.0-4.0			
	1.0		brown and gray, SILTY CLAY and GRAVEL				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-9-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPOSOIL	GP-1 0.0-4.0			Sampled 1'-4'
	3.0		gray, CLAY, w/some silt and gravel				
	5.0		light brown, SILTY CLAY and GRAVEL	GP-2 4.0-8.0			PID=0 ppm
	7.0		gray, SILTY CLAY	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-10-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			gray, CLAY, w/some silt				Sampled 1'-4'
	2.0		light brown, CLAY, w/some gravel				
				GP-2 4.0-8.0			PID=0 ppm
	7.0		gray, CLAY, w/some silt and little gravel				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-11-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		brown, SILTY CLAY and GRAVEL	GP-1 0.0-4.0			
			gray, CLAY, w/some silt and little gravel				Sampled 1'-4'
	2.0		TOPSOIL				
				GP-2 4.0-8.0			PID=0 ppm
	5.0		light brown, SILTY CLAY, w/some gravel				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
▽
▼
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PATRICK ENGINEERING INC.

BORING NUMBER **B-12-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL; Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		TOPOSOIL	GP-1 0.0-4.0			
			brown, SILTY CLAY, w/some gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	7.0		brown, SILTY CLAY, w/some gravel				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-13-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL				
			brown, SILTY CLAY and GRAVEL	0.0-4.0			Sampled 1'-4'
				4.0-8.0			PID=0 ppm
	8.0		light brown, SILTY CLAY and GRAVEL	8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-14-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			light brown, SILTY CLAY, w/some gravel				Sampled 1'-4'
	3.0		gray-brown, SILTY CLAY, w/little gravel				
				GP-2 4.0-8.0			PID=0 ppm
	8.0		gray, SILTY CLAY, w/trace gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-15-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL; Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			brown, SILTY CLAY, w/trace gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	7.0		light gray, SILTY CLAY and gravel				
	8.0		light brown, SILTY CLAY, w/little gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		gray, CLAY				PID=0 ppm
	15.0		End of Boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-16-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			Sampled 1'-4'
	2.0		brown, CLAY, w/some silt				
				GP-2 4.0-8.0			PID=0 ppm
	8.0		light brown, SILTY CLAY, w/some gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-17-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			Sampled 1'-4'
	2.0		brown, CLAY, w/little silt	GP-2 4.0-8.0			PID=0 ppm
	8.0		light brown, SILTYCLAY, w/some gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-18-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			brown, CLAY, w/some silt				Sampled 1'-4'
	2.0		light brown, SANYDY SILT, w/some clay and gravel				
				GP-2 4.0-8.0			PID=0 ppm
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-19-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPOSOIL	GP-1 0.0-4.0			
	1.0		dark brown, SILTY CLAY and GRAVEL brown, SILTY CLAY, w/little gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	8.0		light brown, SANDY SILT, w/little clay and gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-20-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL; Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			dark brown, SILTY CLAY, w/some gravel				Sampled 1'-4'
	4.0		brown, SILTY CLAY, little gravel	GP-2 4.0-8.0			PID=0 ppm
	8.0		light brown, SANYDY SILT, w/little gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-21-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	0.5		Light brown, SANYDY SILT, w/some gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	5.0		brown, SILTY CLAY, w/little gravel				
	6.0		dark brown, SILTY CLAY, w/some gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-22-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	1.0		brown, SILTY CLAY, w/little gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	6.0		brown, SILTY CLAY				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-23-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ – – – ○ – – – △ LL (10 20 30 40 50) Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			dark brown, SILTY CLAY, w/little gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	6.0		brown, SILTY CLAY and GRAVEL				
	7.0		gray-brown, SILTY CLAY, w/trace gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-24-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		dark brown, SILTY CLAY, w/trace gravel TOPSOIL	GP-1 0.0-4.0			Sampled 1'-4'
	3.0		dark brown, SILTYCLAY, w/some gravel and peat	GP-2 4.0-8.0			PID=0 ppm
	6.0		gray, SILTY CLAY, w/little gravel	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-25-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	1.0		dark brown, SILTY CLAY, w/trace gravel				Sampled 1'-4'
	2.0		brown. SILTY CLAY, w/trace gravel				
				GP-2 4.0-8.0			PID=0 ppm
	7.0		light brown, SANDY SILT, w/some gravel				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-26-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	0.0-4.0			Sampled 1'-4'
			dark brown, SILTY CLAY, w/some gravel				
	2.0		light brown, SILTY SAND, w/some gravel and little clay	4.0-8.0			PID=0 ppm
				8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-27-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	1.0		dark brown, CLAY, w/little silt and some gravel				Sampled 1'-4'
	2.0		dark brown, SILTY CLAY, w/little gravel				
				GP-2 4.0-8.0			PID=0 ppm
	6.0		brown, CLAY, w/little silt and gravel				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-28-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	1.0		dark brown, SILTY CLAY, w/some gravel				Sampled 1'-4'
	2.0		brown, SAND, w/some silt				
	3.0		dark brown, CLAY, w/little silt and gravel				
				GP-2 4.0-8.0			PID=0 ppm
	5.0		brown, SAND, w/some silt				
	7.0		dark gray, CLAY, w/little silt				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-29-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL; Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		TOPSOIL	GP-1 0.0-4.0			
	1.0		gray-brown, SILTY CLAY, and gravel				Sampled 1'-4'
	2.0		brown, SILTY CLAY, w/some gravel				
				GP-2 4.0-8.0			PID=0 ppm
	5.0		light brown, SANDY SILT, w/little gravel				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-30-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			brown, SILTY CLAY, w/little gravel				Sampled 1'-4'
				GP-2 4.0-8.0			PID=0 ppm
	6.0		light brown, SILTY SAND and GRAVEL				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-31-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			light brown, SILTY CLAY, w/some gravel				Sampled 1'-4'
	3.0		dark brown, SILTY CLAY, w/little gravel				
				GP-2 4.0-8.0			PID=0 ppm
	7.0		brownish-gray, CLAY, w/some silt				
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-32-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ – – – ○ – – – △ LL (10 20 30 40 50) Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			brown, SILTY CLAY, w/some gravel and peat				Sampled 1'-4'
	5.0		dark brown, SILTY CLAY, w/little gravel	GP-2 4.0-8.0			PID=0 ppm
	9.0		gray, CLAY, w/some silt	GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-33-21** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **BR**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0 0.5		TOPSOIL	GP-1 0.0-4.0			
			brown, SILTY CLAY, w/little gravel				Sampled 1'-4'
	3.0		light brown, SILTY SAND, w/little gravel				
				GP-2 4.0-8.0			PID=0 ppm
				GP-3 8.0-10.0			PID=0 ppm
	10.0		End of Boring at 10'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **10/28/21** ENDED **10/28/21**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-34-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **SK**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		Topsoil and roots	HA 0.0-2.0			PID= 0.0
	1.0		Fill				Sampled from 0-2'
	2.5		Refusal at 2.5'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Hand Auger**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-35-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **SK**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Topsoil and roots	HA 0.0-2.0			PID= 0.0
	1.0		Fill				Sampled from 0-2'
	2.5		Refusal at 2.5'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Hand Auger**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-36-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **SK**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ – – – ○ – – – △ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Topsoil and roots	HA 0.0-2.0			PID= 0.0
	1.0		Gravel				Sampled from 0-2'
	2.0		Refusal at 2'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Hand Auger**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-37-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **SK**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ – – – ○ – – – △ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Topsoil and roots	HA 0.0-2.0			PID= 0.0
	1.0		Gravel				Sampled from 0-2'
	2.0		Refusal at 2'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Hand Auger**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-38-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **SK**
41.493917N
GROUND ELEVATION **88.182450W**

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, topsoil	DP-01 0.0-5.0 R=2.25'			
	1.0		brown, light brown, gravelly lean CLAY, trace cobbles, moist CL				PID=0.0 ppm Sampled from 3'-5' PID=0.0 ppm
				DP-02 5.0-9.5 R=2'			PID=0.0 ppm
	8.5		weathered limestone bedrock				
	9.5		End of boring 9.5'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-39-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **SK**
41.493321N
GROUND ELEVATION **88.182441W**

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=3.5'			
	1.0		TOPSOIL				
			brown to light brown, gravelly lean CLAY, trace cobble				PID= 0.0 ppm
			CL				Sampled from 2'-4'
				DP-02 5.0-10.0 R=2.0'			PID= 0.0 ppm
							PID=0.0 ppm
	9.0		light gray, weathered LIMESTONE, little clay	DP-03 10.0-12.0 R=1.5'			PID=0.0 ppm
	12.0		End of borehole at 12'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-40-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **SK**
41.493597N
GROUND ELEVATION **88.182343W**

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL 10 20 30 40 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0 0.5		grass, dark brown, TOPSOIL TOPSOIL	DP-01 0.0-4.0 R=3'			
			dark gray, lean CLAY, trace sand, trace gravel CL				PID=0.0 ppm Sampled from 2'-4' PID=0.0 ppm
	4.0		End of boring, refusal from weathered limestone bedrock at 4'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-41-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **SK**
41.495496N
GROUND ELEVATION **88.173127W**

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=3.25'			
	0.8		TOPSOIL				
			brown, lean CLAY, some sand, some gravel, moist				PID= 0.0 ppm
			CL				Sampled from 3'-5'
	4.5		light brown, gravelly SAND, little lean clay, dry				PID=0.0 ppm
			SP	DP-02 5.0-10.0 R=3.0'			PID=0.0 ppm
	8.0		light brown to light gray, gravelly SAND, moist				PID=0.0 ppm
			SP	DP-03 10.0-15.0 R=3.25'			PID=0.0 ppm
							PID=0.0 ppm
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-42-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **Sk**
41.496516N
GROUND ELEVATION **88.172438W**

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL				
	1.0		TOPSOIL				
			light brown, lean CLAY, trace sand, stiff, moist	DP-01 1.0-6.0 R=4.0'			PID= 0.0 ppm
			CL				PID= 0.0 ppm
				DP-02 5.0-10.0 R=2.0'			PID= 0.1 ppm
	7.0						PID= 0.3 ppm
				DP-03 10.0-15.0 R=4.5'			PID= 0.3 ppm
							PID= 0.1 ppm
	13.0						
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-43-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **SK**
41.497160N
GROUND ELEVATION **88.171851W**

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL 10 20 30 40 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=			
	1.0		TOPSOIL				
			brown, lean CLAY, trace sand, stiff, moist				PID= 0.0 ppm
			CL				
	4.0		brown, gravelly SAND, little lean clay, stiff, moist				PID= 0.1 ppm
			SP	DP-02 5.0-10.0 R=2.5'			Sampled from 5'-7'
							PID= 0.2 ppm
							PID= 0.3 ppm
				DP-03 10.0-15.0 R=4.25'			PID= 0.3 ppm
	12.0		orange, gravelly SAND, little lean clay, moist				PID= 0.3 ppm
			SP				
	13.5		gray, lean CLAY, trace sand, stiff, moist				
			CL				
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-44-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **SK**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=3.75'			
	1.0		TOPSOIL				
			brown, lean CLAY, trace sand, stiff, moist				PID= 0.1 ppm
			CL				Sampled from 3'-5'
				DP-02 5.0-10.0 R=3.5'			
	6.0		brown, lean CLAY, trace sand, wet				PID= 0.1 ppm
			CL				PID= 0.0 ppm
				DP-03 10.0-15.0 R=3.0'			
							PID= 0.0 ppm
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-45-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **SK**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=4.25'			
	0.8		TOPSOIL				
			brown to gray, lean CLAY, trace sand, trace gravel, stiff, moist CL				PID= 0.1 ppm
							PID= 0.1 ppm
				DP-02 5.0-10.0 R=3.75'			Sampled from 3'-5'
							PID= 0.0 ppm
	8.0		brown, gravelly SAND, little lean clay SP				PID= 0.0 ppm
				DP-03 10.0-15.0 R=4.0'			PID= 0.0 ppm
							PID= 0.0 ppm
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-46-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**

LOGGED BY **SK**
GROUND ELEVATION

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=4.0'			
	1.0		TOPSOIL				
			brown, lean clay, trace sand, stiff, moist				PID= 0.0 ppm
			CL				PID= 0.0 ppm
	5.0		brown, gravelly SAND, little lean clay, stiff, moist	DP-02 5.0-10.0 R=4.25'			Sampled from 5'-7'
			SP				PID= 0.1 ppm
							PID= 0.1 ppm
	10.0		gray, lean CLAY, trace sand, stiff, moist	DP-03 10.0-25.0 R=5.0'			PID= 0.0 ppm
			CL				PID= 0.0 pm
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)
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PATRICK ENGINEERING INC.

BORING NUMBER **B-47-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **SK**
41.497242N
GROUND ELEVATION **88.172454W**

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=3.5'			
	1.0		TOPSOIL				
			brown, lean CLAY, trace sand, stiff, moist				PID= 0.3 ppm
			CL				Sampled from 3'-5'
							PID= 0.3 ppm
				DP-02 5.0-10.0 R=3.0'			
	6.5		brown to light brown, gravelly SAND, little clay, moist				PID= 0.3 ppm
			SP				
							PID= 0.1 ppm
				DP-03 10.0-15.0 R=1.25'			
							PID= 0.1 ppm
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

PATRICK ENGINEERING INC.

BORING NUMBER **B-48-22** SHEET **1** OF **1**
CLIENT **City of Joliet**
PROJECT & NO. **OLYMPIC BLVD. 22177.012**
LOCATION **Joliet, Il**
LOGGED BY **SK**
41.497146N
GROUND ELEVATION
88.172622W

ELEV.	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		grass, dark brown, TOPSOIL	DP-01 0.0-5.0 R=4.0'			
	1.0		TOPSOIL				
			brown, lean CLAY, trace sand, stiff, moist				PID= 0.0 ppm
			CL				PID= 0.1 ppm
	4.8		brown to light brown, gravelly SAND, little lean clay, moist	DP-02 5.0-10.0 R=3.5'			Sampled from 3'-5'
			SP				PID= 0.0 ppm
							PID= 0.0 ppm
				DP-03 10.0-15.0 R=4.8'			PID= 0.3 ppm
	11.0		gray, lean CLAY, trace sand, stiff, moist				PID= 0.1 ppm
			CL				
	15.0		End of boring at 15'				

DRILLING CONTRACTOR **Cabeno**
DRILLING METHOD **Direct Push**
DRILLING EQUIPMENT **Geoprobe**
DRILLING STARTED **6/8/22** ENDED **6/8/22**

REMARKS
Borehole backfilled with bentonite chips

WATER LEVEL (ft.)

APPENDIX B

ANALYTICAL LABORATORY RESULTS

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B1	B2	B3	B4	B5	B6	B7
Type	**Analyte**	**Units**	**MAC**	**MSA**	**Non MSA**	**SPLP**							
	pH		6.0-9.0				7.65	7.90	7.94	7.18	7.72	7.90	7.47
VOC	1,1,1-Trichloroethane	mg/Kg-dry	2				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry					<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	1,1,2-Trichloroethane	mg/Kg-dry	0.02				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	1,1-Dichloroethane	mg/Kg-dry	23				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	1,1-Dichloroethene	mg/Kg-dry	0.06				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	1,2-Dichloroethane	mg/Kg-dry	0.02				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	1,2-Dichloropropane	mg/Kg-dry	0.03				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	1,3-Dichlorobenzene	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
VOC	2-Butanone	mg/Kg-dry	17				<0.00920	<0.00867	<0.00870	<0.00862	<0.00924	<0.00793	<0.0104
VOC	2-Hexanone	mg/Kg-dry					<0.0230	<0.0217	<0.0218	<0.0216	<0.0231	<0.0198	<0.0260
VOC	4-Methyl-2-pentanone	mg/Kg-dry					<0.0230	<0.0217	<0.0218	<0.0216	<0.0231	<0.0198	<0.0260
VOC	Acetone	mg/Kg-dry	25				<0.0230	<0.0217	<0.0218	0.0745	<0.0231	<0.0198	<0.0260
VOC	Benzene	mg/Kg-dry	0.03				<0.000230	<0.000217	<0.000218	<0.000216	<0.000231	<0.000198	<0.000260
VOC	Bromodichloromethane	mg/Kg-dry	0.6				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Bromoform	mg/Kg-dry	0.8				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Bromomethane	mg/Kg-dry	0.2				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Carbon disulfide	mg/Kg-dry	9				<0.000920	<0.000867	<0.000870	0.00102	<0.000924	<0.000793	<0.00104
VOC	Carbon tetrachloride	mg/Kg-dry	0.07				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Chlorobenzene	mg/Kg-dry	1				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Chloroethane	mg/Kg-dry					<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Chloroform	mg/Kg-dry	0.3				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Chloromethane	mg/Kg-dry					<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	0.4				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	cis-1,3-Dichloropropene	mg/Kg-dry					<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Dibromochloromethane	mg/Kg-dry					<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Ethylbenzene	mg/Kg-dry	13				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Methyl tert-butyl ether	mg/Kg-dry	0.32				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Methylene chloride	mg/Kg-dry	0.02				<0.00460	<0.00433	<0.00435	<0.00431	<0.00462	<0.00397	<0.00520
VOC	Styrene	mg/Kg-dry	4				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Tetrachloroethene	mg/Kg-dry	0.06				<0.00184	<0.00173	<0.00174	<0.00172	<0.00185	<0.00159	<0.00208
VOC	Toluene	mg/Kg-dry	12				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Total Xylenes	mg/Kg-dry	5.6				<0.00184	<0.00173	<0.00174	<0.00172	<0.00185	<0.00159	<0.00208
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	0.7				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	trans-1,3-Dichloropropene	mg/Kg-dry					<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Trichloroethene	mg/Kg-dry	0.06				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
VOC	Vinyl chloride	mg/Kg-dry	0.01				<0.000920	<0.000867	<0.000870	<0.000862	<0.000924	<0.000793	<0.00104
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	5				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	17				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	1,4-Dichlorobenzene	mg/Kg-dry	2				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	26				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	0.66				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2,4-Dichlorophenol	mg/Kg-dry	0.48				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2,4-Dimethylphenol	mg/Kg-dry	9				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2,4-Dinitrophenol	mg/Kg-dry	3.3				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	0.25				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	0.26				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2-Chloronaphthalene	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2-Chlorophenol	mg/Kg-dry	1.5				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2-Methylnaphthalene	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2-Methylphenol	mg/Kg-dry	15				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2-Nitroaniline	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	2-Nitrophenol	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	1.3				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	3,4-Methylphenol	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	3-Nitroaniline	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	4-Chloroaniline	mg/Kg-dry	0.7				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	4-Nitroaniline	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	4-Nitrophenol	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry	570				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	85				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	12000				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	1.1	1.8	0.9		<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Butyl benzyl phthalate	mg/Kg-dry	1.3	2.1	0.98	0.09	<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Carbazole	mg/Kg-dry	1.5	2.1	0.9		<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Dibenzofuran	mg/Kg-dry	2300				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Diethyl phthalate	mg/Kg-dry	9				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Dimethyl phthalate	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Di-n-butyl phthalate	mg/Kg-dry	0.66				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Di-n-octyl phthalate	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Hexachlorobenzene	mg/Kg-dry	46				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Hexachlorobutadiene	mg/Kg-dry	930				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	0.6				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Hexachloroethane	mg/Kg-dry	88				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Isophorone	mg/Kg-dry	0.2	0.42	0.15	0.09	<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Nitrobenzene	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	470				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry					<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B1	B2	B3	B4	B5	B6	B7
SVOC	Pentachlorophenol	mg/Kg-dry	2300				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Phenol	mg/Kg-dry	1600				<0.298	<0.292	<0.281	<0.303	<0.291	<0.281	<0.319
SVOC	Acenaphthene	mg/Kg-dry	570				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Acenaphthylene	mg/Kg-dry	85				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Anthracene	mg/Kg-dry	12000				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Benzo(a)anthracene	mg/Kg-dry	1.1				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Benzo(a)pyrene	mg/Kg-dry	1.3				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	1.5				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry	2300				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	9				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Chrysene	mg/Kg-dry					<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.2				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Fluoranthene	mg/Kg-dry	3100				0.0893	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Fluorene	mg/Kg-dry	560				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	0.9				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Naphthalene	mg/Kg-dry	1.8				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Phenanthrene	mg/Kg-dry	210				<0.0596	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
SVOC	Pyrene	mg/Kg-dry	2300				0.0703	<0.0584	<0.0562	<0.0607	<0.0582	<0.0562	<0.0639
Inorganic	Aluminum	mg/Kg-dry		9500	9200		8290	6200	2250	8810	4010	1890	**12800**
Inorganic	Antimony	mg/Kg-dry	5				<1.44	<1.49	<1.50	<1.47	<1.46	<1.46	<1.50
Inorganic	Arsenic	mg/Kg-dry		13	11.3		4.82	2.52	<1.15	1.33	4.22	1.88	4.67
Inorganic	Barium	mg/Kg-dry	1500				70.1	63.1	38.9	81.4	62.4	17.3	153
Inorganic	Beryllium	mg/Kg-dry	22				0.513	0.408	0.268	0.515	0.345	0.213	0.651
Inorganic	Cadmium	mg/Kg-dry	5.2				0.926	0.593	0.346	0.744	0.723	0.353	1.06
Inorganic	Calcium	mg/Kg-dry					74300	84900	133000	55700	92100	129000	28500
Inorganic	Chromium	mg/Kg-dry	21				13.2	10.6	7.29	13.0	10.5	5.48	16.4
Inorganic	Cobalt	mg/Kg-dry	20				7.00	5.84	3.04	5.23	10.4	4.50	14.5
Inorganic	Copper	mg/Kg-dry	2900				18.0	13.9	6.84	14.5	20.6	13.6	19.6
Inorganic	Iron	mg/Kg-dry		15900	15000		**27800**	**16500**	9140	**18700**	**18500**	10700	**25300**
Inorganic	Iron SPLP	mg/L				5	**100**	**110**		**170**	**140**		**210**
Inorganic	Lead	mg/Kg-dry	107				12.0	6.51	2.59	10.5	7.68	3.64	9.89
Inorganic	Magnesium	mg/Kg-dry	325000				39500	38100	64400	25200	44900	66800	14100
Inorganic	Manganese	mg/Kg-dry		636	630		475	565	382	331	**652**	341	**1800**
Inorganic	Manganese (SPLP)	mg/L				0.15					**1.3**		**3**
Inorganic	Mercury	mg/Kg-dry	0.89				<0.0194	<0.0180	<0.0174	0.0281	0.0201	<0.0189	0.0354
Inorganic	Nickel	mg/Kg-dry	100				16.7	12.8	6.61	12.0	19.5	9.81	26.9
Inorganic	Potassium	mg/Kg-dry					884	751	525	780	790	697	838
Inorganic	Selenium	mg/Kg-dry	1.3				<1.25	<1.29	<1.30	<1.27	<1.26	<1.26	<1.30
Inorganic	Silver	mg/Kg-dry	4.4				<0.0577	<0.0594	<0.0600	<0.0588	<0.0583	<0.0583	<0.0600
Inorganic	Sodium	mg/Kg-dry					105	179	184	212	219	165	129
Inorganic	Thallium	mg/Kg-dry	2.6				<0.962	<0.990	<1.00	<0.980	<0.971	<0.971	<1.00
Inorganic	Vanadium	mg/Kg-dry	550				22.2	18.4	10.4	23.2	17.0	7.90	30.7
Inorganic	Zinc	mg/Kg-dry	5100				59.4	40.0	16.6	45.4	44.7	29.9	58.2

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs
Darkly shaded and bolded text indicates exceedance of all MACs and TACO

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B8	B9	B10	B11	B12	B13	B14
Type	**Analyte**	**Units**	**MAC**	**MSA**	**Non MSA**	**SPLP**							
	pH		6.0-9.0				8.10	8.10	8.02	8.42	7.79	8.05	7.35
VOC	1,1,1-Trichloroethane	mg/Kg-dry	2				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry					<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	1,1,2-Trichloroethane	mg/Kg-dry	0.02				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	1,1-Dichloroethane	mg/Kg-dry	23				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	1,1-Dichloroethene	mg/Kg-dry	0.06				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	1,2-Dichloroethane	mg/Kg-dry	0.02				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	1,2-Dichloropropane	mg/Kg-dry	0.03				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	1,3-Dichlorobenzene	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
VOC	2-Butanone	mg/Kg-dry	17				<0.0115	<0.0116	<0.00973	<0.00751	<0.00839	<0.00972	<0.00864
VOC	2-Hexanone	mg/Kg-dry					<0.0288	<0.0289	<0.0243	<0.0188	<0.0210	<0.0243	<0.0216
VOC	4-Methyl-2-pentanone	mg/Kg-dry					<0.0288	<0.0289	<0.0243	<0.0188	<0.0210	<0.0243	<0.0216
VOC	Acetone	mg/Kg-dry	25				<0.0288	<0.0289	<0.0243	<0.0188	<0.0210	<0.0243	<0.0216
VOC	Benzene	mg/Kg-dry	0.03				<0.000288	<0.000289	<0.000243	<0.000188	<0.000210	<0.000243	<0.000216
VOC	Bromodichloromethane	mg/Kg-dry	0.6				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Bromoform	mg/Kg-dry	0.8				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Bromomethane	mg/Kg-dry	0.2				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Carbon disulfide	mg/Kg-dry	9				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Carbon tetrachloride	mg/Kg-dry	0.07				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Chlorobenzene	mg/Kg-dry	1				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Chloroethane	mg/Kg-dry					<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Chloroform	mg/Kg-dry	0.3				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Chloromethane	mg/Kg-dry					<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	0.4				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	cis-1,3-Dichloropropene	mg/Kg-dry					<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Dibromochloromethane	mg/Kg-dry					<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Ethylbenzene	mg/Kg-dry	13				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Methyl tert-butyl ether	mg/Kg-dry	0.32				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Methylene chloride	mg/Kg-dry	0.02				<0.00575	<0.00578	<0.00486	<0.00376	<0.00420	<0.00486	<0.00432
VOC	Styrene	mg/Kg-dry	4				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Tetrachloroethene	mg/Kg-dry	0.06				<0.00230	<0.00231	<0.00195	<0.00150	<0.00168	<0.00194	<0.00173
VOC	Toluene	mg/Kg-dry	12				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Total Xylenes	mg/Kg-dry	5.6				<0.00230	<0.00231	<0.00195	<0.00150	<0.00168	<0.00194	0.00193
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	0.7				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	trans-1,3-Dichloropropene	mg/Kg-dry					<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Trichloroethene	mg/Kg-dry	0.06				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
VOC	Vinyl chloride	mg/Kg-dry	0.01				<0.00115	<0.00116	<0.000973	<0.000751	<0.000839	<0.000972	<0.000864
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	5				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	17				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	1,4-Dichlorobenzene	mg/Kg-dry	2				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	26				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	0.66				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2,4-Dichlorophenol	mg/Kg-dry	0.48				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2,4-Dimethylphenol	mg/Kg-dry	9				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2,4-Dinitrophenol	mg/Kg-dry	3.3				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	0.25				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	0.26				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2-Chloronaphthalene	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2-Chlorophenol	mg/Kg-dry	1.5				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2-Methylnaphthalene	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2-Methylphenol	mg/Kg-dry	15				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2-Nitroaniline	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	2-Nitrophenol	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	1.3				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	3,4-Methylphenol	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	3-Nitroaniline	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	4-Chloroaniline	mg/Kg-dry	0.7				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	4-Nitroaniline	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	4-Nitrophenol	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry	570				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	85				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	12000				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	1.1	1.8	0.9		<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Butyl benzyl phthalate	mg/Kg-dry	1.3	2.1	0.98	0.09	<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Carbazole	mg/Kg-dry	1.5	2.1	0.9		<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Dibenzofuran	mg/Kg-dry	2300				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Diethyl phthalate	mg/Kg-dry	9				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Dimethyl phthalate	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Di-n-butyl phthalate	mg/Kg-dry	0.66				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Di-n-octyl phthalate	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Hexachlorobenzene	mg/Kg-dry	46				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Hexachlorobutadiene	mg/Kg-dry	930				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	0.6				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Hexachloroethane	mg/Kg-dry	88				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Isophorone	mg/Kg-dry	0.2	0.42	0.15	0.09	<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Nitrobenzene	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	470				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry					<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286

Olympic Boulevard and Houbolt Road Joliet, IL
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						Sample ID	B8	B9	B10	B11	B12	B13	B14
SVOC	Pentachlorophenol	mg/Kg-dry	2300				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Phenol	mg/Kg-dry	1600				<0.280	<0.295	<0.298	<0.271	<0.294	<0.296	<0.286
SVOC	Acenaphthene	mg/Kg-dry	570				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Acenaphthylene	mg/Kg-dry	85				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Anthracene	mg/Kg-dry	12000				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Benzo(a)anthracene	mg/Kg-dry	1.1				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Benzo(a)pyrene	mg/Kg-dry	1.3				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	1.5				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry	2300				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	9				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Chrysene	mg/Kg-dry					<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.2				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Fluoranthene	mg/Kg-dry	3100				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Fluorene	mg/Kg-dry	560				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	0.9				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Naphthalene	mg/Kg-dry	1.8				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Phenanthrene	mg/Kg-dry	210				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
SVOC	Pyrene	mg/Kg-dry	2300				<0.0561	<0.0590	<0.0595	<0.0542	<0.0588	<0.0593	<0.0573
Inorganic	Aluminum	mg/Kg-dry		9500	9200		7770	2320	7680	1040	4380	3980	4140
Inorganic	Antimony	mg/Kg-dry	5				<1.46	<1.50	<1.49	<1.50	<1.49	<1.44	<1.49
Inorganic	Arsenic	mg/Kg-dry		13	11.3		2.94	5.95	<1.14	**17.9**	7.39	5.92	3.94
Inorganic	Barium	mg/Kg-dry	1500				52.5	32.2	41.0	19.8	68.8	61.8	45.3
Inorganic	Beryllium	mg/Kg-dry	22				0.423	0.239	0.444	0.151	0.424	0.378	0.301
Inorganic	Cadmium	mg/Kg-dry	5.2				0.672	0.542	0.551	0.827	0.873	0.649	0.401
Inorganic	Calcium	mg/Kg-dry					84300	105000	66400	130000	59600	71100	18700
Inorganic	Chromium	mg/Kg-dry	21				13.5	6.04	15.6	4.65	10.0	8.47	7.50
Inorganic	Cobalt	mg/Kg-dry	20				7.02	4.65	9.99	3.53	7.11	6.34	5.82
Inorganic	Copper	mg/Kg-dry	2900				17.2	16.7	19.7	19.8	18.3	15.5	13.4
Inorganic	Iron	mg/Kg-dry		15900	15000		**20100**	**16400**	**17600**	**26900**	**21500**	**19900**	12700
Inorganic	Iron SPLP	mg/L				5	**7.8**	**21**	<0.25	0.42	**120**	**170**	
Inorganic	Lead	mg/Kg-dry	107				8.54	7.06	8.14	9.01	8.72	9.13	6.76
Inorganic	Magnesium	mg/Kg-dry	325000				38600	53400	26500	71300	32900	39900	11400
Inorganic	Manganese	mg/Kg-dry		636	630		413	466	406	433	**689**	577	379
Inorganic	Manganese (SPLP)	mg/L				0.15					**2.2**		
Inorganic	Mercury	mg/Kg-dry	0.89				<0.0183	0.0195	0.0207	0.0194	0.0403	0.0264	0.0202
Inorganic	Nickel	mg/Kg-dry	100				17.2	11.2	22.7	9.71	16.4	13.5	12.2
Inorganic	Potassium	mg/Kg-dry					1190	507	1420	376	656	551	404
Inorganic	Selenium	mg/Kg-dry	1.3				<1.26	<1.30	<1.29	<1.30	<1.29	<1.25	<1.29
Inorganic	Silver	mg/Kg-dry	4.4				<0.0583	<0.0600	<0.0594	<0.0600	<0.0594	<0.0577	<0.0594
Inorganic	Sodium	mg/Kg-dry					256	245	288	203	114	213	68.9
Inorganic	Thallium	mg/Kg-dry	2.6				<0.971	<1.00	<0.990	<1.00	<0.990	<0.962	<0.990
Inorganic	Vanadium	mg/Kg-dry	550				19.2	10.0	18.1	8.39	16.3	15.2	12.2
Inorganic	Zinc	mg/Kg-dry	5100				54.2	56.2	58.6	74.2	81.0	52.0	41.5

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs
Darkly shaded and bolded text indicates exceedance of all MACs and TACO

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B15	B16	B17	B18	B19	B20	B21

Type	Analyte	Units	MAC	MSA	Non MSA	SPLP							
	pH		6.0-9.0				7.54	7.06	7.37	8.01	7.59	7.87	7.85
VOC	1,1,1-Trichloroethane	mg/Kg-dry	2				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry					<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	1,1,2-Trichloroethane	mg/Kg-dry	0.02				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	1,1-Dichloroethane	mg/Kg-dry	23				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	1,1-Dichloroethene	mg/Kg-dry	0.06				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	1,2-Dichloroethane	mg/Kg-dry	0.02				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	1,2-Dichloropropane	mg/Kg-dry	0.03				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	1,3-Dichlorobenzene	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
VOC	2-Butanone	mg/Kg-dry	17				<0.00937	<0.00890	<0.00931	<0.0106	<0.00923	<0.00922	<0.0109
VOC	2-Hexanone	mg/Kg-dry					<0.0234	<0.0223	<0.0233	<0.0265	<0.0231	<0.0231	<0.0273
VOC	4-Methyl-2-pentanone	mg/Kg-dry					<0.0234	<0.0223	<0.0233	<0.0265	<0.0231	<0.0231	<0.0273
VOC	Acetone	mg/Kg-dry	25				<0.0234	<0.0223	<0.0233	<0.0265	<0.0231	<0.0231	<0.0273
VOC	Benzene	mg/Kg-dry	0.03				<0.000234	<0.000223	<0.000233	<0.000265	<0.000231	<0.000231	<0.000273
VOC	Bromodichloromethane	mg/Kg-dry	0.6				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Bromoform	mg/Kg-dry	0.8				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Bromomethane	mg/Kg-dry	0.2				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Carbon disulfide	mg/Kg-dry	9				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Carbon tetrachloride	mg/Kg-dry	0.07				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Chlorobenzene	mg/Kg-dry	1				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Chloroethane	mg/Kg-dry					<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Chloroform	mg/Kg-dry	0.3				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Chloromethane	mg/Kg-dry					<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	0.4				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	cis-1,3-Dichloropropene	mg/Kg-dry					<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Dibromochloromethane	mg/Kg-dry					<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Ethylbenzene	mg/Kg-dry	13				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Methyl tert-butyl ether	mg/Kg-dry	0.32				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Methylene chloride	mg/Kg-dry	0.02				<0.00469	<0.00445	<0.00466	<0.00531	<0.00461	<0.00461	<0.00546
VOC	Styrene	mg/Kg-dry	4				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Tetrachloroethene	mg/Kg-dry	0.06				<0.00187	<0.00178	<0.00186	<0.00212	<0.00185	<0.00184	<0.00218
VOC	Toluene	mg/Kg-dry	12				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	0.000968	<0.00109
VOC	Total Xylenes	mg/Kg-dry	5.6				<0.00187	<0.00178	<0.00186	<0.00212	<0.00185	<0.00184	<0.00218
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	0.7				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	trans-1,3-Dichloropropene	mg/Kg-dry					<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Trichloroethene	mg/Kg-dry	0.06				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
VOC	Vinyl chloride	mg/Kg-dry	0.01				<0.000937	<0.000890	<0.000931	<0.00106	<0.000923	<0.000922	<0.00109
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	5				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	17				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	1,4-Dichlorobenzene	mg/Kg-dry	2				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	26				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	0.66				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2,4-Dichlorophenol	mg/Kg-dry	0.48				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2,4-Dimethylphenol	mg/Kg-dry	9				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2,4-Dinitrophenol	mg/Kg-dry	3.3				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	0.25				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	0.26				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2-Chloronaphthalene	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2-Chlorophenol	mg/Kg-dry	1.5				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2-Methylnaphthalene	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2-Methylphenol	mg/Kg-dry	15				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2-Nitroaniline	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	2-Nitrophenol	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	1.3				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	3,4-Methylphenol	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	3-Nitroaniline	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	4-Chloroaniline	mg/Kg-dry	0.7				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	4-Nitroaniline	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	4-Nitrophenol	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry	570				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	85				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	12000				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	1.1	1.8	0.9		<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Butyl benzyl phthalate	mg/Kg-dry	1.3	2.1	0.98	0.09	<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Carbazole	mg/Kg-dry	1.5	2.1	0.9		<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Dibenzofuran	mg/Kg-dry	2300				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Diethyl phthalate	mg/Kg-dry	9				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Dimethyl phthalate	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Di-n-butyl phthalate	mg/Kg-dry	0.66				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Di-n-octyl phthalate	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Hexachlorobenzene	mg/Kg-dry	46				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Hexachlorobutadiene	mg/Kg-dry	930				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	0.6				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Hexachloroethane	mg/Kg-dry	88				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Isophorone	mg/Kg-dry	0.2	0.42	0.15	0.09	<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Nitrobenzene	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	470				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry					<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
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						Sample ID	B15	B16	B17	B18	B19	B20	B21
SVOC	Pentachlorophenol	mg/Kg-dry	2300				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Phenol	mg/Kg-dry	1600				<0.290	<0.299	<0.305	<0.311	<0.303	<0.305	<0.299
SVOC	Acenaphthene	mg/Kg-dry	570				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	<0.0610	<0.0599
SVOC	Acenaphthylene	mg/Kg-dry	85				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	<0.0610	<0.0599
SVOC	Anthracene	mg/Kg-dry	12000				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	<0.0610	<0.0599
SVOC	Benzo(a)anthracene	mg/Kg-dry	1.1				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	<0.0610	<0.0599
SVOC	Benzo(a)pyrene	mg/Kg-dry	1.3				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.102	<0.0599
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	1.5				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.0614	<0.0599
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry	2300				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.0829	<0.0599
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	9				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.0642	<0.0599
SVOC	Chrysene	mg/Kg-dry					<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.131	<0.0599
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.2				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	<0.0610	<0.0599
SVOC	Fluoranthene	mg/Kg-dry	3100				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.253	<0.0599
SVOC	Fluorene	mg/Kg-dry	560				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	<0.0610	<0.0599
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	0.9				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.100	<0.0599
SVOC	Naphthalene	mg/Kg-dry	1.8				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	<0.0610	<0.0599
SVOC	Phenanthrene	mg/Kg-dry	210				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.0939	<0.0599
SVOC	Pyrene	mg/Kg-dry	2300				<0.0581	<0.0598	<0.0611	<0.0621	<0.0607	0.196	<0.0599
Inorganic	Aluminum	mg/Kg-dry		9500	9200		9500	1120	**11000**	**11100**	8130	8010	**9630**
Inorganic	Antimony	mg/Kg-dry	5				<1.47	<1.49	<1.50	<1.50	<1.50	<1.44	<1.44
Inorganic	Arsenic	mg/Kg-dry		13	11.3		4.63	9.09	**13.8**	7.20	4.49	10.3	11.2
Inorganic	Barium	mg/Kg-dry	1500				83.3	23.1	75.7	89.3	158	107	93.1
Inorganic	Beryllium	mg/Kg-dry	22				0.533	0.151	0.677	0.614	0.493	0.507	0.532
Inorganic	Cadmium	mg/Kg-dry	5.2				0.604	0.675	1.10	0.902	0.550	0.753	0.662
Inorganic	Calcium	mg/Kg-dry					14800	120000	3100	37900	3070	41700	22600
Inorganic	Chromium	mg/Kg-dry	21				12.4	4.39	16.3	12.8	10.5	11.1	11.6
Inorganic	Cobalt	mg/Kg-dry	20				8.62	3.67	8.56	6.29	8.65	7.25	7.63
Inorganic	Copper	mg/Kg-dry	2900				16.9	17.8	30.3	17.8	9.26	17.5	19.1
Inorganic	Iron	mg/Kg-dry		15900	15000		**19500**	**19000**	**37800**	**37600**	12200	**20400**	**40600**
Inorganic	Iron SPLP	mg/L				5	**300**	**150**	**340**	**240**		**110**	**260**
Inorganic	Lead	mg/Kg-dry	107				10.0	8.31	13.3	8.67	14.6	19.9	13.9
Inorganic	Magnesium	mg/Kg-dry	325000				10200	64200	2960	21100	2260	21500	13400
Inorganic	Manganese	mg/Kg-dry		636	630		**661**	442	532	**779**	**878**	**650**	621
Inorganic	Manganese (SPLP)	mg/L				0.15	**4.9**			**5.6**	**6.6**	**3.7**	
Inorganic	Mercury	mg/Kg-dry	0.89				0.0318	0.0202	0.0347	0.0412	0.0294	0.0347	0.0430
Inorganic	Nickel	mg/Kg-dry	100				18.7	10.4	23.3	25.4	10.3	14.7	16.6
Inorganic	Potassium	mg/Kg-dry					686	329	551	611	798	751	544
Inorganic	Selenium	mg/Kg-dry	1.3				<1.27	<1.29	<1.30	<1.30	<1.30	<1.25	<1.25
Inorganic	Silver	mg/Kg-dry	4.4				<0.0588	<0.0594	<0.0600	<0.0600	0.190	0.0928	0.0742
Inorganic	Sodium	mg/Kg-dry					64.7	161	176	681	481	730	951
Inorganic	Thallium	mg/Kg-dry	2.6				<0.980	<0.990	<1.00	<1.00	<1.00	<0.962	<0.962
Inorganic	Vanadium	mg/Kg-dry	550				21.5	6.45	22.4	20.9	20.6	19.8	20.0
Inorganic	Zinc	mg/Kg-dry	5100				52.2	55.4	78.8	56.2	51.8	68.9	59.0

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs
Darkly shaded and bolded text indicates exceedance of all MACs and TACO

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B22	B23	B24	B25	B26	B27	B28	B29
Type	**Analyte**	**Units**	**MAC**	**MSA**	**Non MSA**	**SPLP**								
	pH		6.0-9.0				7.22	7.54	6.90	7.07	7.54	7.36	7.67	7.88
VOC	1,1,1-Trichloroethane	mg/Kg-dry	2				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry					<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	1,1,2-Trichloroethane	mg/Kg-dry	0.02				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	1,1-Dichloroethane	mg/Kg-dry	23				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	1,1-Dichloroethene	mg/Kg-dry	0.06				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	1,2-Dichloroethane	mg/Kg-dry	0.02				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	1,2-Dichloropropane	mg/Kg-dry	0.03				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	1,3-Dichlorobenzene	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
VOC	2-Butanone	mg/Kg-dry	17				<0.0247	<0.0102	<0.0101	<0.00967	<0.00962	<0.00932	<0.0113	<0.00977
VOC	2-Hexanone	mg/Kg-dry					<0.0619	<0.0254	<0.0252	<0.0242	<0.0241	<0.0233	<0.0283	<0.0244
VOC	4-Methyl-2-pentanone	mg/Kg-dry					<0.0619	<0.0254	<0.0252	<0.0242	<0.0241	<0.0233	<0.0283	<0.0244
VOC	Acetone	mg/Kg-dry	25				<0.0619	<0.0254	<0.0252	<0.0242	<0.0241	<0.0233	<0.0283	<0.0244
VOC	Benzene	mg/Kg-dry	0.03				<0.000619	<0.000254	<0.000252	<0.000242	<0.000241	<0.000233	<0.000283	<0.000244
VOC	Bromodichloromethane	mg/Kg-dry	0.6				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Bromoform	mg/Kg-dry	0.8				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Bromomethane	mg/Kg-dry	0.2				0.00359	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Carbon disulfide	mg/Kg-dry	9				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Carbon tetrachloride	mg/Kg-dry	0.07				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Chlorobenzene	mg/Kg-dry	1				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Chloroethane	mg/Kg-dry					<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Chloroform	mg/Kg-dry	0.3				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Chloromethane	mg/Kg-dry					<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	0.4				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	cis-1,3-Dichloropropene	mg/Kg-dry					<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Dibromochloromethane	mg/Kg-dry					<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Ethylbenzene	mg/Kg-dry	13				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Methyl tert-butyl ether	mg/Kg-dry	0.32				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Methylene chloride	mg/Kg-dry	0.02				<0.0124	<0.00508	<0.00504	<0.00483	<0.00481	<0.00466	<0.00567	<0.00488
VOC	Styrene	mg/Kg-dry	4				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Tetrachloroethene	mg/Kg-dry	0.06				<0.00495	<0.00203	<0.00202	<0.00193	<0.00192	<0.00186	<0.00227	<0.00195
VOC	Toluene	mg/Kg-dry	12				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	0.00117	<0.000977
VOC	Total Xylenes	mg/Kg-dry	5.6				<0.00495	<0.00203	<0.00202	<0.00193	<0.00192	<0.00186	<0.00227	<0.00195
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	0.7				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	trans-1,3-Dichloropropene	mg/Kg-dry					<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Trichloroethene	mg/Kg-dry	0.06				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
VOC	Vinyl chloride	mg/Kg-dry	0.01				<0.00247	<0.00102	<0.00101	<0.000967	<0.000962	<0.000932	<0.00113	<0.000977
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	5				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	17				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	1,4-Dichlorobenzene	mg/Kg-dry	2				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	26				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	0.66				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2,4-Dichlorophenol	mg/Kg-dry	0.48				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2,4-Dimethylphenol	mg/Kg-dry	9				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2,4-Dinitrophenol	mg/Kg-dry	3.3				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	0.25				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	0.26				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2-Chloronaphthalene	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2-Chlorophenol	mg/Kg-dry	1.5				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2-Methylnaphthalene	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2-Methylphenol	mg/Kg-dry	15				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2-Nitroaniline	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	2-Nitrophenol	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	1.3				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	3,4-Methylphenol	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	3-Nitroaniline	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	4-Chloroaniline	mg/Kg-dry	0.7				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	4-Nitroaniline	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	4-Nitrophenol	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry	570				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	85				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	12000				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	1.1	1.8	0.9		<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Butyl benzyl phthalate	mg/Kg-dry	1.3	2.1	0.98	0.09	<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Carbazole	mg/Kg-dry	1.5	2.1	0.9		<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Dibenzofuran	mg/Kg-dry	2300				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Diethyl phthalate	mg/Kg-dry	9				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Dimethyl phthalate	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Di-n-butyl phthalate	mg/Kg-dry	0.66				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Di-n-octyl phthalate	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Hexachlorobenzene	mg/Kg-dry	46				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Hexachlorobutadiene	mg/Kg-dry	930				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	0.6				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Hexachloroethane	mg/Kg-dry	88				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Isophorone	mg/Kg-dry	0.2	0.42	0.15	0.09	<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Nitrobenzene	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	470				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry					<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B22	B23	B24	B25	B26	B27	B28	B29
SVOC	Pentachlorophenol	mg/Kg-dry	2300				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Phenol	mg/Kg-dry	1600				<0.320	<0.316	<0.315	<0.293	<0.310	<0.296	<0.300	<0.293
SVOC	Acenaphthene	mg/Kg-dry	570				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Acenaphthylene	mg/Kg-dry	85				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Anthracene	mg/Kg-dry	12000				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Benzo(a)anthracene	mg/Kg-dry	1.1				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Benzo(a)pyrene	mg/Kg-dry	1.3				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	1.5				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry	2300				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	9				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Chrysene	mg/Kg-dry					<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.2				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Fluoranthene	mg/Kg-dry	3100				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Fluorene	mg/Kg-dry	560				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	0.9				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Naphthalene	mg/Kg-dry	1.8				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Phenanthrene	mg/Kg-dry	210				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
SVOC	Pyrene	mg/Kg-dry	2300				<0.0640	<0.0632	<0.0630	<0.0585	<0.0619	<0.0592	<0.0599	<0.0585
Inorganic	Aluminum	mg/Kg-dry		9500	9200		**13600**	**10100**	8680	**10000**	7730	9360	6600	4060
Inorganic	Antimony	mg/Kg-dry	5				<1.50	<1.50	<1.47	<1.49	<1.50	<1.50	<1.47	<1.47
Inorganic	Arsenic	mg/Kg-dry		13	11.3		9.42	6.95	9.11	9.90	8.06	10.8	12.8	7.94
Inorganic	Barium	mg/Kg-dry	1500				265	112	116	87.6	97.9	114	87.2	70.0
Inorganic	Beryllium	mg/Kg-dry	22				0.738	0.566	0.496	0.568	0.491	0.536	0.507	0.350
Inorganic	Cadmium	mg/Kg-dry	5.2				0.697	0.590	0.694	0.538	0.562	0.741	0.754	0.455
Inorganic	Calcium	mg/Kg-dry					3460	7940	37100	2070	29900	8230	63600	66600
Inorganic	Chromium	mg/Kg-dry	21				14.8	12.4	13.3	13.1	14.7	11.5	11.5	9.09
Inorganic	Cobalt	mg/Kg-dry	20				16.0	7.18	8.28	9.91	7.51	9.82	6.26	6.32
Inorganic	Copper	mg/Kg-dry	2900				14.6	15.2	18.6	16.5	18.2	14.8	16.5	12.5
Inorganic	Iron	mg/Kg-dry		15900	15000		**20800**	**17200**	**19200**	**18700**	**16900**	**21500**	**25400**	14400
Inorganic	Iron SPLP	mg/L				5	**240**	**380**	**280**	**270**	**300**	**260**	**260**	
Inorganic	Lead	mg/Kg-dry	107				6.71	13.9	17.3	12.0	17.1	14.1	9.93	10.7
Inorganic	Magnesium	mg/Kg-dry	325000				3010	5450	20400	2730	16200	6410	35900	37500
Inorganic	Manganese	mg/Kg-dry		636	630		**2250**	400	612	570	**639**	**912**	**661**	559
Inorganic	Manganese (SPLP)	mg/L				0.15	**2.5**				**5.2**	**3**	**4.1**	
Inorganic	Mercury	mg/Kg-dry	0.89				0.0453	0.0358	0.0289	0.0316	0.0295	0.0310	0.0302	<0.0181
Inorganic	Nickel	mg/Kg-dry	100				17.1	13.2	19.4	17.5	13.5	15.1	17.6	11.0
Inorganic	Potassium	mg/Kg-dry					907	750	859	545	746	711	684	561
Inorganic	Selenium	mg/Kg-dry	1.3				<1.30	<1.30	<1.27	<1.29	<1.30	<1.30	<1.27	<1.27
Inorganic	Silver	mg/Kg-dry	4.4				0.208	0.0907	<0.0588	<0.0594	0.0873	0.437	<0.0588	0.0644
Inorganic	Sodium	mg/Kg-dry					54.1	165	482	260	293	462	213	218
Inorganic	Thallium	mg/Kg-dry	2.6				<1.00	<1.00	<0.980	<0.990	<1.00	<1.00	<0.980	<0.980
Inorganic	Vanadium	mg/Kg-dry	550				29.4	21.4	20.5	22.1	20.8	20.8	15.5	15.2
Inorganic	Zinc	mg/Kg-dry	5100				61.8	52.0	66.8	53.1	75.4	56.9	65.4	45.5

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs
Darkly shaded and bolded text indicates exceedance of all MACs and TACO

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B30	B31	B32	B33	B-34 0-2'	B-35 0-2'	B-36 0-2'	B-37 0-2'
Type	**Analyte**	**Units**	**MAC**	**MSA**	**Non MSA**	**SPLP**								
	pH		6.0-9.0				8.02	7.20	7.62	8.08	8.04	7.63	7.85	7.68
VOC	1,1,1-Trichloroethane	mg/Kg-dry	2				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry					<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1,2-Trichloroethane	mg/Kg-dry	0.02				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1-Dichloroethane	mg/Kg-dry	23				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1-Dichloroethene	mg/Kg-dry	0.06				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,2-Dichloroethane	mg/Kg-dry	0.02				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,2-Dichloropropane	mg/Kg-dry	0.03				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,3-Dichlorobenzene	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
VOC	2-Butanone	mg/Kg-dry	17				<0.00952	<0.00962	<0.0103	<0.0101	<0.0113	<0.0127	<0.0118	<0.701
VOC	2-Hexanone	mg/Kg-dry					<0.0238	<0.0241	<0.0258	<0.0252	<0.0283	<0.0318	<0.0294	<1.75
VOC	4-Methyl-2-pentanone	mg/Kg-dry					<0.0238	<0.0241	<0.0258	<0.0252	<0.0283	<0.0318	<0.0294	<1.75
VOC	Acetone	mg/Kg-dry	25				<0.0238	0.0532	0.0813	<0.0252	<0.0283	<0.0318	<0.0294	<1.75
VOC	Benzene	mg/Kg-dry	0.03				<0.000238	<0.000241	<0.000258	<0.000252	<0.000283	<0.000318	<0.000294	<0.0175
VOC	Bromodichloromethane	mg/Kg-dry	0.6				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Bromoform	mg/Kg-dry	0.8				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Bromomethane	mg/Kg-dry	0.2				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Carbon disulfide	mg/Kg-dry	9				<0.000952	0.00187	0.00223	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Carbon tetrachloride	mg/Kg-dry	0.07				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chlorobenzene	mg/Kg-dry	1				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chloroethane	mg/Kg-dry					<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chloroform	mg/Kg-dry	0.3				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chloromethane	mg/Kg-dry					<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	0.4				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	cis-1,3-Dichloropropene	mg/Kg-dry					<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Dibromochloromethane	mg/Kg-dry					<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Ethylbenzene	mg/Kg-dry	13				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Methyl tert-butyl ether	mg/Kg-dry	0.32				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Methylene chloride	mg/Kg-dry	0.02				<0.00476	<0.00481	<0.00516	<0.00504	<0.00567	<0.00636	<0.00588	<0.350
VOC	Styrene	mg/Kg-dry	4				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Tetrachloroethene	mg/Kg-dry	0.06				<0.00190	<0.00192	<0.00207	<0.00202	<0.00227	<0.00255	<0.00235	<0.140
VOC	Toluene	mg/Kg-dry	12				0.000961	<0.000962	0.00105	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Total Xylenes	mg/Kg-dry	5.6				<0.00190	<0.00192	<0.00207	<0.00202	<0.00227	<0.00255	<0.00235	<0.140
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	0.7				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	trans-1,3-Dichloropropene	mg/Kg-dry					<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Trichloroethene	mg/Kg-dry	0.06				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
VOC	Vinyl chloride	mg/Kg-dry	0.01				<0.000952	<0.000962	<0.00103	<0.00101	<0.00113	<0.00127	<0.00118	<0.0701
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	5				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	17				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	1,4-Dichlorobenzene	mg/Kg-dry	2				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	26				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	0.66				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dichlorophenol	mg/Kg-dry	0.48				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dimethylphenol	mg/Kg-dry	9				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dinitrophenol	mg/Kg-dry	3.3				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	0.25				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	0.26				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2-Chloronaphthalene	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2-Chlorophenol	mg/Kg-dry	1.5				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2-Methylnaphthalene	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2-Methylphenol	mg/Kg-dry	15				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2-Nitroaniline	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	2-Nitrophenol	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	1.3				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	3,4-Methylphenol	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	3-Nitroaniline	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	4-Chloroaniline	mg/Kg-dry	0.7				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	4-Nitroaniline	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	4-Nitrophenol	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry	570				<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	85				<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	12000				<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	1.1	1.8	0.9		<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Butyl benzyl phthalate	mg/Kg-dry	1.3	2.1	0.98	0.09	<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Carbazole	mg/Kg-dry	1.5	2.1	0.9		<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Dibenzofuran	mg/Kg-dry	2300				<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Diethyl phthalate	mg/Kg-dry	9				<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Dimethyl phthalate	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Di-n-butyl phthalate	mg/Kg-dry	0.66				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Di-n-octyl phthalate	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Hexachlorobenzene	mg/Kg-dry	46				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Hexachlorobutadiene	mg/Kg-dry	930				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	0.6				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Hexachloroethane	mg/Kg-dry	88				<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Isophorone	mg/Kg-dry	0.2	0.42	0.15	0.09	<0.308	<0.300	<0.302	<0.262	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Nitrobenzene	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	470				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry					<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337

Olympic Boulevard and Houbolt Road Joliet, IL
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February 2022 & June 2022

						Sample ID	B30	B31	B32	B33	B-34 0-2'	B-35 0-2'	B-36 0-2'	B-37 0-2'
SVOC	Pentachlorophenol	mg/Kg-dry	2300				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Phenol	mg/Kg-dry	1600				<0.308	<0.300	<0.302	<0.262	<0.283	<0.318	<0.294	<0.337
SVOC	Acenaphthene	mg/Kg-dry	570				<0.0617	<0.0601	<0.0604	<0.0524	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Acenaphthylene	mg/Kg-dry	85				<0.0617	<0.0601	<0.0604	<0.0524	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Anthracene	mg/Kg-dry	12000				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Benzo(a)anthracene	mg/Kg-dry	1.1				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Benzo(a)pyrene	mg/Kg-dry	1.3				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	1.5				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry	2300				<0.0617	<0.0601	<0.0604	<0.0524	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	9				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Chrysene	mg/Kg-dry					<0.0617	<0.0601	<0.0604	<0.0524	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.2				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Fluoranthene	mg/Kg-dry	3100				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Fluorene	mg/Kg-dry	560				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	0.9				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Naphthalene	mg/Kg-dry	1.8				<0.0617	<0.0601	<0.0604	<0.0524	<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Phenanthrene	mg/Kg-dry	210				<0.0617	<0.0601	<0.0604	<0.0524	<0.283	<0.318	<0.294	<0.337
SVOC	Pyrene	mg/Kg-dry	2300				<0.0617	<0.0601	<0.0604	<0.0524	<0.0567	<0.0636	<0.0587	<0.0673
Inorganic	Aluminum	mg/Kg-dry		9500	9200		3920	6520	8810	842	**10300**	**9880**	**10700**	**12400**
Inorganic	Antimony	mg/Kg-dry	5				<1.49	<1.46	<1.50	<1.47	<1.49	<1.49	<1.50	<1.43
Inorganic	Arsenic	mg/Kg-dry		13	11.3		7.68	13.0	6.80	8.19	5.77	5.06	4.32	3.1
Inorganic	Barium	mg/Kg-dry	1500				56.3	65.3	178	13.9	118	125	139	130
Inorganic	Beryllium	mg/Kg-dry	22				0.344	0.419	0.529	0.133	0.771	0.571	0.574	0.718
Inorganic	Cadmium	mg/Kg-dry	5.2				0.405	0.607	0.513	0.404	2.06	1.45	1.46	1.83
Inorganic	Calcium	mg/Kg-dry					82100	47100	7970	154000	28900	13700	3880	14200
Inorganic	Chromium	mg/Kg-dry	21				9.65	9.81	11.0	4.19	15	13.2	13.5	14.8
Inorganic	Cobalt	mg/Kg-dry	20				5.70	6.47	7.91	3.27	11.2	9.39	9.47	7.77
Inorganic	Copper	mg/Kg-dry	2900				14.0	18.2	12.4	11.9	13.1	12.2	12.2	12.9
Inorganic	Iron	mg/Kg-dry		15900	15000		15500	**20200**	12700	11500	**25300**	**17100**	**17900**	**20100**
Inorganic	Iron SPLP	mg/L				5		**270**			**160**	**310**	**240**	**230**
Inorganic	Lead	mg/Kg-dry	107				6.95	11.0	16.3	5.46	10.4	11.8	10.3	12.4
Inorganic	Magnesium	mg/Kg-dry	325000				43800	25800	5380	83600	16400	9240	3020	9570
Inorganic	Manganese	mg/Kg-dry		636	630		478	540	**715**	409	**1650**	**844**	**858**	**694**
Inorganic	Manganese (SPLP)	mg/L				0.15			**2.1**		**3.6**	**5.2**	**4**	**2.3**
Inorganic	Mercury	mg/Kg-dry	0.89				0.0215	0.0226	0.0256	<0.0170	0.0506	0.0311	0.0302	0.0378
Inorganic	Nickel	mg/Kg-dry	100				11.7	15.9	11.2	7.59	21.2	14.2	14	15
Inorganic	Potassium	mg/Kg-dry					411	517	1090	331	969	961	854	1080
Inorganic	Selenium	mg/Kg-dry	1.3				<1.29	<1.26	<1.30	<1.27	<1.29	<1.29	<1.30	<1.24
Inorganic	Silver	mg/Kg-dry	4.4				<0.0594	0.113	0.183	<0.0588	<0.0594	<0.0594	<0.0600	<0.0571
Inorganic	Sodium	mg/Kg-dry					338	280	652	210	188	86.6	51.8	55.3
Inorganic	Thallium	mg/Kg-dry	2.6				<0.990	<0.971	<1.00	<0.980	<0.990	<0.990	<1.00	<0.952
Inorganic	Vanadium	mg/Kg-dry	550				14.7	16.6	21.9	6.13	27.7	24.7	24.9	26.1
Inorganic	Zinc	mg/Kg-dry	5100				40.7	55.7	68.0	33.5	47.9	53.9	54.7	55.9

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs
Darkly shaded and bolded text indicates exceedance of all MACs and TACO

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Type	Analyte	Units	MAC	MSA	Non MSA	SPLP	Sample ID	B-38 3-5'	B-39 2-4'	B-40 2-4'	B-41 3-5'	B-42 5-7'	B-43 5-7'	B-44 3-5'	B-45 3-5'	B-46 5-7'
	pH		6.0-9.0					9.2	8.1	8.31	8.39	7.97	8.39	7.75	7.36	8.47
VOC	1,1,1-Trichloroethane	mg/Kg-dry	2					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry						<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	1,1,2-Trichloroethane	mg/Kg-dry	0.02					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	1,1-Dichloroethane	mg/Kg-dry	23					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	1,1-Dichloroethene	mg/Kg-dry	0.06					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	1,2-Dichloroethane	mg/Kg-dry	0.02					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	1,2-Dichloropropane	mg/Kg-dry	0.03					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	1,3-Dichlorobenzene	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
VOC	2-Butanone	mg/Kg-dry	17					4.24	0.0126	0.0163	<0.550	<0.0126	<0.0115	4.31	<0.480	<0.595
VOC	2-Hexanone	mg/Kg-dry						<1.31	<0.0299	<0.0306	<1.38	<0.0315	<0.0288	<1.37	<1.20	<1.49
VOC	4-Methyl-2-pentanone	mg/Kg-dry						<1.31	<0.0299	<0.0306	<1.38	<0.0315	<0.0288	<1.37	<1.20	<1.49
VOC	Acetone	mg/Kg-dry	25					<1.31	0.0662	0.0762	<1.38	<0.0315	<0.0288	<1.37	<1.20	<1.49
VOC	Benzene	mg/Kg-dry	0.03					<0.0131	<0.000295	<0.000306	<0.0138	<0.000315	<0.000288	<0.0137	<0.0120	<0.0149
VOC	Bromodichloromethane	mg/Kg-dry	0.6					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Bromoform	mg/Kg-dry	0.8					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Bromomethane	mg/Kg-dry	0.2					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Carbon disulfide	mg/Kg-dry	9					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Carbon tetrachloride	mg/Kg-dry	0.07					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Chlorobenzene	mg/Kg-dry	1					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Chloroethane	mg/Kg-dry						<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Chloroform	mg/Kg-dry	0.3					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Chloromethane	mg/Kg-dry						<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	0.4					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	cis-1,3-Dichloropropene	mg/Kg-dry						<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Dibromochloromethane	mg/Kg-dry						<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Ethylbenzene	mg/Kg-dry	13					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Methyl tert-butyl ether	mg/Kg-dry	0.32					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Methylene chloride	mg/Kg-dry	0.02					<0.262	<0.00597	<0.00612	<0.275	<0.00631	<0.00577	<0.275	<0.240	<0.297
VOC	Styrene	mg/Kg-dry	4					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Tetrachloroethene	mg/Kg-dry	0.06					<0.105	<0.00239	<0.00245	<0.110	<0.00252	<0.00231	<0.110	<0.0960	<0.119
VOC	Toluene	mg/Kg-dry	12					<0.0525	<0.00119	<0.00122	<0.0550	0.0574	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Total Xylenes	mg/Kg-dry	5.6					<0.105	<0.00239	<0.00245	0.436	0.00623	<0.00231	<0.110	<0.0960	<0.119
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	0.7					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	trans-1,3-Dichloropropene	mg/Kg-dry						<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Trichloroethene	mg/Kg-dry	0.06					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
VOC	Vinyl chloride	mg/Kg-dry	0.01					<0.0525	<0.00119	<0.00122	<0.0550	<0.00126	<0.00115	<0.0550	<0.0480	<0.0595
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	5					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	17					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	1,4-Dichlorobenzene	mg/Kg-dry	2					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	26					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	0.66					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2,4-Dichlorophenol	mg/Kg-dry	0.48					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2,4-Dimethylphenol	mg/Kg-dry	9					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2,4-Dinitrophenol	mg/Kg-dry	3.3					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	0.25					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	0.26					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2-Chloronaphthalene	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2-Chlorophenol	mg/Kg-dry	1.5					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2-Methylnaphthalene	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2-Methylphenol	mg/Kg-dry	15					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2-Nitroaniline	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	2-Nitrophenol	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	1.3					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	3,4-Methylphenol	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	3-Nitroaniline	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	4-Chloroaniline	mg/Kg-dry	0.7					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	4-Nitroaniline	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	4-Nitrophenol	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry	570					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	85					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	12000					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	1.1	1.8	0.9			<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Butyl benzyl phthalate	mg/Kg-dry	1.3	2.1	0.98	0.09		<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Carbazole	mg/Kg-dry	1.5	2.1	0.9			<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Dibenzofuran	mg/Kg-dry	2300					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Diethyl phthalate	mg/Kg-dry	9					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Dimethyl phthalate	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Di-n-butyl phthalate	mg/Kg-dry	0.66					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Di-n-octyl phthalate	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Hexachlorobenzene	mg/Kg-dry	46					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Hexachlorobutadiene	mg/Kg-dry	930					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	0.6					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Hexachloroethane	mg/Kg-dry	88					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Isophorone	mg/Kg-dry	0.2	0.42	0.15	0.09		<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Nitrobenzene	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	470					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry						<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

							Sample ID	B-38 3-5'	B-39 2-4'	B-40 2-4'	B-41 3-5'	B-42 5-7'	B-43 5-7'	B-44 3-5'	B-45 3-5'	B-46 5-7'
SVOC	Pentachlorophenol	mg/Kg-dry	2300					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Phenol	mg/Kg-dry	1600					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Acenaphthene	mg/Kg-dry	570					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Acenaphthylene	mg/Kg-dry	85					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Anthracene	mg/Kg-dry	12000					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Benzo(a)anthracene	mg/Kg-dry	1.1					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Benzo(a)pyrene	mg/Kg-dry	1.3					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	1.5					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry	2300					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	9					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Chrysene	mg/Kg-dry						<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.2					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Fluoranthene	mg/Kg-dry	3100					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Fluorene	mg/Kg-dry	560					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	0.9					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Naphthalene	mg/Kg-dry	1.8					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
SVOC	Phenanthrene	mg/Kg-dry	210					<0.308	<0.299	<0.306	<0.300	<0.315	<0.288	<0.313	<0.300	<0.318
SVOC	Pyrene	mg/Kg-dry	2300					<0.0616	<0.0597	<0.0611	<0.0600	<0.0630	<0.0576	<0.0627	<0.0600	<0.0637
Inorganic	Aluminum	mg/Kg-dry		9500	9200			2380	3220	7010	8090	7890	958	9390	**10400**	4140
Inorganic	Antimony	mg/Kg-dry	5					<1.44	<1.50	<1.50	<1.50	<1.49	<1.49	<1.49	<1.49	<1.50
Inorganic	Arsenic	mg/Kg-dry		13	11.3			<1.11	3.22	2.13	6.14	11.2	11.5	6.96	6.55	11.4
Inorganic	Barium	mg/Kg-dry	1500					50.1	60.2	52.3	71.6	67.4	15.4	58.6	112	69.7
Inorganic	Beryllium	mg/Kg-dry	22					0.323	0.325	0.4	0.479	0.497	0.141	0.493	0.602	0.4
Inorganic	Cadmium	mg/Kg-dry	5.2					0.8	0.969	1.27	1.62	1.89	1.45	1.56	1.53	1.85
Inorganic	Calcium	mg/Kg-dry						106000	97300	66600	47400	1900	148000	1760	2450	63900
Inorganic	Chromium	mg/Kg-dry	21					6.9	7.4	11	12.8	11.9	3.89	12.1	13.4	9.96
Inorganic	Cobalt	mg/Kg-dry	20					3.72	3.55	4.23	7.88	9.02	3.67	9.61	8.47	6.74
Inorganic	Copper	mg/Kg-dry	2900					9.67	6.89	5.68	15.8	26.7	16.4	21.6	17.1	22.9
Inorganic	Iron	mg/Kg-dry		15900	15000			9410	11400	**16600**	**20600**	**26100**	**17800**	**21700**	**20700**	**22200**
Inorganic	Iron SPLP	mg/L				5				**590**	**420**	**370**	<0.25	**390**	**330**	**590**
Inorganic	Lead	mg/Kg-dry	107					3.48	4.96	5.93	20.5	11.7	6.22	11.2	9.59	8.8
Inorganic	Magnesium	mg/Kg-dry	325000					61900	56600	37900	29000	2150	79800	2480	2660	36900
Inorganic	Manganese	mg/Kg-dry		636	630			388	338	174	388	**705**	424	506	581	**701**
Inorganic	Manganese (SPLP)	mg/L				0.15						**5.9**				**6.9**
Inorganic	Mercury	mg/Kg-dry	0.89					<0.0246	0.025	0.0457	0.0552	0.036	<0.0213	0.0377	0.0319	0.0355
Inorganic	Nickel	mg/Kg-dry	100					8.22	8.78	9.6	18.3	27.4	10	20.7	19.1	20.6
Inorganic	Potassium	mg/Kg-dry						942	609	493	794	789	501	571	598	587
Inorganic	Selenium	mg/Kg-dry	1.3					<1.25	<1.30	<1.30	<1.30	<1.29	<1.29	<1.29	<1.29	<1.30
Inorganic	Silver	mg/Kg-dry	4.4					<0.0577	<0.0600	<0.0600	<0.0600	<0.0594	<0.0594	<0.0594	<0.0594	<0.0600
Inorganic	Sodium	mg/Kg-dry						2540	385	545	919	701	432	562	525	803
Inorganic	Thallium	mg/Kg-dry	2.6					<0.962	<1.00	<1.00	<1.00	<0.990	<0.990	<0.990	<0.990	<1.00
Inorganic	Vanadium	mg/Kg-dry	550					9.55	12.7	24.3	22.1	18.5	6.3	18.3	22.3	15.1
Inorganic	Zinc	mg/Kg-dry	5100					21.2	26.2	30	47.5	69.4	50	60.3	57.5	78.3

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs
Darkly shaded and bolded text indicates exceedance of all MACs and TACO

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B-47 3-5'	B-48 3-5'
Type	**Analyte**	**Units**	**MAC**	**MSA**	**Non MSA**	**SPLP**		
	pH		6.0-9.0				7.79	8.68
VOC	1,1,1-Trichloroethane	mg/Kg-dry	2				<0.00119	<0.00120
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry					<0.00119	<0.00120
VOC	1,1,2-Trichloroethane	mg/Kg-dry	0.02				<0.00119	<0.00120
VOC	1,1-Dichloroethane	mg/Kg-dry	23				<0.00119	<0.00120
VOC	1,1-Dichloroethene	mg/Kg-dry	0.06				<0.00119	<0.00120
VOC	1,2-Dichloroethane	mg/Kg-dry	0.02				<0.00119	<0.00120
VOC	1,2-Dichloropropane	mg/Kg-dry	0.03				<0.00119	<0.00120
VOC	1,3-Dichlorobenzene	mg/Kg-dry					<0.298	<0.300
VOC	2-Butanone	mg/Kg-dry	17				<0.0119	<0.0120
VOC	2-Hexanone	mg/Kg-dry					<0.0298	<0.0300
VOC	4-Methyl-2-pentanone	mg/Kg-dry					<0.0298	<0.0300
VOC	Acetone	mg/Kg-dry	25				<0.0298	<0.0300
VOC	Benzene	mg/Kg-dry	0.03				<0.000298	<0.000300
VOC	Bromodichloromethane	mg/Kg-dry	0.6				<0.00119	<0.00120
VOC	Bromoform	mg/Kg-dry	0.8				<0.00119	<0.00120
VOC	Bromomethane	mg/Kg-dry	0.2				<0.00119	<0.00120
VOC	Carbon disulfide	mg/Kg-dry	9				<0.00119	<0.00120
VOC	Carbon tetrachloride	mg/Kg-dry	0.07				<0.00119	<0.00120
VOC	Chlorobenzene	mg/Kg-dry	1				<0.00119	<0.00120
VOC	Chloroethane	mg/Kg-dry					<0.00119	<0.00120
VOC	Chloroform	mg/Kg-dry	0.3				<0.00119	<0.00120
VOC	Chloromethane	mg/Kg-dry					<0.00119	<0.00120
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	0.4				<0.00119	<0.00120
VOC	cis-1,3-Dichloropropene	mg/Kg-dry					<0.00119	<0.00120
VOC	Dibromochloromethane	mg/Kg-dry					<0.00119	<0.00120
VOC	Ethylbenzene	mg/Kg-dry	13				<0.00119	<0.00120
VOC	Methyl tert-butyl ether	mg/Kg-dry	0.32				<0.00119	<0.00120
VOC	Methylene chloride	mg/Kg-dry	0.02				<0.00595	<0.00601
VOC	Styrene	mg/Kg-dry	4				<0.00119	<0.00120
VOC	Tetrachloroethene	mg/Kg-dry	0.06				<0.00238	<0.00240
VOC	Toluene	mg/Kg-dry	12				<0.00119	<0.00120
VOC	Total Xylenes	mg/Kg-dry	5.6				<0.00238	<0.00240
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	0.7				<0.00119	<0.00120
VOC	trans-1,3-Dichloropropene	mg/Kg-dry					<0.00119	<0.00120
VOC	Trichloroethene	mg/Kg-dry	0.06				<0.00119	<0.00120
VOC	Vinyl chloride	mg/Kg-dry	0.01				<0.00119	<0.00120
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	5				<0.298	<0.300
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	17				<0.298	<0.300
SVOC	1,4-Dichlorobenzene	mg/Kg-dry	2				<0.298	<0.300
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	26				<0.298	<0.300
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	0.66				<0.298	<0.300
SVOC	2,4-Dichlorophenol	mg/Kg-dry	0.48				<0.298	<0.300
SVOC	2,4-Dimethylphenol	mg/Kg-dry	9				<0.298	<0.300
SVOC	2,4-Dinitrophenol	mg/Kg-dry	3.3				<0.298	<0.300
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	0.25				<0.298	<0.300
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	0.26				<0.298	<0.300
SVOC	2-Chloronaphthalene	mg/Kg-dry					<0.298	<0.300
SVOC	2-Chlorophenol	mg/Kg-dry	1.5				<0.298	<0.300
SVOC	2-Methylnaphthalene	mg/Kg-dry					<0.298	<0.300
SVOC	2-Methylphenol	mg/Kg-dry	15				<0.298	<0.300
SVOC	2-Nitroaniline	mg/Kg-dry					<0.298	<0.300
SVOC	2-Nitrophenol	mg/Kg-dry					<0.298	<0.300
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	1.3				<0.298	<0.300
SVOC	3,4-Methylphenol	mg/Kg-dry					<0.298	<0.300
SVOC	3-Nitroaniline	mg/Kg-dry					<0.298	<0.300
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry					<0.298	<0.300
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry					<0.298	<0.300
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry					<0.298	<0.300
SVOC	4-Chloroaniline	mg/Kg-dry	0.7				<0.298	<0.300
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry					<0.298	<0.300
SVOC	4-Nitroaniline	mg/Kg-dry					<0.298	<0.300
SVOC	4-Nitrophenol	mg/Kg-dry					<0.298	<0.300
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry	570				<0.0595	<0.0600
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	85				<0.0595	<0.0600
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	12000				<0.0595	<0.0600
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	1.1	1.8	0.9		<0.0595	<0.0600
SVOC	Butyl benzyl phthalate	mg/Kg-dry	1.3	2.1	0.98	0.09	<0.0595	<0.0600
SVOC	Carbazole	mg/Kg-dry	1.5	2.1	0.9		<0.0595	<0.0600
SVOC	Dibenzofuran	mg/Kg-dry	2300				<0.0595	<0.0600
SVOC	Diethyl phthalate	mg/Kg-dry	9				<0.0595	<0.0600
SVOC	Dimethyl phthalate	mg/Kg-dry					<0.298	<0.300
SVOC	Di-n-butyl phthalate	mg/Kg-dry	0.66				<0.298	<0.300
SVOC	Di-n-octyl phthalate	mg/Kg-dry					<0.298	<0.300
SVOC	Hexachlorobenzene	mg/Kg-dry	46				<0.298	<0.300
SVOC	Hexachlorobutadiene	mg/Kg-dry	930				<0.298	<0.300
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	0.6				<0.298	<0.300
SVOC	Hexachloroethane	mg/Kg-dry	88				<0.0595	<0.0600
SVOC	Isophorone	mg/Kg-dry	0.2	0.42	0.15	0.09	<0.0595	<0.0600
SVOC	Nitrobenzene	mg/Kg-dry					<0.298	<0.300
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	470				<0.298	<0.300
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry					<0.298	<0.300

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

						Sample ID	B-47 3-5'	B-48 3-5'
SVOC	Pentachlorophenol	mg/Kg-dry	2300				<0.298	<0.300
SVOC	Phenol	mg/Kg-dry	1600				<0.298	<0.300
SVOC	Acenaphthene	mg/Kg-dry	570				<0.0595	<0.0600
SVOC	Acenaphthylene	mg/Kg-dry	85				<0.0595	<0.0600
SVOC	Anthracene	mg/Kg-dry	12000				<0.298	<0.300
SVOC	Benzo(a)anthracene	mg/Kg-dry	1.1				<0.298	<0.300
SVOC	Benzo(a)pyrene	mg/Kg-dry	1.3				<0.298	<0.300
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	1.5				<0.298	<0.300
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry	2300				<0.0595	<0.0600
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	9				<0.298	<0.300
SVOC	Chrysene	mg/Kg-dry					<0.0595	<0.0600
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.2				<0.298	<0.300
SVOC	Fluoranthene	mg/Kg-dry	3100				<0.298	<0.300
SVOC	Fluorene	mg/Kg-dry	560				<0.298	<0.300
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	0.9				<0.298	<0.300
SVOC	Naphthalene	mg/Kg-dry	1.8				<0.0595	<0.0600
SVOC	Phenanthrene	mg/Kg-dry	210				<0.298	<0.300
SVOC	Pyrene	mg/Kg-dry	2300				<0.0595	<0.0600
Inorganic	Aluminum	mg/Kg-dry		9500	9200		4160	6010
Inorganic	Antimony	mg/Kg-dry	5				<1.47	<1.47
Inorganic	Arsenic	mg/Kg-dry		13	11.3		9.8	7.62
Inorganic	Barium	mg/Kg-dry	1500				43.2	47.8
Inorganic	Beryllium	mg/Kg-dry	22				0.354	0.359
Inorganic	Cadmium	mg/Kg-dry	5.2				1.63	1.33
Inorganic	Calcium	mg/Kg-dry					18700	10800
Inorganic	Chromium	mg/Kg-dry	21				9.78	9.82
Inorganic	Cobalt	mg/Kg-dry	20				9.2	7.96
Inorganic	Copper	mg/Kg-dry	2900				23.5	20.7
Inorganic	Iron	mg/Kg-dry		15900	15000		**19200**	**17200**
Inorganic	Iron SPLP	mg/L				5	**250**	**320**
Inorganic	Lead	mg/Kg-dry	107				10.7	9.64
Inorganic	Magnesium	mg/Kg-dry	325000				13300	8170
Inorganic	Manganese	mg/Kg-dry		636	630		517	451
Inorganic	Manganese (SPLP)	mg/L				0.15		
Inorganic	Mercury	mg/Kg-dry	0.89				<0.0238	0.0252
Inorganic	Nickel	mg/Kg-dry	100				23.3	19.3
Inorganic	Potassium	mg/Kg-dry					639	462
Inorganic	Selenium	mg/Kg-dry	1.3				<1.27	<1.27
Inorganic	Silver	mg/Kg-dry	4.4				<0.0588	<0.0588
Inorganic	Sodium	mg/Kg-dry					1350	667
Inorganic	Thallium	mg/Kg-dry	2.6				<0.980	<0.980
Inorganic	Vanadium	mg/Kg-dry	550				16	14.4
Inorganic	Zinc	mg/Kg-dry	5100				71.9	60.3

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs
Darkly shaded and bolded text indicates exceedance of all MACs and TACO

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B1	B2	B3

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										7.65	7.90	7.94
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000920	<0.000867	<0.000870
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000920	<0.000867	<0.000870
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000920	<0.000867	<0.000870
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000920	<0.000867	<0.000870
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000920	<0.000867	<0.000870
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000920	<0.000867	<0.000870
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000920	<0.000867	<0.000870
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.298	<0.292	<0.281
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00920	<0.00867	<0.00870
VOC	2-Hexanone	mg/Kg-dry									<0.0230	<0.0217	<0.0218
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0230	<0.0217	<0.0218
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0230	<0.0217	<0.0218
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000230	<0.000217	<0.000218
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000920	<0.000867	<0.000870
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000920	<0.000867	<0.000870
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000920	<0.000867	<0.000870
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.000920	<0.000867	<0.000870
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000920	<0.000867	<0.000870
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000920	<0.000867	<0.000870
VOC	Chloroethane	mg/Kg-dry									<0.000920	<0.000867	<0.000870
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000920	<0.000867	<0.000870
VOC	Chloromethane	mg/Kg-dry									<0.000920	<0.000867	<0.000870
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000920	<0.000867	<0.000870
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000920	<0.000867	<0.000870
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000920	<0.000867	<0.000870
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000920	<0.000867	<0.000870
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000920	<0.000867	<0.000870
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00460	<0.00433	<0.00435
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000920	<0.000867	<0.000870
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00184	<0.00173	<0.00174
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.000920	<0.000867	<0.000870
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00184	<0.00173	<0.00174
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000920	<0.000867	<0.000870
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000920	<0.000867	<0.000870
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000920	<0.000867	<0.000870
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000920	<0.000867	<0.000870
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.298	<0.292	<0.281
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.298	<0.292	<0.281
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.298	<0.292	<0.281
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.298	<0.292	<0.281
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.298	<0.292	<0.281
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.298	<0.292	<0.281
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.298	<0.292	<0.281
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.298	<0.292	<0.281
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.298	<0.292	<0.281
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.298	<0.292	<0.281
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.298	<0.292	<0.281
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.298	<0.292	<0.281
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.298	<0.292	<0.281
SVOC	2-Nitroaniline	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	2-Nitrophenol	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.298	<0.292	<0.281
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	3-Nitroaniline	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.298	<0.292	<0.281
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	4-Nitroaniline	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	4-Nitrophenol	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.298	<0.292	<0.281
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.298	<0.292	<0.281
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.298	<0.292	<0.281
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.298	<0.292	<0.281
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.298	<0.292	<0.281
SVOC	Dibenzofuran	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.298	<0.292	<0.281
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.298	<0.292	<0.281
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.298	<0.292	<0.281
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.298	<0.292	<0.281
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.298	<0.292	<0.281
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.298	<0.292	<0.281
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.298	<0.292	<0.281
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.298	<0.292	<0.281
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.298	<0.292	<0.281
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.298	<0.292	<0.281
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.298	<0.292	<0.281
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.298	<0.292	<0.281
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.298	<0.292	<0.281
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.298	<0.292	<0.281
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0596	<0.0584	<0.0562
SVOC	Acenaphthylene	mg/Kg-dry									<0.0596	<0.0584	<0.0562
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0596	<0.0584	<0.0562
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0596	<0.0584	<0.0562

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B1	B2	B3
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0596	<0.0584	<0.0562
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0596	<0.0584	<0.0562
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0596	<0.0584	<0.0562
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0596	<0.0584	<0.0562
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0596	<0.0584	<0.0562
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0596	<0.0584	<0.0562
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		0.0893	<0.0584	<0.0562
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0596	<0.0584	<0.0562
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0596	<0.0584	<0.0562
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0596	<0.0584	<0.0562
SVOC	Phenanthrene	mg/Kg-dry										<0.0596	<0.0584	<0.0562
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		0.0703	<0.0584	<0.0562
Inorganic	Aluminum	mg/Kg-dry										8290	6200	2250
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.44	<1.49	<1.50
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				4.82	2.52	<1.15
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				70.1	63.1	38.9
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.513	0.408	0.268
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.926	0.593	0.346
Inorganic	Calcium	mg/Kg-dry										74300	84900	133000
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				13.2	10.6	7.29
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					7.00	5.84	3.04
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					18.0	13.9	6.84
Inorganic	Iron	mg/Kg-dry										**27800**	**16500**	9140
Inorganic	Iron SPLP	mg/L							5	5		**100**	**110**	
Inorganic	Lead	mg/Kg-dry	800		700		400					12.0	6.51	2.59
Inorganic	Magnesium	mg/Kg-dry			730000		325000					39500	38100	64400
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				475	565	382
Inorganic	Manganese (SPLP)	mg/L							0.15	10				
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				<0.0194	<0.0180	<0.0174
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				16.7	12.8	6.61
Inorganic	Potassium	mg/Kg-dry										884	751	525
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.25	<1.29	<1.30
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0577	<0.0594	<0.0600
Inorganic	Sodium	mg/Kg-dry										105	179	184
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.962	<0.990	<1.00
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					22.2	18.4	10.4
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					59.4	40.0	16.6

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B4	B5	B6

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										7.18	7.72	7.90
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000862	<0.000924	<0.000793
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000862	<0.000924	<0.000793
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000862	<0.000924	<0.000793
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000862	<0.000924	<0.000793
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000862	<0.000924	<0.000793
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000862	<0.000924	<0.000793
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000862	<0.000924	<0.000793
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.303	<0.291	<0.281
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00862	<0.00924	<0.00793
VOC	2-Hexanone	mg/Kg-dry									<0.0216	<0.0231	<0.0198
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0216	<0.0231	<0.0198
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	0.0745	<0.0231	<0.0198
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000216	<0.000231	<0.000198
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000862	<0.000924	<0.000793
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000862	<0.000924	<0.000793
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000862	<0.000924	<0.000793
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	0.00102	<0.000924	<0.000793
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000862	<0.000924	<0.000793
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000862	<0.000924	<0.000793
VOC	Chloroethane	mg/Kg-dry									<0.000862	<0.000924	<0.000793
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000862	<0.000924	<0.000793
VOC	Chloromethane	mg/Kg-dry									<0.000862	<0.000924	<0.000793
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000862	<0.000924	<0.000793
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000862	<0.000924	<0.000793
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000862	<0.000924	<0.000793
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000862	<0.000924	<0.000793
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000862	<0.000924	<0.000793
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00431	<0.00462	<0.00397
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000862	<0.000924	<0.000793
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00172	<0.00185	<0.00159
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.000862	<0.000924	<0.000793
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00172	<0.00185	<0.00159
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000862	<0.000924	<0.000793
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000862	<0.000924	<0.000793
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000862	<0.000924	<0.000793
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000862	<0.000924	<0.000793
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.303	<0.291	<0.281
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.303	<0.291	<0.281
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.303	<0.291	<0.281
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.303	<0.291	<0.281
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.303	<0.291	<0.281
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.303	<0.291	<0.281
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.303	<0.291	<0.281
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.303	<0.291	<0.281
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.303	<0.291	<0.281
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.303	<0.291	<0.281
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.303	<0.291	<0.281
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.303	<0.291	<0.281
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.303	<0.291	<0.281
SVOC	2-Nitroaniline	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	2-Nitrophenol	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.303	<0.291	<0.281
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	3-Nitroaniline	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.303	<0.291	<0.281
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	4-Nitroaniline	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	4-Nitrophenol	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.303	<0.291	<0.281
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.303	<0.291	<0.281
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.303	<0.291	<0.281
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.303	<0.291	<0.281
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.303	<0.291	<0.281
SVOC	Dibenzofuran	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.303	<0.291	<0.281
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.303	<0.291	<0.281
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.303	<0.291	<0.281
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.303	<0.291	<0.281
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.303	<0.291	<0.281
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.303	<0.291	<0.281
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.303	<0.291	<0.281
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.303	<0.291	<0.281
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.303	<0.291	<0.281
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.303	<0.291	<0.281
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.303	<0.291	<0.281
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.303	<0.291	<0.281
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.303	<0.291	<0.281
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.303	<0.291	<0.281
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0607	<0.0582	<0.0562
SVOC	Acenaphthylene	mg/Kg-dry									<0.0607	<0.0582	<0.0562
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0607	<0.0582	<0.0562
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0607	<0.0582	<0.0562

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
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										Sample ID	B4	B5	B6
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82	<0.0607	<0.0582	<0.0562
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25	<0.0607	<0.0582	<0.0562
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry									<0.0607	<0.0582	<0.0562
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250	<0.0607	<0.0582	<0.0562
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800	<0.0607	<0.0582	<0.0562
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6	<0.0607	<0.0582	<0.0562
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000	<0.0607	<0.0582	<0.0562
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800	<0.0607	<0.0582	<0.0562
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69	<0.0607	<0.0582	<0.0562
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18	<0.0607	<0.0582	<0.0562
SVOC	Phenanthrene	mg/Kg-dry									<0.0607	<0.0582	<0.0562
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000	<0.0607	<0.0582	<0.0562
Inorganic	Aluminum	mg/Kg-dry									8810	4010	1890
Inorganic	Antimony	mg/Kg-dry	820		82		31				<1.47	<1.46	<1.46
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750			1.33	4.22	1.88
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000			81.4	62.4	17.3
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300			0.515	0.345	0.213
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800			0.744	0.723	0.353
Inorganic	Calcium	mg/Kg-dry									55700	92100	129000
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270			13.0	10.5	5.48
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700				5.23	10.4	4.50
Inorganic	Copper	mg/Kg-dry	82000		8200		2900				14.5	20.6	13.6
Inorganic	Iron	mg/Kg-dry									**18700**	**18500**	10700
Inorganic	Iron SPLP	mg/L							5	5	**170**	**140**	
Inorganic	Lead	mg/Kg-dry	800		700		400				10.5	7.68	3.64
Inorganic	Magnesium	mg/Kg-dry			730000		325000				25200	44900	66800
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000			331	**652**	341
Inorganic	Manganese (SPLP)	mg/L							0.15	10		**1.3**	
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10			0.0281	0.0201	<0.0189
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000			12.0	19.5	9.81
Inorganic	Potassium	mg/Kg-dry									780	790	697
Inorganic	Selenium	mg/Kg-dry	10000		1000		390				<1.27	<1.26	<1.26
Inorganic	Silver	mg/Kg-dry	10000		1000		390				<0.0588	<0.0583	<0.0583
Inorganic	Sodium	mg/Kg-dry									212	219	165
Inorganic	Thallium	mg/Kg-dry	160		160		6.3				<0.980	<0.971	<0.971
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550				23.2	17.0	7.90
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000				45.4	44.7	29.9

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B7	B8	B9

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										7.47	8.10	8.10
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.00104	<0.00115	<0.00116
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.00104	<0.00115	<0.00116
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.00104	<0.00115	<0.00116
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.00104	<0.00115	<0.00116
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.00104	<0.00115	<0.00116
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.00104	<0.00115	<0.00116
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.00104	<0.00115	<0.00116
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.319	<0.280	<0.295
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.0104	<0.0115	<0.0116
VOC	2-Hexanone	mg/Kg-dry									<0.0260	<0.0288	<0.0289
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0260	<0.0288	<0.0289
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0260	<0.0288	<0.0289
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000260	<0.000288	<0.000289
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.00104	<0.00115	<0.00116
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.00104	<0.00115	<0.00116
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.00104	<0.00115	<0.00116
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.00104	<0.00115	<0.00116
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.00104	<0.00115	<0.00116
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.00104	<0.00115	<0.00116
VOC	Chloroethane	mg/Kg-dry									<0.00104	<0.00115	<0.00116
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.00104	<0.00115	<0.00116
VOC	Chloromethane	mg/Kg-dry									<0.00104	<0.00115	<0.00116
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.00104	<0.00115	<0.00116
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.00104	<0.00115	<0.00116
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.00104	<0.00115	<0.00116
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.00104	<0.00115	<0.00116
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.00104	<0.00115	<0.00116
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00520	<0.00575	<0.00578
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.00104	<0.00115	<0.00116
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00208	<0.00230	<0.00231
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.00104	<0.00115	<0.00116
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00208	<0.00230	<0.00231
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.00104	<0.00115	<0.00116
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.00104	<0.00115	<0.00116
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.00104	<0.00115	<0.00116
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.00104	<0.00115	<0.00116
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.319	<0.280	<0.295
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.319	<0.280	<0.295
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.319	<0.280	<0.295
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.319	<0.280	<0.295
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.319	<0.280	<0.295
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.319	<0.280	<0.295
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.319	<0.280	<0.295
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.319	<0.280	<0.295
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.319	<0.280	<0.295
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.319	<0.280	<0.295
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.319	<0.280	<0.295
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.319	<0.280	<0.295
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.319	<0.280	<0.295
SVOC	2-Nitroaniline	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	2-Nitrophenol	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.319	<0.280	<0.295
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	3-Nitroaniline	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.319	<0.280	<0.295
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	4-Nitroaniline	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	4-Nitrophenol	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.319	<0.280	<0.295
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.319	<0.280	<0.295
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.319	<0.280	<0.295
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.319	<0.280	<0.295
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.319	<0.280	<0.295
SVOC	Dibenzofuran	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.319	<0.280	<0.295
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.319	<0.280	<0.295
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.319	<0.280	<0.295
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.319	<0.280	<0.295
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.319	<0.280	<0.295
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.319	<0.280	<0.295
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.319	<0.280	<0.295
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.319	<0.280	<0.295
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.319	<0.280	<0.295
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.319	<0.280	<0.295
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.319	<0.280	<0.295
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.319	<0.280	<0.295
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.319	<0.280	<0.295
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.319	<0.280	<0.295
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0639	<0.0561	<0.0590
SVOC	Acenaphthylene	mg/Kg-dry									<0.0639	<0.0561	<0.0590
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0639	<0.0561	<0.0590
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0639	<0.0561	<0.0590

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B7	B8	B9
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0639	<0.0561	<0.0590
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0639	<0.0561	<0.0590
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0639	<0.0561	<0.0590
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0639	<0.0561	<0.0590
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0639	<0.0561	<0.0590
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0639	<0.0561	<0.0590
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0639	<0.0561	<0.0590
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0639	<0.0561	<0.0590
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0639	<0.0561	<0.0590
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0639	<0.0561	<0.0590
SVOC	Phenanthrene	mg/Kg-dry										<0.0639	<0.0561	<0.0590
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0639	<0.0561	<0.0590
Inorganic	Aluminum	mg/Kg-dry										12800	7770	2320
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.50	<1.46	<1.50
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				4.67	2.94	5.95
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				153	52.5	32.2
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.651	0.423	0.239
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				1.06	0.672	0.542
Inorganic	Calcium	mg/Kg-dry										28500	84300	105000
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				16.4	13.5	6.04
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					14.5	7.02	4.65
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					19.6	17.2	16.7
Inorganic	Iron	mg/Kg-dry										**25300**	**20100**	**16400**
Inorganic	Iron SPLP	mg/L							5	5		**210**	**7.8**	**21**
Inorganic	Lead	mg/Kg-dry	800		700		400					9.89	8.54	7.06
Inorganic	Magnesium	mg/Kg-dry			730000		325000					14100	38600	53400
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				**1800**	413	466
Inorganic	Manganese (SPLP)	mg/L							0.15	10		**3**		
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0354	<0.0183	0.0195
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				26.9	17.2	11.2
Inorganic	Potassium	mg/Kg-dry										838	1190	507
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.30	<1.26	<1.30
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0600	<0.0583	<0.0600
Inorganic	Sodium	mg/Kg-dry										129	256	245
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<1.00	<0.971	<1.00
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					30.7	19.2	10.0
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					58.2	54.2	56.2

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B10	B11	B12

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										8.02	8.42	7.79
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000973	<0.000751	<0.000839
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000973	<0.000751	<0.000839
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000973	<0.000751	<0.000839
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000973	<0.000751	<0.000839
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000973	<0.000751	<0.000839
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000973	<0.000751	<0.000839
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000973	<0.000751	<0.000839
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.298	<0.271	<0.294
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00973	<0.00751	<0.00839
VOC	2-Hexanone	mg/Kg-dry									<0.0243	<0.0188	<0.0210
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0243	<0.0188	<0.0210
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0243	<0.0188	<0.0210
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000243	<0.000188	<0.000210
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000973	<0.000751	<0.000839
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000973	<0.000751	<0.000839
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000973	<0.000751	<0.000839
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.000973	<0.000751	<0.000839
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000973	<0.000751	<0.000839
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000973	<0.000751	<0.000839
VOC	Chloroethane	mg/Kg-dry									<0.000973	<0.000751	<0.000839
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000973	<0.000751	<0.000839
VOC	Chloromethane	mg/Kg-dry									<0.000973	<0.000751	<0.000839
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000973	<0.000751	<0.000839
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000973	<0.000751	<0.000839
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000973	<0.000751	<0.000839
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000973	<0.000751	<0.000839
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000973	<0.000751	<0.000839
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00486	<0.00376	<0.00420
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000973	<0.000751	<0.000839
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00195	<0.00150	<0.00168
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.000973	<0.000751	<0.000839
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00195	<0.00150	<0.00168
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000973	<0.000751	<0.000839
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000973	<0.000751	<0.000839
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000973	<0.000751	<0.000839
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000973	<0.000751	<0.000839
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.298	<0.271	<0.294
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.298	<0.271	<0.294
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.298	<0.271	<0.294
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.298	<0.271	<0.294
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.298	<0.271	<0.294
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.298	<0.271	<0.294
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.298	<0.271	<0.294
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.298	<0.271	<0.294
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.298	<0.271	<0.294
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.298	<0.271	<0.294
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.298	<0.271	<0.294
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.298	<0.271	<0.294
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.298	<0.271	<0.294
SVOC	2-Nitroaniline	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	2-Nitrophenol	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.298	<0.271	<0.294
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	3-Nitroaniline	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.298	<0.271	<0.294
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	4-Nitroaniline	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	4-Nitrophenol	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.298	<0.271	<0.294
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.298	<0.271	<0.294
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.298	<0.271	<0.294
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.298	<0.271	<0.294
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.298	<0.271	<0.294
SVOC	Dibenzofuran	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.298	<0.271	<0.294
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.298	<0.271	<0.294
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.298	<0.271	<0.294
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.298	<0.271	<0.294
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.298	<0.271	<0.294
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.298	<0.271	<0.294
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.298	<0.271	<0.294
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.298	<0.271	<0.294
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.298	<0.271	<0.294
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.298	<0.271	<0.294
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.298	<0.271	<0.294
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.298	<0.271	<0.294
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.298	<0.271	<0.294
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.298	<0.271	<0.294
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0595	<0.0542	<0.0588
SVOC	Acenaphthylene	mg/Kg-dry									<0.0595	<0.0542	<0.0588
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0595	<0.0542	<0.0588
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0595	<0.0542	<0.0588

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B10	B11	B12
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0595	<0.0542	<0.0588
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0595	<0.0542	<0.0588
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0595	<0.0542	<0.0588
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0595	<0.0542	<0.0588
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0595	<0.0542	<0.0588
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0595	<0.0542	<0.0588
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0595	<0.0542	<0.0588
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0595	<0.0542	<0.0588
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0595	<0.0542	<0.0588
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0595	<0.0542	<0.0588
SVOC	Phenanthrene	mg/Kg-dry										<0.0595	<0.0542	<0.0588
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0595	<0.0542	<0.0588
Inorganic	Aluminum	mg/Kg-dry										7680	1040	4380
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.49	<1.50	<1.49
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				<1.14	17.9	7.39
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				41.0	19.8	68.8
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.444	0.151	0.424
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.551	0.827	0.873
Inorganic	Calcium	mg/Kg-dry										66400	130000	59600
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				15.6	4.65	10.0
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					9.99	3.53	7.11
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					19.7	19.8	18.3
Inorganic	Iron	mg/Kg-dry										**17600**	**26900**	**21500**
Inorganic	Iron SPLP	mg/L							5	5		<0.25	0.42	**120**
Inorganic	Lead	mg/Kg-dry	800		700		400					8.14	9.01	8.72
Inorganic	Magnesium	mg/Kg-dry			730000		325000					26500	71300	32900
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				406	433	**689**
Inorganic	Manganese (SPLP)	mg/L							0.15	10				**2.2**
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0207	0.0194	0.0403
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				22.7	9.71	16.4
Inorganic	Potassium	mg/Kg-dry										1420	376	656
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.29	<1.30	<1.29
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0594	<0.0600	<0.0594
Inorganic	Sodium	mg/Kg-dry										288	203	114
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.990	<1.00	<0.990
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					18.1	8.39	16.3
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					58.6	74.2	81.0

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B13	B14	B15

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										8.05	7.35	7.54
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000972	<0.000864	<0.000937
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000972	<0.000864	<0.000937
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000972	<0.000864	<0.000937
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000972	<0.000864	<0.000937
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000972	<0.000864	<0.000937
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000972	<0.000864	<0.000937
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000972	<0.000864	<0.000937
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.296	<0.286	<0.290
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00972	<0.00864	<0.00937
VOC	2-Hexanone	mg/Kg-dry									<0.0243	<0.0216	<0.0234
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0243	<0.0216	<0.0234
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0243	<0.0216	<0.0234
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000243	<0.000216	<0.000234
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000972	<0.000864	<0.000937
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000972	<0.000864	<0.000937
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000972	<0.000864	<0.000937
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.000972	<0.000864	<0.000937
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000972	<0.000864	<0.000937
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000972	<0.000864	<0.000937
VOC	Chloroethane	mg/Kg-dry									<0.000972	<0.000864	<0.000937
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000972	<0.000864	<0.000937
VOC	Chloromethane	mg/Kg-dry									<0.000972	<0.000864	<0.000937
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000972	<0.000864	<0.000937
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000972	<0.000864	<0.000937
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000972	<0.000864	<0.000937
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000972	<0.000864	<0.000937
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000972	<0.000864	<0.000937
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00486	<0.00432	<0.00469
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000972	<0.000864	<0.000937
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00194	<0.00173	<0.00187
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.000972	<0.000864	<0.000937
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00194	0.00193	<0.00187
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000972	<0.000864	<0.000937
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000972	<0.000864	<0.000937
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000972	<0.000864	<0.000937
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000972	<0.000864	<0.000937
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.296	<0.286	<0.290
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.296	<0.286	<0.290
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.296	<0.286	<0.290
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.296	<0.286	<0.290
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.296	<0.286	<0.290
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.296	<0.286	<0.290
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.296	<0.286	<0.290
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.296	<0.286	<0.290
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.296	<0.286	<0.290
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.296	<0.286	<0.290
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.296	<0.286	<0.290
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.296	<0.286	<0.290
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.296	<0.286	<0.290
SVOC	2-Nitroaniline	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	2-Nitrophenol	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.296	<0.286	<0.290
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	3-Nitroaniline	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.296	<0.286	<0.290
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	4-Nitroaniline	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	4-Nitrophenol	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.296	<0.286	<0.290
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.296	<0.286	<0.290
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.296	<0.286	<0.290
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.296	<0.286	<0.290
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.296	<0.286	<0.290
SVOC	Dibenzofuran	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.296	<0.286	<0.290
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.296	<0.286	<0.290
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.296	<0.286	<0.290
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.296	<0.286	<0.290
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.296	<0.286	<0.290
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.296	<0.286	<0.290
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.296	<0.286	<0.290
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.296	<0.286	<0.290
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.296	<0.286	<0.290
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.296	<0.286	<0.290
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.296	<0.286	<0.290
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.296	<0.286	<0.290
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.296	<0.286	<0.290
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.296	<0.286	<0.290
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0593	<0.0573	<0.0581
SVOC	Acenaphthylene	mg/Kg-dry									<0.0593	<0.0573	<0.0581
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0593	<0.0573	<0.0581
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0593	<0.0573	<0.0581

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B13	B14	B15
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0593	<0.0573	<0.0581
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0593	<0.0573	<0.0581
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0593	<0.0573	<0.0581
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0593	<0.0573	<0.0581
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0593	<0.0573	<0.0581
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0593	<0.0573	<0.0581
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0593	<0.0573	<0.0581
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0593	<0.0573	<0.0581
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0593	<0.0573	<0.0581
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0593	<0.0573	<0.0581
SVOC	Phenanthrene	mg/Kg-dry										<0.0593	<0.0573	<0.0581
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0593	<0.0573	<0.0581
Inorganic	Aluminum	mg/Kg-dry										3980	4140	9500
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.44	<1.49	<1.47
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				5.92	3.94	4.63
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				61.8	45.3	83.3
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.378	0.301	0.533
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.649	0.401	0.604
Inorganic	Calcium	mg/Kg-dry										71100	18700	14800
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				8.47	7.50	12.4
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					6.34	5.82	8.62
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					15.5	13.4	16.9
Inorganic	Iron	mg/Kg-dry										**19900**	12700	**19500**
Inorganic	Iron SPLP	mg/L							5	5		**170**		**300**
Inorganic	Lead	mg/Kg-dry	800		700		400					9.13	6.76	10.0
Inorganic	Magnesium	mg/Kg-dry			730000		325000					39900	11400	10200
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				577	379	**661**
Inorganic	Manganese (SPLP)	mg/L							0.15	10				**4.9**
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0264	0.0202	0.0318
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				13.5	12.2	18.7
Inorganic	Potassium	mg/Kg-dry										551	404	686
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.25	<1.29	<1.27
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0577	<0.0594	<0.0588
Inorganic	Sodium	mg/Kg-dry										213	68.9	64.7
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.962	<0.990	<0.980
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					15.2	12.2	21.5
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					52.0	41.5	52.2

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B16	B17	B18

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										7.06	7.37	8.01
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000890	<0.000931	<0.00106
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000890	<0.000931	<0.00106
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000890	<0.000931	<0.00106
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000890	<0.000931	<0.00106
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000890	<0.000931	<0.00106
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000890	<0.000931	<0.00106
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000890	<0.000931	<0.00106
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.299	<0.305	<0.311
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00890	<0.00931	<0.0106
VOC	2-Hexanone	mg/Kg-dry									<0.0223	<0.0233	<0.0265
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0223	<0.0233	<0.0265
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0223	<0.0233	<0.0265
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000223	<0.000233	<0.000265
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000890	<0.000931	<0.00106
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000890	<0.000931	<0.00106
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000890	<0.000931	<0.00106
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.000890	<0.000931	<0.00106
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000890	<0.000931	<0.00106
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000890	<0.000931	<0.00106
VOC	Chloroethane	mg/Kg-dry									<0.000890	<0.000931	<0.00106
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000890	<0.000931	<0.00106
VOC	Chloromethane	mg/Kg-dry									<0.000890	<0.000931	<0.00106
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000890	<0.000931	<0.00106
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000890	<0.000931	<0.00106
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000890	<0.000931	<0.00106
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000890	<0.000931	<0.00106
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000890	<0.000931	<0.00106
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00445	<0.00466	<0.00531
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000890	<0.000931	<0.00106
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00178	<0.00186	<0.00212
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.000890	<0.000931	<0.00106
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00178	<0.00186	<0.00212
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000890	<0.000931	<0.00106
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000890	<0.000931	<0.00106
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000890	<0.000931	<0.00106
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000890	<0.000931	<0.00106
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.299	<0.305	<0.311
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.299	<0.305	<0.311
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.299	<0.305	<0.311
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.299	<0.305	<0.311
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.299	<0.305	<0.311
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.299	<0.305	<0.311
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.299	<0.305	<0.311
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.299	<0.305	<0.311
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.299	<0.305	<0.311
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.299	<0.305	<0.311
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.299	<0.305	<0.311
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.299	<0.305	<0.311
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.299	<0.305	<0.311
SVOC	2-Nitroaniline	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	2-Nitrophenol	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.299	<0.305	<0.311
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	3-Nitroaniline	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.299	<0.305	<0.311
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	4-Nitroaniline	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	4-Nitrophenol	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.299	<0.305	<0.311
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.299	<0.305	<0.311
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.299	<0.305	<0.311
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.299	<0.305	<0.311
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.299	<0.305	<0.311
SVOC	Dibenzofuran	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.299	<0.305	<0.311
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.299	<0.305	<0.311
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.299	<0.305	<0.311
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.299	<0.305	<0.311
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.299	<0.305	<0.311
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.299	<0.305	<0.311
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.299	<0.305	<0.311
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.299	<0.305	<0.311
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.299	<0.305	<0.311
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.299	<0.305	<0.311
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.299	<0.305	<0.311
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.299	<0.305	<0.311
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.299	<0.305	<0.311
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.299	<0.305	<0.311
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0598	<0.0611	<0.0621
SVOC	Acenaphthylene	mg/Kg-dry									<0.0598	<0.0611	<0.0621
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0598	<0.0611	<0.0621
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0598	<0.0611	<0.0621

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B16	B17	B18
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0598	<0.0611	<0.0621
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0598	<0.0611	<0.0621
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0598	<0.0611	<0.0621
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0598	<0.0611	<0.0621
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0598	<0.0611	<0.0621
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0598	<0.0611	<0.0621
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0598	<0.0611	<0.0621
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0598	<0.0611	<0.0621
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0598	<0.0611	<0.0621
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0598	<0.0611	<0.0621
SVOC	Phenanthrene	mg/Kg-dry										<0.0598	<0.0611	<0.0621
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0598	<0.0611	<0.0621
Inorganic	Aluminum	mg/Kg-dry										1120	11000	11100
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.49	<1.50	<1.50
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				9.09	13.8	7.20
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				23.1	75.7	89.3
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.151	0.677	0.614
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.675	1.10	0.902
Inorganic	Calcium	mg/Kg-dry										120000	3100	37900
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				4.39	16.3	12.8
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					3.67	8.56	6.29
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					17.8	30.3	17.8
Inorganic	Iron	mg/Kg-dry										**19000**	**37800**	**37600**
Inorganic	Iron SPLP	mg/L							5	5		**150**	**340**	**240**
Inorganic	Lead	mg/Kg-dry	800		700		400					8.31	13.3	8.67
Inorganic	Magnesium	mg/Kg-dry			730000		325000					64200	2960	21100
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				442	532	**779**
Inorganic	Manganese (SPLP)	mg/L							0.15	10				**5.6**
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0202	0.0347	0.0412
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				10.4	23.3	25.4
Inorganic	Potassium	mg/Kg-dry										329	551	611
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.29	<1.30	<1.30
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0594	<0.0600	<0.0600
Inorganic	Sodium	mg/Kg-dry										161	176	681
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.990	<1.00	<1.00
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					6.45	22.4	20.9
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					55.4	78.8	56.2

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B19	B20	B21	B22

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II				
	pH										7.59	7.87	7.85	7.22
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000923	<0.000922	<0.00109	<0.00247
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000923	<0.000922	<0.00109	<0.00247
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000923	<0.000922	<0.00109	<0.00247
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000923	<0.000922	<0.00109	<0.00247
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000923	<0.000922	<0.00109	<0.00247
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000923	<0.000922	<0.00109	<0.00247
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000923	<0.000922	<0.00109	<0.00247
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00923	<0.00922	<0.0109	<0.0247
VOC	2-Hexanone	mg/Kg-dry									<0.0231	<0.0231	<0.0273	<0.0619
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0231	<0.0231	<0.0273	<0.0619
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0231	<0.0231	<0.0273	<0.0619
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000231	<0.000231	<0.000273	<0.000619
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000923	<0.000922	<0.00109	0.00359
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Chloroethane	mg/Kg-dry									<0.000923	<0.000922	<0.00109	<0.00247
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Chloromethane	mg/Kg-dry									<0.000923	<0.000922	<0.00109	<0.00247
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000923	<0.000922	<0.00109	<0.00247
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00461	<0.00461	<0.00546	<0.0124
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00185	<0.00184	<0.00218	<0.00495
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.000923	0.000968	<0.00109	<0.00247
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00185	<0.00184	<0.00218	<0.00495
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000923	<0.000922	<0.00109	<0.00247
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000923	<0.000922	<0.00109	<0.00247
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000923	<0.000922	<0.00109	<0.00247
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.303	<0.305	<0.299	<0.320
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.303	<0.305	<0.299	<0.320
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.303	<0.305	<0.299	<0.320
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.303	<0.305	<0.299	<0.320
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.303	<0.305	<0.299	<0.320
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.303	<0.305	<0.299	<0.320
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.303	<0.305	<0.299	<0.320
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.303	<0.305	<0.299	<0.320
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.303	<0.305	<0.299	<0.320
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.303	<0.305	<0.299	<0.320
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.303	<0.305	<0.299	<0.320
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.303	<0.305	<0.299	<0.320
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.303	<0.305	<0.299	<0.320
SVOC	2-Nitroaniline	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	2-Nitrophenol	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.303	<0.305	<0.299	<0.320
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	3-Nitroaniline	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.303	<0.305	<0.299	<0.320
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	4-Nitroaniline	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	4-Nitrophenol	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.303	<0.305	<0.299	<0.320
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.303	<0.305	<0.299	<0.320
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.303	<0.305	<0.299	<0.320
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.303	<0.305	<0.299	<0.320
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.303	<0.305	<0.299	<0.320
SVOC	Dibenzofuran	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.303	<0.305	<0.299	<0.320
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.303	<0.305	<0.299	<0.320
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.303	<0.305	<0.299	<0.320
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.303	<0.305	<0.299	<0.320
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.303	<0.305	<0.299	<0.320
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.303	<0.305	<0.299	<0.320
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.303	<0.305	<0.299	<0.320
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.303	<0.305	<0.299	<0.320
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.303	<0.305	<0.299	<0.320
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.303	<0.305	<0.299	<0.320
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.303	<0.305	<0.299	<0.320
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.303	<0.305	<0.299	<0.320
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.303	<0.305	<0.299	<0.320
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.303	<0.305	<0.299	<0.320
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0607	<0.0610	<0.0599	<0.0640
SVOC	Acenaphthylene	mg/Kg-dry									<0.0607	<0.0610	<0.0599	<0.0640
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0607	<0.0610	<0.0599	<0.0640
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0607	<0.0610	<0.0599	<0.0640

Olympic Boulevard and Houbolt Road Joliet, IL
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											Sample ID	B19	B20	B21	B22
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0607	0.102	<0.0599	<0.0640
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0607	0.0614	<0.0599	<0.0640
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0607	0.0829	<0.0599	<0.0640
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0607	0.0642	<0.0599	<0.0640
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0607	0.131	<0.0599	<0.0640
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0607	<0.0610	<0.0599	<0.0640
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0607	0.253	<0.0599	<0.0640
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0607	<0.0610	<0.0599	<0.0640
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0607	0.100	<0.0599	<0.0640
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0607	<0.0610	<0.0599	<0.0640
SVOC	Phenanthrene	mg/Kg-dry										<0.0607	0.0939	<0.0599	<0.0640
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0607	0.196	<0.0599	<0.0640
Inorganic	Aluminum	mg/Kg-dry										8130	8010	9630	13600
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.50	<1.44	<1.44	<1.50
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				4.49	10.3	11.2	9.42
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				158	107	93.1	265
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.493	0.507	0.532	0.738
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.550	0.753	0.662	0.697
Inorganic	Calcium	mg/Kg-dry										3070	41700	22600	3460
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				10.5	11.1	11.6	14.8
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					8.65	7.25	7.63	16.0
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					9.26	17.5	19.1	14.6
Inorganic	Iron	mg/Kg-dry										12200	**20400**	**40600**	**20800**
Inorganic	Iron SPLP	mg/L							5	5			**110**	**260**	**240**
Inorganic	Lead	mg/Kg-dry	800		700		400					14.6	19.9	13.9	6.71
Inorganic	Magnesium	mg/Kg-dry			730000		325000					2260	21500	13400	3010
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				**878**	**650**	621	**2250**
Inorganic	Manganese (SPLP)	mg/L							0.15	10		**6.6**	**3.7**		**2.5**
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0294	0.0347	0.0430	0.0453
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				10.3	14.7	16.6	17.1
Inorganic	Potassium	mg/Kg-dry										798	751	544	907
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.30	<1.25	<1.25	<1.30
Inorganic	Silver	mg/Kg-dry	10000		1000		390					0.190	0.0928	0.0742	0.208
Inorganic	Sodium	mg/Kg-dry										481	730	951	54.1
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<1.00	<0.962	<0.962	<1.00
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					20.6	19.8	20.0	29.4
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					51.8	68.9	59.0	61.8

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B23	B24	B25	B26

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II				
	pH										7.54	6.90	7.07	7.54
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.00102	<0.00101	<0.000967	<0.000962
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.00102	<0.00101	<0.000967	<0.000962
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.00102	<0.00101	<0.000967	<0.000962
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.00102	<0.00101	<0.000967	<0.000962
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.00102	<0.00101	<0.000967	<0.000962
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.00102	<0.00101	<0.000967	<0.000962
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.00102	<0.00101	<0.000967	<0.000962
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.0102	<0.0101	<0.00967	<0.00962
VOC	2-Hexanone	mg/Kg-dry									<0.0254	<0.0252	<0.0242	<0.0241
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0254	<0.0252	<0.0242	<0.0241
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0254	<0.0252	<0.0242	<0.0241
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000254	<0.000252	<0.000242	<0.000241
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Chloroethane	mg/Kg-dry									<0.00102	<0.00101	<0.000967	<0.000962
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Chloromethane	mg/Kg-dry									<0.00102	<0.00101	<0.000967	<0.000962
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.00102	<0.00101	<0.000967	<0.000962
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00508	<0.00504	<0.00483	<0.00481
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00203	<0.00202	<0.00193	<0.00192
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00203	<0.00202	<0.00193	<0.00192
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.00102	<0.00101	<0.000967	<0.000962
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.00102	<0.00101	<0.000967	<0.000962
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.00102	<0.00101	<0.000967	<0.000962
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.316	<0.315	<0.293	<0.310
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.316	<0.315	<0.293	<0.310
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.316	<0.315	<0.293	<0.310
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.316	<0.315	<0.293	<0.310
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.316	<0.315	<0.293	<0.310
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.316	<0.315	<0.293	<0.310
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.316	<0.315	<0.293	<0.310
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.316	<0.315	<0.293	<0.310
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.316	<0.315	<0.293	<0.310
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.316	<0.315	<0.293	<0.310
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.316	<0.315	<0.293	<0.310
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.316	<0.315	<0.293	<0.310
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.316	<0.315	<0.293	<0.310
SVOC	2-Nitroaniline	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	2-Nitrophenol	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.316	<0.315	<0.293	<0.310
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	3-Nitroaniline	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.316	<0.315	<0.293	<0.310
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	4-Nitroaniline	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	4-Nitrophenol	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.316	<0.315	<0.293	<0.310
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.316	<0.315	<0.293	<0.310
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.316	<0.315	<0.293	<0.310
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.316	<0.315	<0.293	<0.310
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.316	<0.315	<0.293	<0.310
SVOC	Dibenzofuran	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.316	<0.315	<0.293	<0.310
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.316	<0.315	<0.293	<0.310
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.316	<0.315	<0.293	<0.310
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.316	<0.315	<0.293	<0.310
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.316	<0.315	<0.293	<0.310
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.316	<0.315	<0.293	<0.310
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.316	<0.315	<0.293	<0.310
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.316	<0.315	<0.293	<0.310
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.316	<0.315	<0.293	<0.310
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.316	<0.315	<0.293	<0.310
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.316	<0.315	<0.293	<0.310
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.316	<0.315	<0.293	<0.310
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.316	<0.315	<0.293	<0.310
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.316	<0.315	<0.293	<0.310
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Acenaphthylene	mg/Kg-dry									<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0632	<0.0630	<0.0585	<0.0619

Olympic Boulevard and Houbolt Road Joliet, IL
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											Sample ID	B23	B24	B25	B26
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Phenanthrene	mg/Kg-dry										<0.0632	<0.0630	<0.0585	<0.0619
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0632	<0.0630	<0.0585	<0.0619
Inorganic	Aluminum	mg/Kg-dry										10100	8680	10000	7730
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.50	<1.47	<1.49	<1.50
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				6.95	9.11	9.90	8.06
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				112	116	87.6	97.9
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.566	0.496	0.568	0.491
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.590	0.694	0.538	0.562
Inorganic	Calcium	mg/Kg-dry										7940	37100	2070	29900
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				12.4	13.3	13.1	14.7
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					7.18	8.28	9.91	7.51
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					15.2	18.6	16.5	18.2
Inorganic	Iron	mg/Kg-dry										**17200**	**19200**	**18700**	**16900**
Inorganic	Iron SPLP	mg/L							5	5		**380**	**280**	**270**	**300**
Inorganic	Lead	mg/Kg-dry	800		700		400					13.9	17.3	12.0	17.1
Inorganic	Magnesium	mg/Kg-dry			730000		325000					5450	20400	2730	16200
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				400	612	570	**639**
Inorganic	Manganese (SPLP)	mg/L							0.15	10					**5.2**
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0358	0.0289	0.0316	0.0295
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				13.2	19.4	17.5	13.5
Inorganic	Potassium	mg/Kg-dry										750	859	545	746
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.30	<1.27	<1.29	<1.30
Inorganic	Silver	mg/Kg-dry	10000		1000		390					0.0907	<0.0588	<0.0594	0.0873
Inorganic	Sodium	mg/Kg-dry										165	482	260	293
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<1.00	<0.980	<0.990	<1.00
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					21.4	20.5	22.1	20.8
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					52.0	66.8	53.1	75.4

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B27	B28	B29

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										7.36	7.67	7.88
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000932	<0.00113	<0.000977
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000932	<0.00113	<0.000977
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000932	<0.00113	<0.000977
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000932	<0.00113	<0.000977
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000932	<0.00113	<0.000977
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000932	<0.00113	<0.000977
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000932	<0.00113	<0.000977
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.296	<0.300	<0.293
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00932	<0.0113	<0.00977
VOC	2-Hexanone	mg/Kg-dry									<0.0233	<0.0283	<0.0244
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0233	<0.0283	<0.0244
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0233	<0.0283	<0.0244
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000233	<0.000283	<0.000244
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000932	<0.00113	<0.000977
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000932	<0.00113	<0.000977
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000932	<0.00113	<0.000977
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.000932	<0.00113	<0.000977
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000932	<0.00113	<0.000977
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000932	<0.00113	<0.000977
VOC	Chloroethane	mg/Kg-dry									<0.000932	<0.00113	<0.000977
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000932	<0.00113	<0.000977
VOC	Chloromethane	mg/Kg-dry									<0.000932	<0.00113	<0.000977
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000932	<0.00113	<0.000977
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000932	<0.00113	<0.000977
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000932	<0.00113	<0.000977
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000932	<0.00113	<0.000977
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000932	<0.00113	<0.000977
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00466	<0.00567	<0.00488
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000932	<0.00113	<0.000977
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00186	<0.00227	<0.00195
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.000932	0.00117	<0.000977
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00186	<0.00227	<0.00195
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000932	<0.00113	<0.000977
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000932	<0.00113	<0.000977
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000932	<0.00113	<0.000977
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000932	<0.00113	<0.000977
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.296	<0.300	<0.293
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.296	<0.300	<0.293
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.296	<0.300	<0.293
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.296	<0.300	<0.293
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.296	<0.300	<0.293
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.296	<0.300	<0.293
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.296	<0.300	<0.293
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.296	<0.300	<0.293
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.296	<0.300	<0.293
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.296	<0.300	<0.293
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.296	<0.300	<0.293
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.296	<0.300	<0.293
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.296	<0.300	<0.293
SVOC	2-Nitroaniline	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	2-Nitrophenol	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.296	<0.300	<0.293
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	3-Nitroaniline	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.296	<0.300	<0.293
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	4-Nitroaniline	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	4-Nitrophenol	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.296	<0.300	<0.293
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.296	<0.300	<0.293
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.296	<0.300	<0.293
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.296	<0.300	<0.293
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.296	<0.300	<0.293
SVOC	Dibenzofuran	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.296	<0.300	<0.293
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.296	<0.300	<0.293
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.296	<0.300	<0.293
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.296	<0.300	<0.293
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.296	<0.300	<0.293
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.296	<0.300	<0.293
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.296	<0.300	<0.293
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.296	<0.300	<0.293
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.296	<0.300	<0.293
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.296	<0.300	<0.293
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.296	<0.300	<0.293
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.296	<0.300	<0.293
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.296	<0.300	<0.293
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.296	<0.300	<0.293
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0592	<0.0599	<0.0585
SVOC	Acenaphthylene	mg/Kg-dry									<0.0592	<0.0599	<0.0585
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0592	<0.0599	<0.0585
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0592	<0.0599	<0.0585

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
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											Sample ID	B27	B28	B29
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0592	<0.0599	<0.0585
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0592	<0.0599	<0.0585
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0592	<0.0599	<0.0585
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0592	<0.0599	<0.0585
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0592	<0.0599	<0.0585
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0592	<0.0599	<0.0585
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0592	<0.0599	<0.0585
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0592	<0.0599	<0.0585
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0592	<0.0599	<0.0585
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0592	<0.0599	<0.0585
SVOC	Phenanthrene	mg/Kg-dry										<0.0592	<0.0599	<0.0585
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0592	<0.0599	<0.0585
Inorganic	Aluminum	mg/Kg-dry										9360	6600	4060
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.50	<1.47	<1.47
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				10.8	12.8	7.94
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				114	87.2	70.0
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.536	0.507	0.350
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.741	0.754	0.455
Inorganic	Calcium	mg/Kg-dry										8230	63600	66600
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				11.5	11.5	9.09
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					9.82	6.26	6.32
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					14.8	16.5	12.5
Inorganic	Iron	mg/Kg-dry										**21500**	**25400**	14400
Inorganic	Iron SPLP	mg/L							5	5		**260**	**260**	
Inorganic	Lead	mg/Kg-dry	800		700		400					14.1	9.93	10.7
Inorganic	Magnesium	mg/Kg-dry			730000		325000					6410	35900	37500
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				**912**	**661**	559
Inorganic	Manganese (SPLP)	mg/L							0.15	10		**3**	**4.1**	
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0310	0.0302	<0.0181
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				15.1	17.6	11.0
Inorganic	Potassium	mg/Kg-dry										711	684	561
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.30	<1.27	<1.27
Inorganic	Silver	mg/Kg-dry	10000		1000		390					0.437	<0.0588	0.0644
Inorganic	Sodium	mg/Kg-dry										462	213	218
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<1.00	<0.980	<0.980
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					20.8	15.5	15.2
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					56.9	65.4	45.5

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B30	B31	B32	B33

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II				
	pH										8.02	7.20	7.62	8.08
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.000952	<0.000962	<0.00103	<0.00101
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.000952	<0.000962	<0.00103	<0.00101
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.000952	<0.000962	<0.00103	<0.00101
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.000952	<0.000962	<0.00103	<0.00101
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.000952	<0.000962	<0.00103	<0.00101
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.000952	<0.000962	<0.00103	<0.00101
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.000952	<0.000962	<0.00103	<0.00101
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.00952	<0.00962	<0.0103	<0.0101
VOC	2-Hexanone	mg/Kg-dry									<0.0238	<0.0241	<0.0258	<0.0252
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0238	<0.0241	<0.0258	<0.0252
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0238	0.0532	0.0813	<0.0252
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000238	<0.000241	<0.000258	<0.000252
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.000952	0.00187	0.00223	<0.00101
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Chloroethane	mg/Kg-dry									<0.000952	<0.000962	<0.00103	<0.00101
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Chloromethane	mg/Kg-dry									<0.000952	<0.000962	<0.00103	<0.00101
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.000952	<0.000962	<0.00103	<0.00101
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00476	<0.00481	<0.00516	<0.00504
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00190	<0.00192	<0.00207	<0.00202
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	0.000961	<0.000962	0.00105	<0.00101
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.00190	<0.00192	<0.00207	<0.00202
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.000952	<0.000962	<0.00103	<0.00101
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.000952	<0.000962	<0.00103	<0.00101
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.000952	<0.000962	<0.00103	<0.00101
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.308	<0.300	<0.302	<0.262
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.308	<0.300	<0.302	<0.262
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.308	<0.300	<0.302	<0.262
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.308	<0.300	<0.302	<0.262
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.308	<0.300	<0.302	<0.262
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.308	<0.300	<0.302	<0.262
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.308	<0.300	<0.302	<0.262
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.308	<0.300	<0.302	<0.262
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.308	<0.300	<0.302	<0.262
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.308	<0.300	<0.302	<0.262
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.308	<0.300	<0.302	<0.262
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.308	<0.300	<0.302	<0.262
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.308	<0.300	<0.302	<0.262
SVOC	2-Nitroaniline	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	2-Nitrophenol	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.308	<0.300	<0.302	<0.262
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	3-Nitroaniline	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.308	<0.300	<0.302	<0.262
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	4-Nitroaniline	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	4-Nitrophenol	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.308	<0.300	<0.302	<0.262
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.308	<0.300	<0.302	<0.262
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.308	<0.300	<0.302	<0.262
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.308	<0.300	<0.302	<0.262
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.308	<0.300	<0.302	<0.262
SVOC	Dibenzofuran	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.308	<0.300	<0.302	<0.262
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.308	<0.300	<0.302	<0.262
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.308	<0.300	<0.302	<0.262
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.308	<0.300	<0.302	<0.262
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.308	<0.300	<0.302	<0.262
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.308	<0.300	<0.302	<0.262
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.308	<0.300	<0.302	<0.262
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.308	<0.300	<0.302	<0.262
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.308	<0.300	<0.302	<0.262
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.308	<0.300	<0.302	<0.262
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.308	<0.300	<0.302	<0.262
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.308	<0.300	<0.302	<0.262
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.308	<0.300	<0.302	<0.262
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.308	<0.300	<0.302	<0.262
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Acenaphthylene	mg/Kg-dry									<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.0617	<0.0601	<0.0604	<0.0524

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B30	B31	B32	B33
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Phenanthrene	mg/Kg-dry										<0.0617	<0.0601	<0.0604	<0.0524
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0617	<0.0601	<0.0604	<0.0524
Inorganic	Aluminum	mg/Kg-dry										3920	6520	8810	842
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.49	<1.46	<1.50	<1.47
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				7.68	13.0	6.80	8.19
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				56.3	65.3	178	13.9
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.344	0.419	0.529	0.133
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.405	0.607	0.513	0.404
Inorganic	Calcium	mg/Kg-dry										82100	47100	7970	154000
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				9.65	9.81	11.0	4.19
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					5.70	6.47	7.91	3.27
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					14.0	18.2	12.4	11.9
Inorganic	Iron	mg/Kg-dry										15500	**20200**	12700	11500
Inorganic	Iron SPLP	mg/L							5	5			**270**		
Inorganic	Lead	mg/Kg-dry	800		700		400					6.95	11.0	16.3	5.46
Inorganic	Magnesium	mg/Kg-dry			730000		325000					43800	25800	5380	83600
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				478	540	**715**	409
Inorganic	Manganese (SPLP)	mg/L							0.15	10				**2.1**	
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0215	0.0226	0.0256	<0.0170
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				11.7	15.9	11.2	7.59
Inorganic	Potassium	mg/Kg-dry										411	517	1090	331
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.29	<1.26	<1.30	<1.27
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0594	0.113	0.183	<0.0588
Inorganic	Sodium	mg/Kg-dry										338	280	652	210
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.990	<0.971	<1.00	<0.980
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					14.7	16.6	21.9	6.13
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					40.7	55.7	68.0	33.5

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II	Sample ID	B-34 0-2'	B-35 0-2'	B-36 0-2'	B-37 0-2'
	pH											8.04	7.63	7.85	7.68
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6		<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry										<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3		<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110		<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3		<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1		<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15		<0.00113	<0.00127	<0.00118	<0.0701
VOC	1,3-Dichlorobenzene	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17		<0.0113	<0.0127	<0.0118	<0.701
VOC	2-Hexanone	mg/Kg-dry										<0.0283	<0.0318	<0.0294	<1.75
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5		<0.0283	<0.0318	<0.0294	<1.75
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25		<0.0283	<0.0318	<0.0294	<1.75
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17		<0.000283	<0.000318	<0.000294	<0.0175
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chloroethane	mg/Kg-dry										<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Chloromethane	mg/Kg-dry										<0.00113	<0.00127	<0.00118	<0.0701
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1		<0.00113	<0.00127	<0.00118	<0.0701
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2		<0.00567	<0.00636	<0.00588	<0.350
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3		<0.00227	<0.00255	<0.00235	<0.140
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150		<0.00227	<0.00255	<0.00235	<0.140
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4		<0.00113	<0.00127	<0.00118	<0.0701
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3		<0.00113	<0.00127	<0.00118	<0.0701
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07		<0.00113	<0.00127	<0.00118	<0.0701
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53		<0.283	<0.318	<0.294	<0.337
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43		<0.283	<0.318	<0.294	<0.337
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11		<0.283	<0.318	<0.294	<0.337
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400		<0.283	<0.318	<0.294	<0.337
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77		<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1		<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9		<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2		<0.283	<0.318	<0.294	<0.337
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008		<0.283	<0.318	<0.294	<0.337
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007		<0.283	<0.318	<0.294	<0.337
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200		<0.283	<0.318	<0.294	<0.337
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4		<0.283	<0.318	<0.294	<0.337
SVOC	2-Methylnaphthalene	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15		<0.283	<0.318	<0.294	<0.337
SVOC	2-Nitroaniline	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	2-Nitrophenol	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033		<0.283	<0.318	<0.294	<0.337
SVOC	3,4-Methylphenol	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	3-Nitroaniline	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7		<0.283	<0.318	<0.294	<0.337
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	4-Nitroaniline	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	4-Nitrophenol	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry										<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Dibenzofuran	mg/Kg-dry										<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Dimethyl phthalate	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300		<0.283	<0.318	<0.294	<0.337
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000		<0.283	<0.318	<0.294	<0.337
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11		<0.283	<0.318	<0.294	<0.337
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15		<0.283	<0.318	<0.294	<0.337
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200		<0.283	<0.318	<0.294	<0.337
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1		<0.283	<0.318	<0.294	<0.337
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005		<0.283	<0.318	<0.294	<0.337
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6		<0.283	<0.318	<0.294	<0.337
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14		<0.283	<0.318	<0.294	<0.337
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100		<0.283	<0.318	<0.294	<0.337
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Acenaphthylene	mg/Kg-dry										<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000		<0.283	<0.318	<0.294	<0.337
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8		<0.283	<0.318	<0.294	<0.337

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B-34 0-2'	B-35 0-2'	B-36 0-2'	B-37 0-2'
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.283	<0.318	<0.294	<0.337
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.283	<0.318	<0.294	<0.337
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.283	<0.318	<0.294	<0.337
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.283	<0.318	<0.294	<0.337
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.283	<0.318	<0.294	<0.337
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.283	<0.318	<0.294	<0.337
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.283	<0.318	<0.294	<0.337
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0567	<0.0636	<0.0587	<0.0673
SVOC	Phenanthrene	mg/Kg-dry										<0.283	<0.318	<0.294	<0.337
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0567	<0.0636	<0.0587	<0.0673
Inorganic	Aluminum	mg/Kg-dry										10300	9880	10700	12400
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.49	<1.49	<1.50	<1.43
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				5.77	5.06	4.32	3.1
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				118	125	139	130
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.771	0.571	0.574	0.718
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				2.06	1.45	1.46	1.83
Inorganic	Calcium	mg/Kg-dry										28900	13700	3880	14200
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				15	13.2	13.5	14.8
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					11.2	9.39	9.47	7.77
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					13.1	12.2	12.2	12.9
Inorganic	Iron	mg/Kg-dry										25300	17100	17900	20100
Inorganic	Iron SPLP	mg/L							5	5		**160**	**310**	**240**	**230**
Inorganic	Lead	mg/Kg-dry	800		700		400					10.4	11.8	10.3	12.4
Inorganic	Magnesium	mg/Kg-dry			730000		325000					16400	9240	3020	9570
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				**1650**	844	858	694
Inorganic	Manganese (SPLP)	mg/L							0.15	10		**3.6**	**5.2**	**4**	**2.3**
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0506	0.0311	0.0302	0.0378
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				21.2	14.2	14	15
Inorganic	Potassium	mg/Kg-dry										969	961	854	1080
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.29	<1.29	<1.30	<1.24
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0594	<0.0594	<0.0600	<0.0571
Inorganic	Sodium	mg/Kg-dry										188	86.6	51.8	55.3
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.990	<0.990	<1.00	<0.952
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					27.7	24.7	24.9	26.1
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					47.9	53.9	54.7	55.9

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II	Sample ID	B-38 3-5'	B-39 2-4'	B-40 2-4'	B-41 3-5'
	pH											9.2	8.1	8.31	8.39
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6		<0.0525	<0.00119	<0.00122	<0.0550
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry										<0.0525	<0.00119	<0.00122	<0.0550
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3		<0.0525	<0.00119	<0.00122	<0.0550
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110		<0.0525	<0.00119	<0.00122	<0.0550
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3		<0.0525	<0.00119	<0.00122	<0.0550
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1		<0.0525	<0.00119	<0.00122	<0.0550
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15		<0.0525	<0.00119	<0.00122	<0.0550
VOC	1,3-Dichlorobenzene	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17		4.24	0.0126	0.0163	<0.550
VOC	2-Hexanone	mg/Kg-dry										<1.31	<0.0299	<0.0306	<1.38
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5		<1.31	<0.0299	<0.0306	<1.38
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25		<1.31	0.0662	0.0762	<1.38
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17		<0.0131	<0.000299	<0.000306	<0.0138
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Chloroethane	mg/Kg-dry										<0.0525	<0.00119	<0.00122	<0.0550
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Chloromethane	mg/Kg-dry										<0.0525	<0.00119	<0.00122	<0.0550
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1		<0.0525	<0.00119	<0.00122	<0.0550
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2		<0.262	<0.00597	<0.00612	<0.275
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3		<0.105	<0.00239	<0.00245	<0.110
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150		<0.105	<0.00239	<0.00245	0.436
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4		<0.0525	<0.00119	<0.00122	<0.0550
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3		<0.0525	<0.00119	<0.00122	<0.0550
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07		<0.0525	<0.00119	<0.00122	<0.0550
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53		<0.308	<0.299	<0.306	<0.300
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43		<0.308	<0.299	<0.306	<0.300
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11		<0.308	<0.299	<0.306	<0.300
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400		<0.308	<0.299	<0.306	<0.300
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77		<0.308	<0.299	<0.306	<0.300
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1		<0.308	<0.299	<0.306	<0.300
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9		<0.308	<0.299	<0.306	<0.300
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2		<0.308	<0.299	<0.306	<0.300
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008		<0.308	<0.299	<0.306	<0.300
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007		<0.308	<0.299	<0.306	<0.300
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200		<0.308	<0.299	<0.306	<0.300
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4		<0.308	<0.299	<0.306	<0.300
SVOC	2-Methylnaphthalene	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15		<0.308	<0.299	<0.306	<0.300
SVOC	2-Nitroaniline	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	2-Nitrophenol	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033		<0.308	<0.299	<0.306	<0.300
SVOC	3,4-Methylphenol	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	3-Nitroaniline	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7		<0.308	<0.299	<0.306	<0.300
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	4-Nitroaniline	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	4-Nitrophenol	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry										<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Dibenzofuran	mg/Kg-dry										<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Dimethyl phthalate	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300		<0.308	<0.299	<0.306	<0.300
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000		<0.308	<0.299	<0.306	<0.300
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11		<0.308	<0.299	<0.306	<0.300
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15		<0.308	<0.299	<0.306	<0.300
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200		<0.308	<0.299	<0.306	<0.300
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1		<0.308	<0.299	<0.306	<0.300
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005		<0.308	<0.299	<0.306	<0.300
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6		<0.308	<0.299	<0.306	<0.300
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14		<0.308	<0.299	<0.306	<0.300
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100		<0.308	<0.299	<0.306	<0.300
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Acenaphthylene	mg/Kg-dry										<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000		<0.308	<0.299	<0.306	<0.300
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8		<0.308	<0.299	<0.306	<0.300

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B-38 3-5'	B-39 2-4'	B-40 2-4'	B-41 3-5'
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.308	<0.299	<0.306	<0.300
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.308	<0.299	<0.306	<0.300
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.308	<0.299	<0.306	<0.300
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.308	<0.299	<0.306	<0.300
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.308	<0.299	<0.306	<0.300
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.308	<0.299	<0.306	<0.300
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.308	<0.299	<0.306	<0.300
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0616	<0.0597	<0.0611	<0.0600
SVOC	Phenanthrene	mg/Kg-dry										<0.308	<0.299	<0.306	<0.300
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0616	<0.0597	<0.0611	<0.0600
Inorganic	Aluminum	mg/Kg-dry										2380	3220	7010	8090
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.44	<1.50	<1.50	<1.50
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				<1.11	3.22	2.13	6.14
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				50.1	60.2	52.3	71.6
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.323	0.325	0.4	0.479
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				0.8	0.969	1.27	1.62
Inorganic	Calcium	mg/Kg-dry										106000	97300	66600	47400
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				6.9	7.4	11	12.8
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					3.72	3.55	4.23	7.88
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					9.67	6.89	5.68	15.8
Inorganic	Iron	mg/Kg-dry										9410	11400	16600	20600
Inorganic	Iron SPLP	mg/L							5	5				**590**	**420**
Inorganic	Lead	mg/Kg-dry	800		700		400					3.48	4.96	5.93	20.5
Inorganic	Magnesium	mg/Kg-dry			730000		325000					61900	56600	37900	29000
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				388	338	174	388
Inorganic	Manganese (SPLP)	mg/L							0.15	10					
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				<0.0246	0.025	0.0457	0.0552
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				8.22	8.78	9.6	18.3
Inorganic	Potassium	mg/Kg-dry										942	609	493	794
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.25	<1.30	<1.30	<1.30
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0577	<0.0600	<0.0600	<0.0600
Inorganic	Sodium	mg/Kg-dry										2540	385	545	919
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.962	<1.00	<1.00	<1.00
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					9.55	12.7	24.3	22.1
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					21.2	26.2	30	47.5

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B-42 5-7'	B-43 5-7'	B-44 3-5'	B-45 3-5'

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II				
	pH										7.97	8.39	7.75	7.36
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.00126	<0.00115	<0.0550	<0.0480
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.00126	<0.00115	<0.0550	<0.0480
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.00126	<0.00115	<0.0550	<0.0480
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.00126	<0.00115	<0.0550	<0.0480
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.00126	<0.00115	<0.0550	<0.0480
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.00126	<0.00115	<0.0550	<0.0480
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.00126	<0.00115	<0.0550	<0.0480
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.0126	<0.0115	4.31	<0.480
VOC	2-Hexanone	mg/Kg-dry									<0.0315	<0.0288	<1.37	<1.20
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<0.0315	<0.0288	<1.37	<1.20
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<0.0315	<0.0288	<1.37	<1.20
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.000315	<0.000288	<0.0137	<0.0120
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Chloroethane	mg/Kg-dry									<0.00126	<0.00115	<0.0550	<0.0480
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Chloromethane	mg/Kg-dry									<0.00126	<0.00115	<0.0550	<0.0480
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.00126	<0.00115	<0.0550	<0.0480
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.00631	<0.00577	<0.275	<0.240
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.00252	<0.00231	<0.110	<0.0960
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	0.0574	<0.00115	<0.0550	<0.0480
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	0.00623	<0.00231	<0.110	<0.0960
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.00126	<0.00115	<0.0550	<0.0480
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.00126	<0.00115	<0.0550	<0.0480
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.00126	<0.00115	<0.0550	<0.0480
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.315	<0.288	<0.313	<0.300
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.315	<0.288	<0.313	<0.300
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.315	<0.288	<0.313	<0.300
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.315	<0.288	<0.313	<0.300
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.315	<0.288	<0.313	<0.300
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.315	<0.288	<0.313	<0.300
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.315	<0.288	<0.313	<0.300
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.315	<0.288	<0.313	<0.300
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.315	<0.288	<0.313	<0.300
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.315	<0.288	<0.313	<0.300
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.315	<0.288	<0.313	<0.300
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.315	<0.288	<0.313	<0.300
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.315	<0.288	<0.313	<0.300
SVOC	2-Nitroaniline	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	2-Nitrophenol	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.315	<0.288	<0.313	<0.300
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	3-Nitroaniline	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.315	<0.288	<0.313	<0.300
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	4-Nitroaniline	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	4-Nitrophenol	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Dibenzofuran	mg/Kg-dry									<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.315	<0.288	<0.313	<0.300
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.315	<0.288	<0.313	<0.300
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.315	<0.288	<0.313	<0.300
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.315	<0.288	<0.313	<0.300
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.315	<0.288	<0.313	<0.300
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.315	<0.288	<0.313	<0.300
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.315	<0.288	<0.313	<0.300
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.315	<0.288	<0.313	<0.300
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.315	<0.288	<0.313	<0.300
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.315	<0.288	<0.313	<0.300
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.315	<0.288	<0.313	<0.300
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Acenaphthylene	mg/Kg-dry									<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.315	<0.288	<0.313	<0.300
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.315	<0.288	<0.313	<0.300

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B-42 5-7'	B-43 5-7'	B-44 3-5'	B-45 3-5'
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.315	<0.288	<0.313	<0.300
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.315	<0.288	<0.313	<0.300
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.315	<0.288	<0.313	<0.300
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.315	<0.288	<0.313	<0.300
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.315	<0.288	<0.313	<0.300
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.315	<0.288	<0.313	<0.300
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.315	<0.288	<0.313	<0.300
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0630	<0.0576	<0.0627	<0.0600
SVOC	Phenanthrene	mg/Kg-dry										<0.315	<0.288	<0.313	<0.300
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0630	<0.0576	<0.0627	<0.0600
Inorganic	Aluminum	mg/Kg-dry										7890	958	9390	10400
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.49	<1.49	<1.49	<1.49
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				11.2	11.5	6.96	6.55
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				67.4	15.4	58.6	112
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.497	0.141	0.493	0.602
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				1.89	1.45	1.56	1.53
Inorganic	Calcium	mg/Kg-dry										1900	148000	1760	2450
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				11.9	3.89	12.1	13.4
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					9.02	3.67	9.61	8.47
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					26.7	16.4	21.6	17.1
Inorganic	Iron	mg/Kg-dry										26100	17800	21700	20700
Inorganic	Iron SPLP	mg/L							5	5		**370**	<0.25	**390**	**330**
Inorganic	Lead	mg/Kg-dry	800		700		400					11.7	6.22	11.2	9.59
Inorganic	Magnesium	mg/Kg-dry			730000		325000					2150	79800	2480	2660
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				705	424	506	581
Inorganic	Manganese (SPLP)	mg/L							0.15	10		**5.9**			
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.036	<0.0213	0.0377	0.0319
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				27.4	10	20.7	19.1
Inorganic	Potassium	mg/Kg-dry										789	501	571	598
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.29	<1.29	<1.29	<1.29
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0594	<0.0594	<0.0594	<0.0594
Inorganic	Sodium	mg/Kg-dry										701	432	562	525
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<0.990	<0.990	<0.990	<0.990
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					18.5	6.3	18.3	22.3
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					69.4	50	60.3	57.5

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

Sample ID	B-46 5-7'	B-47 3-5'	B-48 3-5'

Type	Analyte	Units	Industrial Ingestion	Industrial Inhalation	Construction Ingestion	Construction Inhalation	Residential Ingestion	Residential Inhalation	Class I	Class II			
	pH										8.47	7.79	8.68
VOC	1,1,1-Trichloroethane	mg/Kg-dry		1200		1200		1200	2	9.6	<0.0595	<0.00119	<0.00120
VOC	1,1,2,2-Tetrachloroethane	mg/Kg-dry									<0.0595	<0.00119	<0.00120
VOC	1,1,2-Trichloroethane	mg/Kg-dry	8200	1800	8200	1800	310	1800	0.02	0.3	<0.0595	<0.00119	<0.00120
VOC	1,1-Dichloroethane	mg/Kg-dry	200000	1700	200000	130	7800	1300	23	110	<0.0595	<0.00119	<0.00120
VOC	1,1-Dichloroethene	mg/Kg-dry	100000	470	10000	3	3900	290	0.06	0.3	<0.0595	<0.00119	<0.00120
VOC	1,2-Dichloroethane	mg/Kg-dry	63	0.7	1400	0.99	7	0.4	0.02	0.1	<0.0595	<0.00119	<0.00120
VOC	1,2-Dichloropropane	mg/Kg-dry	84	23	1800	0.5	9	15	0.03	0.15	<0.0595	<0.00119	<0.00120
VOC	1,3-Dichlorobenzene	mg/Kg-dry									<0.318	<0.298	<0.300
VOC	2-Butanone	mg/Kg-dry	1000000	22000	410000	140	47000	14000	17	17	<0.595	<0.0119	<0.0120
VOC	2-Hexanone	mg/Kg-dry									<1.49	<0.0298	<0.0300
VOC	4-Methyl-2-pentanone	mg/Kg-dry	160000	1400	160000	90	6300	880	2.5	2.5	<1.49	<0.0298	<0.0300
VOC	Acetone	mg/Kg-dry		100000		100000	70000	100000	25	25	<1.49	<0.0298	<0.0300
VOC	Benzene	mg/Kg-dry	100	1.6	2300	2.2	12	0.8	0.03	0.17	<0.0149	<0.000298	<0.000300
VOC	Bromodichloromethane	mg/Kg-dry	92	3000	2000	3000	10	3000	0.6	0.6	<0.0595	<0.00119	<0.00120
VOC	Bromoform	mg/Kg-dry	720	100	16000	140	81	53	0.8	0.8	<0.0595	<0.00119	<0.00120
VOC	Bromomethane	mg/Kg-dry	2900	15	1000	3.9	110	10	0.2	1.2	<0.0595	<0.00119	<0.00120
VOC	Carbon disulfide	mg/Kg-dry	200000	720	20000	9	7800	720	32	160	<0.0595	<0.00119	<0.00120
VOC	Carbon tetrachloride	mg/Kg-dry	44	0.64	410	0.9	5	0.3	0.07	0.33	<0.0595	<0.00119	<0.00120
VOC	Chlorobenzene	mg/Kg-dry	41000	210	4100	1.3	1600	130	1	6.5	<0.0595	<0.00119	<0.00120
VOC	Chloroethane	mg/Kg-dry									<0.0595	<0.00119	<0.00120
VOC	Chloroform	mg/Kg-dry	940	0.54	2000	0.76	100	0.3	0.6	2.9	<0.0595	<0.00119	<0.00120
VOC	Chloromethane	mg/Kg-dry									<0.0595	<0.00119	<0.00120
VOC	cis-1,2-Dichloroethene	mg/Kg-dry	20000	1200	20000	1200	780	1200	0.4	1.1	<0.0595	<0.00119	<0.00120
VOC	cis-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.0595	<0.00119	<0.00120
VOC	Dibromochloromethane	mg/Kg-dry	41000	1300	41000	1300	1600	1300	0.4	0.4	<0.0595	<0.00119	<0.00120
VOC	Ethylbenzene	mg/Kg-dry	200000	400	20000	58	7800	400	13	19	<0.0595	<0.00119	<0.00120
VOC	Methyl tert-butyl ether	mg/Kg-dry	20000	8800	2000	140	780	8800	0.32	0.32	<0.0595	<0.00119	<0.00120
VOC	Methylene chloride	mg/Kg-dry	760	24	12000	34	85	13	0.02	0.2	<0.297	<0.00595	<0.00601
VOC	Styrene	mg/Kg-dry	410000	1500	41000	430	16000	1500	4	18	<0.0595	<0.00119	<0.00120
VOC	Tetrachloroethene	mg/Kg-dry	110	20	2400	28	12	11	0.06	0.3	<0.119	<0.00238	<0.00240
VOC	Toluene	mg/Kg-dry	410000	650	410000	42	16000	650	12	29	<0.0595	<0.00119	<0.00120
VOC	Total Xylenes	mg/Kg-dry	410000	320	41000	5.6	160000	320	150	150	<0.119	<0.00238	<0.00240
VOC	trans-1,2-Dichloroethene	mg/Kg-dry	41000	3100	41000	3100	1600	3100	0.7	3.4	<0.0595	<0.00119	<0.00120
VOC	trans-1,3-Dichloropropene	mg/Kg-dry	57	2.1	1200	0.39	6.4	1.1	0.004	0.02	<0.0595	<0.00119	<0.00120
VOC	Trichloroethene	mg/Kg-dry	520	8.9	1200	12	58	5	0.06	0.3	<0.0595	<0.00119	<0.00120
VOC	Vinyl chloride	mg/Kg-dry	7.9	1.1	170	1.1	0.46	0.28	0.01	0.07	<0.0595	<0.00119	<0.00120
SVOC	1,2,4-Trichlorobenzene	mg/Kg-dry	20000	3200	2000	920	780	3200	5	53	<0.318	<0.298	<0.300
SVOC	1,2-Dichlorobenzene	mg/Kg-dry	180000	560	18000	310	7000	560	17	43	<0.318	<0.298	<0.300
SVOC	1,4-Dichlorobenzene	mg/Kg-dry		17000		340		11000	2	11	<0.318	<0.298	<0.300
SVOC	2,4,5-Trichlorophenol	mg/Kg-dry	200000		200000		7800		270	1400	<0.318	<0.298	<0.300
SVOC	2,4,6-Trichlorophenol	mg/Kg-dry	520	390	11000	540	58	200	0.2	0.77	<0.318	<0.298	<0.300
SVOC	2,4-Dichlorophenol	mg/Kg-dry	6100		610		230		1	1	<0.318	<0.298	<0.300
SVOC	2,4-Dimethylphenol	mg/Kg-dry	41000		41000		1600		9	9	<0.318	<0.298	<0.300
SVOC	2,4-Dinitrophenol	mg/Kg-dry	4100		410		160		0.2	0.2	<0.318	<0.298	<0.300
SVOC	2,4-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0008	0.0008	<0.318	<0.298	<0.300
SVOC	2,6-Dinitrotoluene	mg/Kg-dry	8.4		180		0.9		0.0007	0.0007	<0.318	<0.298	<0.300
SVOC	2-Chloronaphthalene	mg/Kg-dry	160000		16000		6300		240	1200	<0.318	<0.298	<0.300
SVOC	2-Chlorophenol	mg/Kg-dry	10000	53000	10000	53000	390	53000	4	4	<0.318	<0.298	<0.300
SVOC	2-Methylnaphthalene	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	2-Methylphenol	mg/Kg-dry	100000		100000		3900		15	15	<0.318	<0.298	<0.300
SVOC	2-Nitroaniline	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	2-Nitrophenol	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	3,3'-Dichlorobenzidine	mg/Kg-dry	13		280		1		0.007	0.033	<0.318	<0.298	<0.300
SVOC	3,4-Methylphenol	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	3-Nitroaniline	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	4,6-Dinitro-2-methylphenol	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	4-Bromophenyl phenyl ether	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	4-Chloro-3-methylphenol	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	4-Chloroaniline	mg/Kg-dry	8200		820		310		0.7	0.7	<0.318	<0.298	<0.300
SVOC	4-Chlorophenyl phenyl ether	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	4-Nitroaniline	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	4-Nitrophenol	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	Bis(2-chloroethoxy)methane	mg/Kg-dry									<0.0637	<0.0595	<0.0600
SVOC	Bis(2-chloroethyl)ether	mg/Kg-dry	5	0.47	75	0.66	0.6	0.2	0.0004	0.0004	<0.0637	<0.0595	<0.0600
SVOC	Bis(2-chloroisopropyl)ether	mg/Kg-dry	82000	1300	8200	1300	3100	1300	2.4	2.4	<0.0637	<0.0595	<0.0600
SVOC	Bis(2-ethylhexyl)phthalate	mg/Kg-dry	410	31000	4100	31000	46	31000	3600	31000	<0.0637	<0.0595	<0.0600
SVOC	Butyl benzyl phthalate	mg/Kg-dry	410000	930	410000	930	16000	930	930	930	<0.0637	<0.0595	<0.0600
SVOC	Carbazole	mg/Kg-dry	290		6200		32		0.6	2.8	<0.0637	<0.0595	<0.0600
SVOC	Dibenzofuran	mg/Kg-dry									<0.0637	<0.0595	<0.0600
SVOC	Diethyl phthalate	mg/Kg-dry	1000000	2000	1000000	2000	63000	2000	470	470	<0.0637	<0.0595	<0.0600
SVOC	Dimethyl phthalate	mg/Kg-dry									<0.318	<0.298	<0.300
SVOC	Di-n-butyl phthalate	mg/Kg-dry	200000	2300	200000	2300	7800	2300	2300	2300	<0.318	<0.298	<0.300
SVOC	Di-n-octyl phthalate	mg/Kg-dry	41000	10000	4100	10000	1600	10000	10000	10000	<0.318	<0.298	<0.300
SVOC	Hexachlorobenzene	mg/Kg-dry	4	1.8	78	2.6	0.4	1	2	11	<0.318	<0.298	<0.300
SVOC	Hexachlorobutadiene	mg/Kg-dry	410	1000	41	180	16	1000	2.9	15	<0.318	<0.298	<0.300
SVOC	Hexachlorocyclopentadiene	mg/Kg-dry	14000	16	14000	1.1	550	10	400	2200	<0.318	<0.298	<0.300
SVOC	Hexachloroethane	mg/Kg-dry	2000		2000		78		0.5	2.6	<0.0637	<0.0595	<0.0600
SVOC	Isophorone	mg/Kg-dry	410000	4600	410000	4600	15600	4600	8	8	<0.0637	<0.0595	<0.0600
SVOC	Nitrobenzene	mg/Kg-dry	1000	140	1000	9.4	39	92	0.1	0.1	<0.318	<0.298	<0.300
SVOC	N-Nitroso-di-n-propylamine	mg/Kg-dry	0.8		18		0.09		0.00005	0.00005	<0.318	<0.298	<0.300
SVOC	N-Nitrosodiphenylamine	mg/Kg-dry	1200		25000		130		1	5.6	<0.318	<0.298	<0.300
SVOC	Pentachlorophenol	mg/Kg-dry	24		520		3		0.03	0.14	<0.318	<0.298	<0.300
SVOC	Phenol	mg/Kg-dry	610000		61000		23000		100	100	<0.318	<0.298	<0.300
SVOC	Acenaphthene	mg/Kg-dry	120000		120000		4700		570	2900	<0.0637	<0.0595	<0.0600
SVOC	Acenaphthylene	mg/Kg-dry									<0.0637	<0.0595	<0.0600
SVOC	Anthracene	mg/Kg-dry	610000		610000		23000		12000	59000	<0.318	<0.298	<0.300
SVOC	Benzo(a)anthracene	mg/Kg-dry	8		170		0.9		2	8	<0.318	<0.298	<0.300

Olympic Boulevard and Houbolt Road Joliet, IL
PRELIMINARY SITE INVESTIGATION
February 2022 & June 2022

											Sample ID	B-46 5-7'	B-47 3-5'	B-48 3-5'
SVOC	Benzo(a)pyrene	mg/Kg-dry	0.8		17		0.09		8	82		<0.318	<0.298	<0.300
SVOC	Benzo(b)fluoranthene	mg/Kg-dry	8		170		0.9		5	25		<0.318	<0.298	<0.300
SVOC	Benzo(g,h,i)perylene	mg/Kg-dry										<0.0637	<0.0595	<0.0600
SVOC	Benzo(k)fluoranthene	mg/Kg-dry	78		1700		9		49	250		<0.318	<0.298	<0.300
SVOC	Chrysene	mg/Kg-dry	780		17000		88		160	800		<0.0637	<0.0595	<0.0600
SVOC	Dibenzo(a,h)anthracene	mg/Kg-dry	0.8		17		0.09		2	7.6		<0.318	<0.298	<0.300
SVOC	Fluoranthene	mg/Kg-dry	82000		82000		3100		4300	21000		<0.318	<0.298	<0.300
SVOC	Fluorene	mg/Kg-dry	82000		82000		3100		560	2800		<0.318	<0.298	<0.300
SVOC	Indeno(1,2,3-cd)pyrene	mg/Kg-dry	8		170		0.9		14	69		<0.318	<0.298	<0.300
SVOC	Naphthalene	mg/Kg-dry	41000	270	4100	1.8	1600	170	12	18		<0.0637	<0.0595	<0.0600
SVOC	Phenanthrene	mg/Kg-dry										<0.318	<0.298	<0.300
SVOC	Pyrene	mg/Kg-dry	61000		61000		2300		4200	21000		<0.0637	<0.0595	<0.0600
Inorganic	Aluminum	mg/Kg-dry										4140	4160	6010
Inorganic	Antimony	mg/Kg-dry	820		82		31					<1.50	<1.47	<1.47
Inorganic	Arsenic	mg/Kg-dry		1200	61	25000		750				11.4	9.8	7.62
Inorganic	Barium	mg/Kg-dry	140000	910000	14000	870000	5500	690000				69.7	43.2	47.8
Inorganic	Beryllium	mg/Kg-dry	4100	2100	410	44000	160	1300				0.4	0.354	0.359
Inorganic	Cadmium	mg/Kg-dry	2000	28000	200	59000	78	1800				1.85	1.63	1.33
Inorganic	Calcium	mg/Kg-dry										63900	18700	10800
Inorganic	Chromium	mg/Kg-dry	6100	420	4100	690	230	270				9.96	9.78	9.82
Inorganic	Cobalt	mg/Kg-dry	120000		12000		4700					6.74	9.2	7.96
Inorganic	Copper	mg/Kg-dry	82000		8200		2900					22.9	23.5	20.7
Inorganic	Iron	mg/Kg-dry										22200	19200	17200
Inorganic	Iron SPLP	mg/L							5	5		**590**	**250**	**320**
Inorganic	Lead	mg/Kg-dry	800		700		400					8.8	10.7	9.64
Inorganic	Magnesium	mg/Kg-dry			730000		325000					36900	13300	8170
Inorganic	Manganese	mg/Kg-dry	41000	91000	4100	87000	1600	69000				701	517	451
Inorganic	Manganese (SPLP)	mg/L							0.15	10		**6.9**		
Inorganic	Mercury	mg/Kg-dry	610	16	61	0.1	23	10				0.0355	<0.0238	0.0252
Inorganic	Nickel	mg/Kg-dry	41000	21000	41000	440000	1600	13000				20.6	23.3	19.3
Inorganic	Potassium	mg/Kg-dry										587	639	462
Inorganic	Selenium	mg/Kg-dry	10000		1000		390					<1.30	<1.27	<1.27
Inorganic	Silver	mg/Kg-dry	10000		1000		390					<0.0600	<0.0588	<0.0588
Inorganic	Sodium	mg/Kg-dry										803	1350	667
Inorganic	Thallium	mg/Kg-dry	160		160		6.3					<1.00	<0.980	<0.980
Inorganic	Vanadium	mg/Kg-dry	14000		1400		550					15.1	16	14.4
Inorganic	Zinc	mg/Kg-dry	610000		61000		23000					78.3	71.9	60.3

Notes: Shaded and bolded text indicates exceedance of all MACs
Shaded text indicates exceedance of Non-MSA/OPA MACs

APPENDIX C

ANALYTICAL LABORATORY REPORTS

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave., Suite 150 Geneva, Illinois 60134
Tel. (708) 544-3260 • Toll Free (800) 783-LABS
Fax (708) 544-8587
www.suburbanlabs.com

November 09, 2021

Workorder: 2111039

Steve Kroll
Patrick Engineering, Inc.
4970 Varsity Drive
Lisle, IL 60532

TEL: (630) 957-7245
FAX: (630) 249-9290
RE: Soil Testing

Dear Steve Kroll:

Suburban Laboratories, Inc. received 33 sample(s) on 10/29/2021 for the analyses presented in the following report.

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the case narrative. If you are comparing these results to external QC specifications or compliance limits and have any questions, please contact us.

This final report of laboratory analysis consists of this cover letter, case narrative, analytical report, dates report, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call me at (708) 544-3260.

Sincerely,

Keith Sinon
Project Manager
708-544-3260 ext 212
keith@suburbanlabs.com

Case Narrative

Client: Patrick Engineering, Inc.
Project: Soil Testing
WorkOrder: 2111039
Temperature of samples upon receipt at SLI: 1 C

Date: November 09, 2021
PO #:
QC Level: LEVEL I
Chain of Custody #:

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of 35 IAC Part 186 unless otherwise indicated.
- Waste water analysis follows the rules set forth in 40 CFR part 136 except where otherwise noted.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated.
- For more information about the laboratories' scope of accreditation, please contact us at (708) 544-3260 or the Agency at (217) 782-6455.
- All radiological results are reported to the 95% confidence level.

Abbreviations:
- Reporting Limit: The concentration at which an analyte can be routinely detected on a day to day basis, and which also meets regulatory and client needs.
- Quantitation Limit: The lowest concentration at which results can be accurately quantitated.
- J: The analyte was positively identified above our Method Detection Limit and is considered detectable and usable; however, the associated numerical value is the approximate concentration of the analyte in the sample.
- ATC: Automatic Temperature Correction. - TNTC: Too Numerous To Count
- TIC: Tentatively Identified Compound (GCMS library search identification, concentration estimated to nearest internal standard).
- SS (Surrogate Standard): Quality control compound added to the sample by the lab.

Method References:
For a complete list of method references please contact us.
- E: USEPA Reference methods
- SW: USEPA, Test Methods for Evaluating Solid Waste (SW-846)
- M: Standard Methods for the Examination of Water and Wastewater
- USP: Latest version of United States Pharmacopeia

Workorder Specific Comments:

6010:
Sample 2111039-008C: S=The MS and/or the MSD percent recoveries for the following analytes were outside laboratory control limits (70% - 130%):

Antimony; 59.8%, 57.9%
Potassium; 136.3% (MSD only)

6010:

Samples 2111039-001C to 017C, 022C to 023C: B=The method blank contained Sodium at 21.5 mg/kg. (MDL is 2.45).

6010:
Samples 2111039-001C to 017C: B=The method blank contained Potassium at 42.5 mg/kg. (MDL is 5.0).

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B1
Lab ID: 2111039-001
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	8,290	12.0		mg/Kg-dry	5	11/04/2021 2:42 PM	77868
Antimony	ND	1.44		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Arsenic	4.82	1.11		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Barium	70.1	0.120		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Beryllium	0.513	0.0481		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Cadmium	0.926	0.0721		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Calcium	74,300	3.00		mg/Kg-dry	5	11/04/2021 2:42 PM	77868
Chromium	13.2	0.0577		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Cobalt	7.00	0.120		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Copper	18.0	0.144		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Iron	27,800	6.01		mg/Kg-dry	10	11/05/2021 11:32 AM	77868
Lead	12.0	0.577		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Magnesium	39,500	6.01		mg/Kg-dry	10	11/05/2021 11:32 AM	77868
Manganese	475	0.0577		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Nickel	16.7	0.226		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Potassium	884	2.40		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Selenium	ND	1.25		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Silver	ND	0.0577		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Sodium	105	1.20	B	mg/Kg-dry	1	11/05/2021 10:49 AM	77868
Thallium	ND	0.962		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Vanadium	22.2	0.144		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
Zinc	59.4	0.962		mg/Kg-dry	1	11/04/2021 1:47 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
1,1,1-Trichloroethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
1,1,2-Trichloroethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
1,1-Dichloroethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
1,1-Dichloroethene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
1,2-Dichloroethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
1,2-Dichloropropane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
2-Butanone	ND	0.00920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
2-Hexanone	ND	0.0230		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
4-Methyl-2-pentanone	ND	0.0230		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Acetone	ND	0.0230	c	mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Benzene	ND	0.000230		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908

Created: 11/9/2021 4:46:17 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B1
Lab ID: 2111039-001
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Bromoform	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Bromomethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Carbon disulfide	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Carbon tetrachloride	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Chlorobenzene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Chloroethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Chloroform	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Chloromethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
cis-1,2-Dichloroethene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
cis-1,3-Dichloropropene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Dibromochloromethane	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Ethylbenzene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
m,p-Xylene	ND	0.00184		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Methyl tert-butyl ether	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Methylene chloride	ND	0.00460		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
o-Xylene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Total Xylenes	ND	0.00184		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Styrene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Tetrachloroethene	ND	0.00184		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Toluene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
trans-1,2-Dichloroethene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
trans-1,3-Dichloropropene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Trichloroethene	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Vinyl chloride	ND	0.000920		mg/Kg-dry	0.77	11/02/2021 5:09 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	98.1	80-130		%Rec	0.77	11/02/2021 5:09 PM	R140908
SS: Dibromofluoromethane	109	76.1-120		%Rec	0.77	11/02/2021 5:09 PM	R140908
SS: Toluene-d8	101	85-115		%Rec	0.77	11/02/2021 5:09 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
1,2-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
1,3-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
1,4-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2,4,5-Trichlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2,4,6-Trichlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2,4-Dichlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B1
Lab ID: 2111039-001 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2,4-Dinitrophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2,4-Dinitrotoluene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2,6-Dinitrotoluene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2-Chloronaphthalene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2-Chlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2-Methylnaphthalene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2-Nitroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
2-Nitrophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
3,3-Dichlorobenzidine	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
3-Nitroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
4-Bromophenyl phenyl ether	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
4-Chloro-3-methylphenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
4-Chloroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
4-Chlorophenyl phenyl ether	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
4-Nitroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
4-Nitrophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Acenaphthene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Acenaphthylene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Anthracene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Benzo(a)anthracene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Benzo(a)pyrene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Benzo(b)fluoranthene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Benzo(g,h,i)perylene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Benzo(k)fluoranthene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Bis(2-chloroethoxy)methane	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Bis(2-chloroethyl)ether	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Butyl benzyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Carbazole	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Chrysene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Dibenzo(a,h)anthracene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Dibenzofuran	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Diethyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Dimethyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Di-n-butyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Di-n-octyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B1
Lab ID: 2111039-001
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	0.0893	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Fluorene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Hexachlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Hexachlorobutadiene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Hexachlorocyclopentadiene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Hexachloroethane	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Isophorone	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
m,p-Cresol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Naphthalene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Nitrobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
N-Nitroso-di-n-propylamine	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
N-Nitrosodiphenylamine	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
o-Cresol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Pentachlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Phenanthrene	ND	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Phenol	ND	0.298		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Pyrene	0.0703	0.0596		mg/Kg-dry	1	11/05/2021 3:27 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	104	0.1-136		%Rec	1	11/05/2021 3:27 PM	77893
SS: 2-Fluorobiphenyl	95.0	16.3-118		%Rec	1	11/05/2021 3:27 PM	77893
SS: 2-Fluorophenol	88.7	4.2-97		%Rec	1	11/05/2021 3:27 PM	77893
SS: 4-Terphenyl-d14	228	0.1-147	S	%Rec	1	11/05/2021 3:27 PM	77893
SS: Nitrobenzene-d5	98.3	0.1-119		%Rec	1	11/05/2021 3:27 PM	77893
SS: Phenol-d6	89.7	9.82-111		%Rec	1	11/05/2021 3:27 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0194		mg/Kg-dry	1	11/03/2021 12:47 PM	77829
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.65	1.00		pH Units	1	11/02/2021 11:18 AM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	16	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:17 PM

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B2
Lab ID: 2111039-002
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	6,200	12.4		mg/Kg-dry	5	11/04/2021 2:45 PM	77868
Antimony	ND	1.49		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Arsenic	2.52	1.14	J	mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Barium	63.1	0.124		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Beryllium	0.408	0.0495		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Cadmium	0.593	0.0743		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Calcium	84,900	3.09		mg/Kg-dry	5	11/04/2021 2:45 PM	77868
Chromium	10.6	0.0594		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Cobalt	5.84	0.124		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Copper	13.9	0.149		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Iron	16,500	3.09		mg/Kg-dry	5	11/04/2021 2:45 PM	77868
Lead	6.51	0.594		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Magnesium	38,100	6.19		mg/Kg-dry	10	11/05/2021 11:35 AM	77868
Manganese	565	0.0594		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Nickel	12.8	0.233		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Potassium	751	2.48		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Selenium	ND	1.29		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Silver	ND	0.0594		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Sodium	179	1.24	B	mg/Kg-dry	1	11/05/2021 10:53 AM	77868
Thallium	ND	0.990		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Vanadium	18.4	0.149		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
Zinc	40.0	0.990		mg/Kg-dry	1	11/04/2021 1:50 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
1,1,1-Trichloroethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
1,1,2-Trichloroethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
1,1-Dichloroethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
1,1-Dichloroethene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
1,2-Dichloroethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
1,2-Dichloropropane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
2-Butanone	ND	0.00867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
2-Hexanone	ND	0.0217		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
4-Methyl-2-pentanone	ND	0.0217		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Acetone	ND	0.0217	c	mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Benzene	ND	0.000217		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B2
Lab ID: 2111039-002
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Bromoform	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Bromomethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Carbon disulfide	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Carbon tetrachloride	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Chlorobenzene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Chloroethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Chloroform	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Chloromethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
cis-1,2-Dichloroethene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
cis-1,3-Dichloropropene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Dibromochloromethane	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Ethylbenzene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
m,p-Xylene	ND	0.00173		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Methyl tert-butyl ether	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Methylene chloride	ND	0.00433		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
o-Xylene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Total Xylenes	ND	0.00173		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Styrene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Tetrachloroethene	ND	0.00173		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Toluene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
trans-1,2-Dichloroethene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
trans-1,3-Dichloropropene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Trichloroethene	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Vinyl chloride	ND	0.000867		mg/Kg-dry	0.74	11/02/2021 5:43 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	91.4	80-130		%Rec	0.74	11/02/2021 5:43 PM	R140908
SS: Dibromofluoromethane	108	76.1-120		%Rec	0.74	11/02/2021 5:43 PM	R140908
SS: Toluene-d8	99.5	85-115		%Rec	0.74	11/02/2021 5:43 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
1,2-Dichlorobenzene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
1,3-Dichlorobenzene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
1,4-Dichlorobenzene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2,4,5-Trichlorophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2,4,6-Trichlorophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2,4-Dichlorophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B2
Lab ID: 2111039-002
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2,4-Dinitrophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2,4-Dinitrotoluene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2,6-Dinitrotoluene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2-Chloronaphthalene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2-Chlorophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2-Methylnaphthalene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2-Nitroaniline	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
2-Nitrophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
3,3-Dichlorobenzidine	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
3-Nitroaniline	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
4-Bromophenyl phenyl ether	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
4-Chloro-3-methylphenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
4-Chloroaniline	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
4-Chlorophenyl phenyl ether	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
4-Nitroaniline	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
4-Nitrophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Acenaphthene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Acenaphthylene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Anthracene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Benzo(a)anthracene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Benzo(a)pyrene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Benzo(b)fluoranthene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Benzo(g,h,i)perylene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Benzo(k)fluoranthene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Bis(2-chloroethoxy)methane	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Bis(2-chloroethyl)ether	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Butyl benzyl phthalate	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Carbazole	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Chrysene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Dibenzo(a,h)anthracene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Dibenzofuran	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Diethyl phthalate	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Dimethyl phthalate	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Di-n-butyl phthalate	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Di-n-octyl phthalate	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B2
Lab ID: 2111039-002
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Fluorene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Hexachlorobenzene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Hexachlorobutadiene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Hexachlorocyclopentadiene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Hexachloroethane	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Isophorone	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
m,p-Cresol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Naphthalene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Nitrobenzene	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
N-Nitroso-di-n-propylamine	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
N-Nitrosodiphenylamine	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
o-Cresol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Pentachlorophenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Phenanthrene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Phenol	ND	0.292		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Pyrene	ND	0.0584		mg/Kg-dry	1	11/05/2021 4:03 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	109	0.1-136		%Rec	1	11/05/2021 4:03 PM	77893
SS: 2-Fluorobiphenyl	101	16.3-118		%Rec	1	11/05/2021 4:03 PM	77893
SS: 2-Fluorophenol	93.0	4.2-97		%Rec	1	11/05/2021 4:03 PM	77893
SS: 4-Terphenyl-d14	248	0.1-147	S	%Rec	1	11/05/2021 4:03 PM	77893
SS: Nitrobenzene-d5	104	0.1-119		%Rec	1	11/05/2021 4:03 PM	77893
SS: Phenol-d6	95.4	9.82-111		%Rec	1	11/05/2021 4:03 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0180		mg/Kg-dry	1	11/03/2021 12:50 PM	77829
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.90	1.00		pH Units	1	11/02/2021 11:19 AM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	15	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:21 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B3
Lab ID: 2111039-003
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	2,250	2.50		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Antimony	ND	1.50		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Arsenic	ND	1.15		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Barium	38.9	0.125		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Beryllium	0.268	0.0500		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Cadmium	0.346	0.0750		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Calcium	133,000	6.25		mg/Kg-dry	10	11/05/2021 11:38 AM	77868
Chromium	7.29	0.0600		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Cobalt	3.04	0.125		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Copper	6.84	0.150		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Iron	9,140	3.13		mg/Kg-dry	5	11/04/2021 2:47 PM	77868
Lead	2.59	0.600		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Magnesium	64,400	12.5		mg/Kg-dry	20	11/05/2021 1:49 PM	77868
Manganese	382	0.0600		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Nickel	6.61	0.235		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Potassium	525	2.50		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Selenium	ND	1.30		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Silver	ND	0.0600		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Sodium	184	1.25	B	mg/Kg-dry	1	11/05/2021 10:56 AM	77868
Thallium	ND	1.00		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Vanadium	10.4	0.150		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
Zinc	16.6	1.00		mg/Kg-dry	1	11/04/2021 1:53 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
1,1,1-Trichloroethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
1,1,2-Trichloroethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
1,1-Dichloroethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
1,1-Dichloroethene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
1,2-Dichloroethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
1,2-Dichloropropane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
2-Butanone	ND	0.00870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
2-Hexanone	ND	0.0218		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
4-Methyl-2-pentanone	ND	0.0218		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Acetone	ND	0.0218	c	mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Benzene	ND	0.000218		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B3
Lab ID: 2111039-003
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Bromoform	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Bromomethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Carbon disulfide	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Carbon tetrachloride	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Chlorobenzene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Chloroethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Chloroform	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Chloromethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
cis-1,2-Dichloroethene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
cis-1,3-Dichloropropene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Dibromochloromethane	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Ethylbenzene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
m,p-Xylene	ND	0.00174		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Methyl tert-butyl ether	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Methylene chloride	ND	0.00435		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
o-Xylene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Total Xylenes	ND	0.00174		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Styrene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Tetrachloroethene	ND	0.00174		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Toluene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
trans-1,2-Dichloroethene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
trans-1,3-Dichloropropene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Trichloroethene	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Vinyl chloride	ND	0.000870		mg/Kg-dry	0.77	11/02/2021 6:17 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.9	80-130		%Rec	0.77	11/02/2021 6:17 PM	R140908
SS: Dibromofluoromethane	108	76.1-120		%Rec	0.77	11/02/2021 6:17 PM	R140908
SS: Toluene-d8	99.9	85-115		%Rec	0.77	11/02/2021 6:17 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
1,2-Dichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
1,3-Dichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
1,4-Dichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2,4,5-Trichlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2,4,6-Trichlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2,4-Dichlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B3
Lab ID: 2111039-003
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2,4-Dinitrophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2,4-Dinitrotoluene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2,6-Dinitrotoluene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2-Chloronaphthalene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2-Chlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2-Methylnaphthalene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2-Nitroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
2-Nitrophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
3,3-Dichlorobenzidine	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
3-Nitroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
4-Bromophenyl phenyl ether	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
4-Chloro-3-methylphenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
4-Chloroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
4-Chlorophenyl phenyl ether	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
4-Nitroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
4-Nitrophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Acenaphthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Acenaphthylene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Anthracene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Benzo(a)anthracene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Benzo(a)pyrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Benzo(b)fluoranthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Benzo(g,h,i)perylene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Benzo(k)fluoranthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Bis(2-chloroethoxy)methane	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Bis(2-chloroethyl)ether	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Butyl benzyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Carbazole	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Chrysene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Dibenzo(a,h)anthracene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Dibenzofuran	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Diethyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Dimethyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Di-n-butyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Di-n-octyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B3
Lab ID: 2111039-003
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Fluorene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Hexachlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Hexachlorobutadiene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Hexachlorocyclopentadiene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Hexachloroethane	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Isophorone	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
m,p-Cresol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Naphthalene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Nitrobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
N-Nitroso-di-n-propylamine	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
N-Nitrosodiphenylamine	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
o-Cresol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Pentachlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Phenanthrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Phenol	ND	0.281		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Pyrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 4:39 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	115	0.1-136		%Rec	1	11/05/2021 4:39 PM	77893
SS: 2-Fluorobiphenyl	108	16.3-118		%Rec	1	11/05/2021 4:39 PM	77893
SS: 2-Fluorophenol	108	4.2-97	S	%Rec	1	11/05/2021 4:39 PM	77893
SS: 4-Terphenyl-d14	253	0.1-147	S	%Rec	1	11/05/2021 4:39 PM	77893
SS: Nitrobenzene-d5	115	0.1-119		%Rec	1	11/05/2021 4:39 PM	77893
SS: Phenol-d6	108	9.82-111		%Rec	1	11/05/2021 4:39 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0174		mg/Kg-dry	1	11/03/2021 12:53 PM	77829
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.94	1.00		pH Units	1	11/02/2021 11:23 AM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	12	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:24 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B4
Lab ID: 2111039-004
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	8,810	12.3		mg/Kg-dry	5	11/04/2021 2:50 PM	77868
Antimony	ND	1.47		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Arsenic	1.33	1.13	J	mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Barium	81.4	0.123		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Beryllium	0.515	0.0490		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Cadmium	0.744	0.0735		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Calcium	55,700	3.06		mg/Kg-dry	5	11/04/2021 2:50 PM	77868
Chromium	13.0	0.0588		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Cobalt	5.23	0.123		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Copper	14.5	0.147		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Iron	18,700	3.06		mg/Kg-dry	5	11/04/2021 2:50 PM	77868
Lead	10.5	0.588		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Magnesium	25,200	6.13		mg/Kg-dry	10	11/05/2021 11:40 AM	77868
Manganese	331	0.0588		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Nickel	12.0	0.230		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Potassium	780	2.45		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Selenium	ND	1.27		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Silver	ND	0.0588		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Sodium	212	1.23	B	mg/Kg-dry	1	11/05/2021 10:59 AM	77868
Thallium	ND	0.980		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Vanadium	23.2	0.147		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
Zinc	45.4	0.980		mg/Kg-dry	1	11/04/2021 1:57 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
1,1,1-Trichloroethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
1,1,2-Trichloroethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
1,1-Dichloroethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
1,1-Dichloroethene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
1,2-Dichloroethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
1,2-Dichloropropane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
2-Butanone	ND	0.00862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
2-Hexanone	ND	0.0216		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
4-Methyl-2-pentanone	ND	0.0216		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Acetone	0.0745	0.0216	c	mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Benzene	ND	0.000216		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B4
Lab ID: 2111039-004
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Bromoform	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Bromomethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Carbon disulfide	0.00102	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Carbon tetrachloride	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Chlorobenzene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Chloroethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Chloroform	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Chloromethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
cis-1,2-Dichloroethene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
cis-1,3-Dichloropropene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Dibromochloromethane	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Ethylbenzene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
m,p-Xylene	ND	0.00172		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Methyl tert-butyl ether	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Methylene chloride	ND	0.00431		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
o-Xylene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Total Xylenes	ND	0.00172		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Styrene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Tetrachloroethene	ND	0.00172		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Toluene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
trans-1,2-Dichloroethene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
trans-1,3-Dichloropropene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Trichloroethene	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Vinyl chloride	ND	0.000862		mg/Kg-dry	0.71	11/02/2021 6:51 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.5	80-130		%Rec	0.71	11/02/2021 6:51 PM	R140908
SS: Dibromofluoromethane	107	76.1-120		%Rec	0.71	11/02/2021 6:51 PM	R140908
SS: Toluene-d8	101	85-115		%Rec	0.71	11/02/2021 6:51 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
1,2-Dichlorobenzene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
1,3-Dichlorobenzene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
1,4-Dichlorobenzene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2,4,5-Trichlorophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2,4,6-Trichlorophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2,4-Dichlorophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B4
Lab ID: 2111039-004
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2,4-Dinitrophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2,4-Dinitrotoluene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2,6-Dinitrotoluene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2-Chloronaphthalene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2-Chlorophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2-Methylnaphthalene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2-Nitroaniline	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
2-Nitrophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
3,3-Dichlorobenzidine	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
3-Nitroaniline	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
4-Bromophenyl phenyl ether	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
4-Chloro-3-methylphenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
4-Chloroaniline	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
4-Chlorophenyl phenyl ether	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
4-Nitroaniline	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
4-Nitrophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Acenaphthene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Acenaphthylene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Anthracene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Benzo(a)anthracene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Benzo(a)pyrene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Benzo(b)fluoranthene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Benzo(g,h,i)perylene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Benzo(k)fluoranthene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Bis(2-chloroethoxy)methane	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Bis(2-chloroethyl)ether	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Butyl benzyl phthalate	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Carbazole	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Chrysene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Dibenzo(a,h)anthracene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Dibenzofuran	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Diethyl phthalate	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Dimethyl phthalate	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Di-n-butyl phthalate	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Di-n-octyl phthalate	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B4
Lab ID: 2111039-004
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Fluorene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Hexachlorobenzene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Hexachlorobutadiene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Hexachlorocyclopentadiene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Hexachloroethane	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Isophorone	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
m,p-Cresol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Naphthalene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Nitrobenzene	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
N-Nitroso-di-n-propylamine	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
N-Nitrosodiphenylamine	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
o-Cresol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Pentachlorophenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Phenanthrene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Phenol	ND	0.303		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Pyrene	ND	0.0607		mg/Kg-dry	1	11/05/2021 5:16 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	108	0.1-136		%Rec	1	11/05/2021 5:16 PM	77893
SS: 2-Fluorobiphenyl	90.8	16.3-118		%Rec	1	11/05/2021 5:16 PM	77893
SS: 2-Fluorophenol	91.3	4.2-97		%Rec	1	11/05/2021 5:16 PM	77893
SS: 4-Terphenyl-d14	249	0.1-147	S	%Rec	1	11/05/2021 5:16 PM	77893
SS: Nitrobenzene-d5	93.6	0.1-119		%Rec	1	11/05/2021 5:16 PM	77893
SS: Phenol-d6	92.1	9.82-111		%Rec	1	11/05/2021 5:16 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0281	0.0197	J	mg/Kg-dry	1	11/04/2021 11:36 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.18	1.00		pH Units	1	11/02/2021 11:21 AM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	18	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:26 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B5
Lab ID: 2111039-005
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	4,010	2.43		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Antimony	ND	1.46		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Arsenic	4.22	1.12	J	mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Barium	62.4	0.121		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Beryllium	0.345	0.0485		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Cadmium	0.723	0.0728		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Calcium	92,100	3.03		mg/Kg-dry	5	11/04/2021 2:53 PM	77868
Chromium	10.5	0.0583		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Cobalt	10.4	0.121		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Copper	20.6	0.146		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Iron	18,500	3.03		mg/Kg-dry	5	11/04/2021 2:53 PM	77868
Lead	7.68	0.583		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Magnesium	44,900	12.1		mg/Kg-dry	20	11/05/2021 1:52 PM	77868
Manganese	652	0.0583		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Nickel	19.5	0.228		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Potassium	790	2.43		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Selenium	ND	1.26		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Silver	ND	0.0583		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Sodium	219	1.21	B	mg/Kg-dry	1	11/05/2021 11:02 AM	77868
Thallium	ND	0.971		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Vanadium	17.0	0.146		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
Zinc	44.7	0.971		mg/Kg-dry	1	11/04/2021 2:00 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
1,1,1-Trichloroethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
1,1,2-Trichloroethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
1,1-Dichloroethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
1,1-Dichloroethene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
1,2-Dichloroethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
1,2-Dichloropropane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
2-Butanone	ND	0.00924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
2-Hexanone	ND	0.0231		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
4-Methyl-2-pentanone	ND	0.0231		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Acetone	ND	0.0231	c	mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Benzene	ND	0.000231		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B5
Lab ID: 2111039-005
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Bromoform	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Bromomethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Carbon disulfide	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Carbon tetrachloride	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Chlorobenzene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Chloroethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Chloroform	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Chloromethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
cis-1,2-Dichloroethene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
cis-1,3-Dichloropropene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Dibromochloromethane	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Ethylbenzene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
m,p-Xylene	ND	0.00185		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Methyl tert-butyl ether	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Methylene chloride	ND	0.00462		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
o-Xylene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Total Xylenes	ND	0.00185		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Styrene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Tetrachloroethene	ND	0.00185		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Toluene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
trans-1,2-Dichloroethene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
trans-1,3-Dichloropropene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Trichloroethene	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Vinyl chloride	ND	0.000924		mg/Kg-dry	0.79	11/02/2021 7:25 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	94.2	80-130		%Rec	0.79	11/02/2021 7:25 PM	R140908
SS: Dibromofluoromethane	109	76.1-120		%Rec	0.79	11/02/2021 7:25 PM	R140908
SS: Toluene-d8	100	85-115		%Rec	0.79	11/02/2021 7:25 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
1,2-Dichlorobenzene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
1,3-Dichlorobenzene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
1,4-Dichlorobenzene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2,4,5-Trichlorophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2,4,6-Trichlorophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2,4-Dichlorophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B5
Lab ID: 2111039-005
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2,4-Dinitrophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2,4-Dinitrotoluene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2,6-Dinitrotoluene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2-Chloronaphthalene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2-Chlorophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2-Methylnaphthalene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2-Nitroaniline	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
2-Nitrophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
3,3-Dichlorobenzidine	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
3-Nitroaniline	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
4-Bromophenyl phenyl ether	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
4-Chloro-3-methylphenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
4-Chloroaniline	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
4-Chlorophenyl phenyl ether	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
4-Nitroaniline	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
4-Nitrophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Acenaphthene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Acenaphthylene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Anthracene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Benzo(a)anthracene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Benzo(a)pyrene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Benzo(b)fluoranthene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Benzo(g,h,i)perylene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Benzo(k)fluoranthene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Bis(2-chloroethoxy)methane	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Bis(2-chloroethyl)ether	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Butyl benzyl phthalate	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Carbazole	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Chrysene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Dibenzo(a,h)anthracene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Dibenzofuran	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Diethyl phthalate	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Dimethyl phthalate	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Di-n-butyl phthalate	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Di-n-octyl phthalate	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893

Client ID: Patrick Engineering, Inc. **Report Date:** November 09, 2021
Project Name: Soil Testing **Workorder:** **2111039**

Client Sample ID: **B5** **Matrix:** SOIL
Lab ID: 2111039-005 **Date Received:** 10/29/2021 5:10 PM **Collection Date:** 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Fluorene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Hexachlorobenzene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Hexachlorobutadiene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Hexachlorocyclopentadiene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Hexachloroethane	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Isophorone	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
m,p-Cresol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Naphthalene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Nitrobenzene	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
N-Nitroso-di-n-propylamine	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
N-Nitrosodiphenylamine	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
o-Cresol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Pentachlorophenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Phenanthrene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Phenol	ND	0.291		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Pyrene	ND	0.0582		mg/Kg-dry	1	11/05/2021 5:52 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	107	0.1-136		%Rec	1	11/05/2021 5:52 PM	77893
SS: 2-Fluorobiphenyl	77.3	16.3-118		%Rec	1	11/05/2021 5:52 PM	77893
SS: 2-Fluorophenol	66.7	4.2-97		%Rec	1	11/05/2021 5:52 PM	77893
SS: 4-Terphenyl-d14	273	0.1-147	S	%Rec	1	11/05/2021 5:52 PM	77893
SS: Nitrobenzene-d5	67.8	0.1-119		%Rec	1	11/05/2021 5:52 PM	77893
SS: Phenol-d6	71.8	9.82-111		%Rec	1	11/05/2021 5:52 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0201	0.0195	J	mg/Kg-dry	1	11/04/2021 11:39 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.72	1.00		pH Units	1	11/02/2021 1:04 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	15	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B6
Lab ID: 2111039-006
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	1,890	2.43		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Antimony	ND	1.46		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Arsenic	1.88	1.12	J	mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Barium	17.3	0.121		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Beryllium	0.213	0.0485	J	mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Cadmium	0.353	0.0728		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Calcium	129,000	6.07		mg/Kg-dry	10	11/05/2021 11:46 AM	77868
Chromium	5.48	0.0583		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Cobalt	4.50	0.121		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Copper	13.6	0.146		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Iron	10,700	3.03		mg/Kg-dry	5	11/04/2021 2:56 PM	77868
Lead	3.64	0.583		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Magnesium	66,800	12.1		mg/Kg-dry	20	11/05/2021 1:55 PM	77868
Manganese	341	0.0583		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Nickel	9.81	0.228		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Potassium	697	2.43		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Selenium	ND	1.26		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Silver	ND	0.0583		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Sodium	165	1.21	B	mg/Kg-dry	1	11/05/2021 11:06 AM	77868
Thallium	ND	0.971		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Vanadium	7.90	0.146		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
Zinc	29.9	0.971		mg/Kg-dry	1	11/04/2021 2:03 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
1,1,1-Trichloroethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
1,1,2-Trichloroethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
1,1-Dichloroethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
1,1-Dichloroethene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
1,2-Dichloroethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
1,2-Dichloropropane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
2-Butanone	ND	0.00793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
2-Hexanone	ND	0.0198		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
4-Methyl-2-pentanone	ND	0.0198		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Acetone	ND	0.0198	c	mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Benzene	ND	0.000198		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908

Created: 11/9/2021 4:46:33 PM

Client ID: Patrick Engineering, Inc. **Report Date:** November 09, 2021
Project Name: Soil Testing **Workorder:** **2111039**

Client Sample ID: **B6** **Matrix:** SOIL
Lab ID: 2111039-006 **Date Received:** 10/29/2021 5:10 PM **Collection Date:** 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Bromoform	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Bromomethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Carbon disulfide	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Carbon tetrachloride	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Chlorobenzene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Chloroethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Chloroform	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Chloromethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
cis-1,2-Dichloroethene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
cis-1,3-Dichloropropene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Dibromochloromethane	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Ethylbenzene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
m,p-Xylene	ND	0.00159		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Methyl tert-butyl ether	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Methylene chloride	ND	0.00397		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
o-Xylene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Total Xylenes	ND	0.00159		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Styrene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Tetrachloroethene	ND	0.00159		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Toluene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
trans-1,2-Dichloroethene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
trans-1,3-Dichloropropene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Trichloroethene	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Vinyl chloride	ND	0.000793		mg/Kg-dry	0.7	11/02/2021 7:58 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.7	80-130		%Rec	0.7	11/02/2021 7:58 PM	R140908
SS: Dibromofluoromethane	109	76.1-120		%Rec	0.7	11/02/2021 7:58 PM	R140908
SS: Toluene-d8	100	85-115		%Rec	0.7	11/02/2021 7:58 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
1,2-Dichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
1,3-Dichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
1,4-Dichlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2,4,5-Trichlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2,4,6-Trichlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2,4-Dichlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B6
Lab ID: 2111039-006
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2,4-Dinitrophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2,4-Dinitrotoluene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2,6-Dinitrotoluene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2-Chloronaphthalene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2-Chlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2-Methylnaphthalene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2-Nitroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
2-Nitrophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
3,3-Dichlorobenzidine	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
3-Nitroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
4-Bromophenyl phenyl ether	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
4-Chloro-3-methylphenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
4-Chloroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
4-Chlorophenyl phenyl ether	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
4-Nitroaniline	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
4-Nitrophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Acenaphthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Acenaphthylene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Anthracene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Benzo(a)anthracene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Benzo(a)pyrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Benzo(b)fluoranthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Benzo(g,h,i)perylene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Benzo(k)fluoranthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Bis(2-chloroethoxy)methane	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Bis(2-chloroethyl)ether	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Butyl benzyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Carbazole	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Chrysene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Dibenzo(a,h)anthracene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Dibenzofuran	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Diethyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Dimethyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Di-n-butyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Di-n-octyl phthalate	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B6
Lab ID: 2111039-006 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Fluorene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Hexachlorobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Hexachlorobutadiene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Hexachlorocyclopentadiene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Hexachloroethane	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Isophorone	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
m,p-Cresol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Naphthalene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Nitrobenzene	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
N-Nitroso-di-n-propylamine	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
N-Nitrosodiphenylamine	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
o-Cresol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Pentachlorophenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Phenanthrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Phenol	ND	0.281		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Pyrene	ND	0.0562		mg/Kg-dry	1	11/05/2021 6:28 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	111	0.1-136		%Rec	1	11/05/2021 6:28 PM	77893
SS: 2-Fluorobiphenyl	71.7	16.3-118		%Rec	1	11/05/2021 6:28 PM	77893
SS: 2-Fluorophenol	63.3	4.2-97		%Rec	1	11/05/2021 6:28 PM	77893
SS: 4-Terphenyl-d14	116	0.1-147		%Rec	1	11/05/2021 6:28 PM	77893
SS: Nitrobenzene-d5	61.5	0.1-119		%Rec	1	11/05/2021 6:28 PM	77893
SS: Phenol-d6	67.8	9.82-111		%Rec	1	11/05/2021 6:28 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0189		mg/Kg-dry	1	11/04/2021 11:42 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.90	1.00		pH Units	1	11/02/2021 1:05 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	12	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B7
Lab ID: 2111039-007
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	12,800	12.5		mg/Kg-dry	5	11/04/2021 3:10 PM	77868
Antimony	ND	1.50		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Arsenic	4.67	1.15	J	mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Barium	153	0.125		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Beryllium	0.651	0.0500		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Cadmium	1.06	0.0750		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Calcium	28,500	3.13		mg/Kg-dry	5	11/04/2021 3:10 PM	77868
Chromium	16.4	0.0600		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Cobalt	14.5	0.125		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Copper	19.6	0.150		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Iron	25,300	6.25		mg/Kg-dry	10	11/05/2021 11:49 AM	77868
Lead	9.89	0.600		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Magnesium	14,100	6.25		mg/Kg-dry	10	11/05/2021 11:49 AM	77868
Manganese	1,800	0.300		mg/Kg-dry	5	11/04/2021 3:10 PM	77868
Nickel	26.9	0.235		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Potassium	838	2.50		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Selenium	ND	1.30		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Silver	ND	0.0600		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Sodium	129	1.25	B	mg/Kg-dry	1	11/05/2021 11:09 AM	77868
Thallium	ND	1.00		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Vanadium	30.7	0.150		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
Zinc	58.2	1.00		mg/Kg-dry	1	11/04/2021 2:26 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
1,1,1-Trichloroethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
1,1,2-Trichloroethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
1,1-Dichloroethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
1,1-Dichloroethene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
1,2-Dichloroethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
1,2-Dichloropropane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
2-Butanone	ND	0.0104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
2-Hexanone	ND	0.0260		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
4-Methyl-2-pentanone	ND	0.0260		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Acetone	ND	0.0260	c	mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Benzene	ND	0.000260		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B7
Lab ID: 2111039-007
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Bromoform	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Bromomethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Carbon disulfide	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Carbon tetrachloride	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Chlorobenzene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Chloroethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Chloroform	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Chloromethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
cis-1,2-Dichloroethene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Dibromochloromethane	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Ethylbenzene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
m,p-Xylene	ND	0.00208		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Methyl tert-butyl ether	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Methylene chloride	ND	0.00520		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
o-Xylene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Total Xylenes	ND	0.00208		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Styrene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Tetrachloroethene	ND	0.00208		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Toluene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
trans-1,2-Dichloroethene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Trichloroethene	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Vinyl chloride	ND	0.00104		mg/Kg-dry	0.81	11/02/2021 8:32 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	94.1	80-130		%Rec	0.81	11/02/2021 8:32 PM	R140908
SS: Dibromofluoromethane	110	76.1-120		%Rec	0.81	11/02/2021 8:32 PM	R140908
SS: Toluene-d8	101	85-115		%Rec	0.81	11/02/2021 8:32 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
1,2-Dichlorobenzene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
1,3-Dichlorobenzene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
1,4-Dichlorobenzene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2,4,5-Trichlorophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2,4,6-Trichlorophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2,4-Dichlorophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B7
Lab ID: 2111039-007
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2,4-Dinitrophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2,4-Dinitrotoluene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2,6-Dinitrotoluene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2-Chloronaphthalene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2-Chlorophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2-Methylnaphthalene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2-Nitroaniline	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
2-Nitrophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
3,3-Dichlorobenzidine	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
3-Nitroaniline	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
4-Bromophenyl phenyl ether	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
4-Chloro-3-methylphenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
4-Chloroaniline	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
4-Chlorophenyl phenyl ether	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
4-Nitroaniline	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
4-Nitrophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Acenaphthene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Acenaphthylene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Anthracene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Benzo(a)anthracene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Benzo(a)pyrene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Benzo(b)fluoranthene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Benzo(g,h,i)perylene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Benzo(k)fluoranthene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Bis(2-chloroethoxy)methane	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Bis(2-chloroethyl)ether	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Butyl benzyl phthalate	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Carbazole	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Chrysene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Dibenzo(a,h)anthracene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Dibenzofuran	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Diethyl phthalate	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Dimethyl phthalate	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Di-n-butyl phthalate	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Di-n-octyl phthalate	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B7
Lab ID: 2111039-007
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Fluorene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Hexachlorobenzene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Hexachlorobutadiene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Hexachlorocyclopentadiene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Hexachloroethane	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Isophorone	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
m,p-Cresol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Naphthalene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Nitrobenzene	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
N-Nitroso-di-n-propylamine	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
N-Nitrosodiphenylamine	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
o-Cresol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Pentachlorophenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Phenanthrene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Phenol	ND	0.319		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Pyrene	ND	0.0639		mg/Kg-dry	1	11/05/2021 7:03 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	110	0.1-136		%Rec	1	11/05/2021 7:03 PM	77893
SS: 2-Fluorobiphenyl	96.3	16.3-118		%Rec	1	11/05/2021 7:03 PM	77893
SS: 2-Fluorophenol	97.7	4.2-97	S	%Rec	1	11/05/2021 7:03 PM	77893
SS: 4-Terphenyl-d14	114	0.1-147		%Rec	1	11/05/2021 7:03 PM	77893
SS: Nitrobenzene-d5	97.3	0.1-119		%Rec	1	11/05/2021 7:03 PM	77893
SS: Phenol-d6	98.3	9.82-111		%Rec	1	11/05/2021 7:03 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0354	0.0208	J	mg/Kg-dry	1	11/04/2021 11:46 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.47	1.00		pH Units	1	11/02/2021 1:06 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	22	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B8
Lab ID: 2111039-008
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	7,770	12.1		mg/Kg-dry	5	11/04/2021 3:13 PM	77868
Antimony	ND	1.46	S	mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Arsenic	2.94	1.12	J	mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Barium	52.5	0.121		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Beryllium	0.423	0.0485		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Cadmium	0.672	0.0728		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Calcium	84,300	3.03		mg/Kg-dry	5	11/04/2021 3:13 PM	77868
Chromium	13.5	0.0583		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Cobalt	7.02	0.121		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Copper	17.2	0.146		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Iron	20,100	3.03		mg/Kg-dry	5	11/04/2021 3:13 PM	77868
Lead	8.54	0.583		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Magnesium	38,600	6.07		mg/Kg-dry	10	11/05/2021 11:52 AM	77868
Manganese	413	0.0583		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Nickel	17.2	0.228		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Potassium	1,190	2.43	S	mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Selenium	ND	1.26		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Silver	ND	0.0583		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Sodium	256	1.21	B	mg/Kg-dry	1	11/05/2021 11:29 AM	77868
Thallium	ND	0.971		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Vanadium	19.2	0.146		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
Zinc	54.2	0.971		mg/Kg-dry	1	11/04/2021 2:29 PM	77868
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
1,1,1-Trichloroethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
1,1,2-Trichloroethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
1,1-Dichloroethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
1,1-Dichloroethene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
1,2-Dichloroethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
1,2-Dichloropropane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
2-Butanone	ND	0.0115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
2-Hexanone	ND	0.0288		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
4-Methyl-2-pentanone	ND	0.0288		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Acetone	ND	0.0288	c	mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Benzene	ND	0.000288		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B8
Lab ID: 2111039-008
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Bromoform	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Bromomethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Carbon disulfide	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Carbon tetrachloride	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Chlorobenzene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Chloroethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Chloroform	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Chloromethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
cis-1,2-Dichloroethene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
cis-1,3-Dichloropropene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Dibromochloromethane	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Ethylbenzene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
m,p-Xylene	ND	0.00230		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Methyl tert-butyl ether	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Methylene chloride	ND	0.00575		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
o-Xylene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Total Xylenes	ND	0.00230		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Styrene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Tetrachloroethene	ND	0.00230		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Toluene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
trans-1,2-Dichloroethene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
trans-1,3-Dichloropropene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Trichloroethene	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Vinyl chloride	ND	0.00115		mg/Kg-dry	1.02	11/02/2021 9:06 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.2	80-130		%Rec	1.02	11/02/2021 9:06 PM	R140908
SS: Dibromofluoromethane	111	76.1-120		%Rec	1.02	11/02/2021 9:06 PM	R140908
SS: Toluene-d8	100	85-115		%Rec	1.02	11/02/2021 9:06 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
1,2-Dichlorobenzene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
1,3-Dichlorobenzene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
1,4-Dichlorobenzene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2,4,5-Trichlorophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2,4,6-Trichlorophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2,4-Dichlorophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B8
Lab ID: 2111039-008
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2,4-Dinitrophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2,4-Dinitrotoluene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2,6-Dinitrotoluene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2-Chloronaphthalene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2-Chlorophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2-Methylnaphthalene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2-Nitroaniline	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
2-Nitrophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
3,3-Dichlorobenzidine	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
3-Nitroaniline	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
4-Bromophenyl phenyl ether	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
4-Chloro-3-methylphenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
4-Chloroaniline	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
4-Chlorophenyl phenyl ether	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
4-Nitroaniline	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
4-Nitrophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Acenaphthene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Acenaphthylene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Anthracene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Benzo(a)anthracene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Benzo(a)pyrene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Benzo(b)fluoranthene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Benzo(g,h,i)perylene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Benzo(k)fluoranthene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Bis(2-chloroethoxy)methane	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Bis(2-chloroethyl)ether	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Butyl benzyl phthalate	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Carbazole	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Chrysene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Dibenzo(a,h)anthracene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Dibenzofuran	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Diethyl phthalate	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Dimethyl phthalate	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Di-n-butyl phthalate	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Di-n-octyl phthalate	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B8
Lab ID: 2111039-008
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Fluorene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Hexachlorobenzene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Hexachlorobutadiene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Hexachlorocyclopentadiene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Hexachloroethane	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Isophorone	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
m,p-Cresol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Naphthalene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Nitrobenzene	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
N-Nitroso-di-n-propylamine	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
N-Nitrosodiphenylamine	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
o-Cresol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Pentachlorophenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Phenanthrene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Phenol	ND	0.280		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Pyrene	ND	0.0561		mg/Kg-dry	1	11/05/2021 7:39 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	103	0.1-136		%Rec	1	11/05/2021 7:39 PM	77893
SS: 2-Fluorobiphenyl	85.0	16.3-118		%Rec	1	11/05/2021 7:39 PM	77893
SS: 2-Fluorophenol	92.4	4.2-97		%Rec	1	11/05/2021 7:39 PM	77893
SS: 4-Terphenyl-d14	107	0.1-147		%Rec	1	11/05/2021 7:39 PM	77893
SS: Nitrobenzene-d5	128	0.1-119	S	%Rec	1	11/05/2021 7:39 PM	77893
SS: Phenol-d6	91.6	9.82-111		%Rec	1	11/05/2021 7:39 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0183		mg/Kg-dry	1	11/04/2021 11:49 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.10	1.00		pH Units	1	11/02/2021 1:08 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	11	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:40 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B9
Lab ID: 2111039-009
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	2,320	2.50		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Antimony	ND	1.50		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Arsenic	5.95	1.15		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Barium	32.2	0.125		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Beryllium	0.239	0.0500	J	mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Cadmium	0.542	0.0750		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Calcium	105,000	3.13		mg/Kg-dry	5	11/05/2021 1:58 PM	77900
Chromium	6.04	0.0600		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Cobalt	4.65	0.125		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Copper	16.7	0.150		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Iron	16,400	3.13		mg/Kg-dry	5	11/05/2021 1:58 PM	77900
Lead	7.06	0.600		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Magnesium	53,400	12.5		mg/Kg-dry	20	11/05/2021 2:38 PM	77900
Manganese	466	0.0600		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Nickel	11.2	0.235		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Potassium	507	2.50	B	mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Selenium	ND	1.30		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Silver	ND	0.0600		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Sodium	245	1.25	B	mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Thallium	ND	1.00		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Vanadium	10.0	0.150		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
Zinc	56.2	1.00		mg/Kg-dry	1	11/05/2021 12:34 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
1,1,1-Trichloroethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
1,1,2-Trichloroethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
1,1-Dichloroethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
1,1-Dichloroethene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
1,2-Dichloroethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
1,2-Dichloropropane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
2-Butanone	ND	0.0116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
2-Hexanone	ND	0.0289		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
4-Methyl-2-pentanone	ND	0.0289		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Acetone	ND	0.0289	c	mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Benzene	ND	0.000289		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B9
Lab ID: 2111039-009
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Bromoform	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Bromomethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Carbon disulfide	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Carbon tetrachloride	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Chlorobenzene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Chloroethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Chloroform	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Chloromethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
cis-1,2-Dichloroethene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
cis-1,3-Dichloropropene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Dibromochloromethane	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Ethylbenzene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
m,p-Xylene	ND	0.00231		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Methyl tert-butyl ether	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Methylene chloride	ND	0.00578		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
o-Xylene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Total Xylenes	ND	0.00231		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Styrene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Tetrachloroethene	ND	0.00231		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Toluene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
trans-1,2-Dichloroethene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
trans-1,3-Dichloropropene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Trichloroethene	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Vinyl chloride	ND	0.00116		mg/Kg-dry	0.98	11/02/2021 9:40 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	97.3	80-130		%Rec	0.98	11/02/2021 9:40 PM	R140908
SS: Dibromofluoromethane	111	76.1-120		%Rec	0.98	11/02/2021 9:40 PM	R140908
SS: Toluene-d8	101	85-115		%Rec	0.98	11/02/2021 9:40 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
1,2-Dichlorobenzene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
1,3-Dichlorobenzene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
1,4-Dichlorobenzene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2,4,5-Trichlorophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2,4,6-Trichlorophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2,4-Dichlorophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B9
Lab ID: 2111039-009
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2,4-Dinitrophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2,4-Dinitrotoluene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2,6-Dinitrotoluene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2-Chloronaphthalene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2-Chlorophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2-Methylnaphthalene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2-Nitroaniline	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
2-Nitrophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
3,3-Dichlorobenzidine	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
3-Nitroaniline	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
4-Bromophenyl phenyl ether	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
4-Chloro-3-methylphenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
4-Chloroaniline	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
4-Chlorophenyl phenyl ether	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
4-Nitroaniline	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
4-Nitrophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Acenaphthene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Acenaphthylene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Anthracene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Benzo(a)anthracene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Benzo(a)pyrene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Benzo(b)fluoranthene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Benzo(g,h,i)perylene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Benzo(k)fluoranthene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Bis(2-chloroethoxy)methane	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Bis(2-chloroethyl)ether	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Butyl benzyl phthalate	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Carbazole	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Chrysene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Dibenzo(a,h)anthracene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Dibenzofuran	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Diethyl phthalate	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Dimethyl phthalate	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Di-n-butyl phthalate	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Di-n-octyl phthalate	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B9
Lab ID: 2111039-009
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Fluorene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Hexachlorobenzene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Hexachlorobutadiene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Hexachlorocyclopentadiene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Hexachloroethane	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Isophorone	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
m,p-Cresol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Naphthalene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Nitrobenzene	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
N-Nitroso-di-n-propylamine	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
N-Nitrosodiphenylamine	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
o-Cresol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Pentachlorophenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Phenanthrene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Phenol	ND	0.295		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Pyrene	ND	0.0590		mg/Kg-dry	1	11/05/2021 8:15 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	115	0.1-136		%Rec	1	11/05/2021 8:15 PM	77893
SS: 2-Fluorobiphenyl	106	16.3-118		%Rec	1	11/05/2021 8:15 PM	77893
SS: 2-Fluorophenol	106	4.2-97	S	%Rec	1	11/05/2021 8:15 PM	77893
SS: 4-Terphenyl-d14	117	0.1-147		%Rec	1	11/05/2021 8:15 PM	77893
SS: Nitrobenzene-d5	110	0.1-119		%Rec	1	11/05/2021 8:15 PM	77893
SS: Phenol-d6	106	9.82-111		%Rec	1	11/05/2021 8:15 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0195	0.0182	J	mg/Kg-dry	1	11/04/2021 11:52 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.10	1.00		pH Units	1	11/02/2021 1:09 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	15	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:43 PM

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B10
Lab ID: 2111039-010
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	7,680	12.4		mg/Kg-dry	5	11/05/2021 2:00 PM	77900
Antimony	ND	1.49		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Arsenic	ND	1.14		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Barium	41.0	0.124		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Beryllium	0.444	0.0495		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Cadmium	0.551	0.0743		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Calcium	66,400	3.09		mg/Kg-dry	5	11/05/2021 2:00 PM	77900
Chromium	15.6	0.0594		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Cobalt	9.99	0.124		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Copper	19.7	0.149		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Iron	17,600	3.09		mg/Kg-dry	5	11/05/2021 2:00 PM	77900
Lead	8.14	0.594		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Magnesium	26,500	6.19		mg/Kg-dry	10	11/05/2021 2:40 PM	77900
Manganese	406	0.0594		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Nickel	22.7	0.233		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Potassium	1,420	2.48	B	mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Selenium	ND	1.29		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Silver	ND	0.0594		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Sodium	288	1.24	B	mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Thallium	ND	0.990		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Vanadium	18.1	0.149		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
Zinc	58.6	0.990		mg/Kg-dry	1	11/05/2021 1:00 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
1,1,1-Trichloroethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
1,1,2-Trichloroethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
1,1-Dichloroethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
1,1-Dichloroethene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
1,2-Dichloroethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
1,2-Dichloropropane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
2-Butanone	ND	0.00973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
2-Hexanone	ND	0.0243		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
4-Methyl-2-pentanone	ND	0.0243		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Acetone	ND	0.0243	c	mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Benzene	ND	0.000243		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B10
Lab ID: 2111039-010
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Bromoform	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Bromomethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Carbon disulfide	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Carbon tetrachloride	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Chlorobenzene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Chloroethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Chloroform	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Chloromethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
cis-1,2-Dichloroethene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
cis-1,3-Dichloropropene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Dibromochloromethane	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Ethylbenzene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
m,p-Xylene	ND	0.00195		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Methyl tert-butyl ether	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Methylene chloride	ND	0.00486		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
o-Xylene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Total Xylenes	ND	0.00195		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Styrene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Tetrachloroethene	ND	0.00195		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Toluene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
trans-1,2-Dichloroethene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
trans-1,3-Dichloropropene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Trichloroethene	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Vinyl chloride	ND	0.000973		mg/Kg-dry	0.81	11/02/2021 10:13 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	93.0	80-130		%Rec	0.81	11/02/2021 10:13 PM	R140908
SS: Dibromofluoromethane	113	76.1-120		%Rec	0.81	11/02/2021 10:13 PM	R140908
SS: Toluene-d8	99.9	85-115		%Rec	0.81	11/02/2021 10:13 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
1,2-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
1,3-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
1,4-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2,4,5-Trichlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2,4,6-Trichlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2,4-Dichlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B10
Lab ID: 2111039-010
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2,4-Dinitrophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2,4-Dinitrotoluene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2,6-Dinitrotoluene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2-Chloronaphthalene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2-Chlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2-Methylnaphthalene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2-Nitroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
2-Nitrophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
3,3-Dichlorobenzidine	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
3-Nitroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
4-Bromophenyl phenyl ether	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
4-Chloro-3-methylphenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
4-Chloroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
4-Chlorophenyl phenyl ether	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
4-Nitroaniline	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
4-Nitrophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Acenaphthene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Acenaphthylene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Anthracene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Benzo(a)anthracene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Benzo(a)pyrene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Benzo(b)fluoranthene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Benzo(g,h,i)perylene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Benzo(k)fluoranthene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Bis(2-chloroethoxy)methane	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Bis(2-chloroethyl)ether	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Butyl benzyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Carbazole	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Chrysene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Dibenzo(a,h)anthracene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Dibenzofuran	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Diethyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Dimethyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Di-n-butyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Di-n-octyl phthalate	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B10
Lab ID: 2111039-010 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Fluorene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Hexachlorobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Hexachlorobutadiene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Hexachlorocyclopentadiene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Hexachloroethane	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Isophorone	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
m,p-Cresol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Naphthalene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Nitrobenzene	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
N-Nitroso-di-n-propylamine	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
N-Nitrosodiphenylamine	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
o-Cresol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Pentachlorophenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Phenanthrene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Phenol	ND	0.298		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Pyrene	ND	0.0595		mg/Kg-dry	1	11/05/2021 8:51 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	100	0.1-136		%Rec	1	11/05/2021 8:51 PM	77893
SS: 2-Fluorobiphenyl	91.5	16.3-118		%Rec	1	11/05/2021 8:51 PM	77893
SS: 2-Fluorophenol	94.1	4.2-97		%Rec	1	11/05/2021 8:51 PM	77893
SS: 4-Terphenyl-d14	106	0.1-147		%Rec	1	11/05/2021 8:51 PM	77893
SS: Nitrobenzene-d5	94.2	0.1-119		%Rec	1	11/05/2021 8:51 PM	77893
SS: Phenol-d6	91.9	9.82-111		%Rec	1	11/05/2021 8:51 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0207	0.0200	J	mg/Kg-dry	1	11/04/2021 11:56 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.02	1.00		pH Units	1	11/02/2021 1:10 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	17	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B11
Lab ID: 2111039-011
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	1,040	2.50		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Antimony	ND	1.50		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Arsenic	17.9	1.15		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Barium	19.8	0.125		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Beryllium	0.151	0.0500	J	mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Cadmium	0.827	0.0750		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Calcium	130,000	12.5		mg/Kg-dry	20	11/05/2021 2:43 PM	77900
Chromium	4.65	0.0600		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Cobalt	3.53	0.125		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Copper	19.8	0.150		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Iron	26,900	12.5		mg/Kg-dry	20	11/05/2021 2:43 PM	77900
Lead	9.01	0.600		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Magnesium	71,300	12.5		mg/Kg-dry	20	11/05/2021 2:43 PM	77900
Manganese	433	0.0600		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Nickel	9.71	0.235		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Potassium	376	2.50	B	mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Selenium	ND	1.30		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Silver	ND	0.0600		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Sodium	203	1.25	B	mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Thallium	ND	1.00		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Vanadium	8.39	0.150		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
Zinc	74.2	1.00		mg/Kg-dry	1	11/05/2021 1:03 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
1,1,1-Trichloroethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
1,1,2-Trichloroethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
1,1-Dichloroethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
1,1-Dichloroethene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
1,2-Dichloroethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
1,2-Dichloropropane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
2-Butanone	ND	0.00751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
2-Hexanone	ND	0.0188		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
4-Methyl-2-pentanone	ND	0.0188		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Acetone	ND	0.0188	c	mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Benzene	ND	0.000188		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B11
Lab ID: 2111039-011
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Bromoform	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Bromomethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Carbon disulfide	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Carbon tetrachloride	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Chlorobenzene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Chloroethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Chloroform	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Chloromethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
cis-1,2-Dichloroethene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
cis-1,3-Dichloropropene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Dibromochloromethane	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Ethylbenzene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
m,p-Xylene	ND	0.00150		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Methyl tert-butyl ether	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Methylene chloride	ND	0.00376		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
o-Xylene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Total Xylenes	ND	0.00150		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Styrene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Tetrachloroethene	ND	0.00150		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Toluene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
trans-1,2-Dichloroethene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
trans-1,3-Dichloropropene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Trichloroethene	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Vinyl chloride	ND	0.000751		mg/Kg-dry	0.69	11/02/2021 10:47 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	98.7	80-130		%Rec	0.69	11/02/2021 10:47 PM	R140908
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.69	11/02/2021 10:47 PM	R140908
SS: Toluene-d8	102	85-115		%Rec	0.69	11/02/2021 10:47 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
1,2-Dichlorobenzene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
1,3-Dichlorobenzene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
1,4-Dichlorobenzene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2,4,5-Trichlorophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2,4,6-Trichlorophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2,4-Dichlorophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B11
Lab ID: 2111039-011
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2,4-Dinitrophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2,4-Dinitrotoluene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2,6-Dinitrotoluene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2-Chloronaphthalene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2-Chlorophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2-Methylnaphthalene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2-Nitroaniline	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
2-Nitrophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
3,3-Dichlorobenzidine	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
3-Nitroaniline	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
4-Bromophenyl phenyl ether	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
4-Chloro-3-methylphenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
4-Chloroaniline	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
4-Chlorophenyl phenyl ether	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
4-Nitroaniline	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
4-Nitrophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Acenaphthene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Acenaphthylene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Anthracene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Benzo(a)anthracene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Benzo(a)pyrene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Benzo(b)fluoranthene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Benzo(g,h,i)perylene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Benzo(k)fluoranthene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Bis(2-chloroethoxy)methane	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Bis(2-chloroethyl)ether	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Butyl benzyl phthalate	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Carbazole	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Chrysene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Dibenzo(a,h)anthracene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Dibenzofuran	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Diethyl phthalate	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Dimethyl phthalate	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Di-n-butyl phthalate	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Di-n-octyl phthalate	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B11
Lab ID: 2111039-011
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Fluorene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Hexachlorobenzene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Hexachlorobutadiene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Hexachlorocyclopentadiene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Hexachloroethane	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Isophorone	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
m,p-Cresol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Naphthalene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Nitrobenzene	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
N-Nitroso-di-n-propylamine	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
N-Nitrosodiphenylamine	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
o-Cresol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Pentachlorophenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Phenanthrene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Phenol	ND	0.271		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Pyrene	ND	0.0542		mg/Kg-dry	1	11/05/2021 9:27 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	103	0.1-136		%Rec	1	11/05/2021 9:27 PM	77893
SS: 2-Fluorobiphenyl	88.9	16.3-118		%Rec	1	11/05/2021 9:27 PM	77893
SS: 2-Fluorophenol	105	4.2-97	S	%Rec	1	11/05/2021 9:27 PM	77893
SS: 4-Terphenyl-d14	102	0.1-147		%Rec	1	11/05/2021 9:27 PM	77893
SS: Nitrobenzene-d5	98.4	0.1-119		%Rec	1	11/05/2021 9:27 PM	77893
SS: Phenol-d6	103	9.82-111		%Rec	1	11/05/2021 9:27 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0194	0.0177	J	mg/Kg-dry	1	11/04/2021 11:59 AM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.42	1.00		pH Units	1	11/02/2021 1:13 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	8.1	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:49 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B12
Lab ID: 2111039-012
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	4,380	2.48		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Antimony	ND	1.49		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Arsenic	7.39	1.14		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Barium	68.8	0.124		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Beryllium	0.424	0.0495		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Cadmium	0.873	0.0743		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Calcium	59,600	3.09		mg/Kg-dry	5	11/05/2021 2:06 PM	77900
Chromium	10.0	0.0594		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Cobalt	7.11	0.124		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Copper	18.3	0.149		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Iron	21,500	3.09		mg/Kg-dry	5	11/05/2021 2:06 PM	77900
Lead	8.72	0.594		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Magnesium	32,900	6.19		mg/Kg-dry	10	11/05/2021 2:46 PM	77900
Manganese	689	0.0594		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Nickel	16.4	0.233		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Potassium	656	2.48	B	mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Selenium	ND	1.29		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Silver	ND	0.0594		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Sodium	114	1.24	B	mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Thallium	ND	0.990		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Vanadium	16.3	0.149		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
Zinc	81.0	0.990		mg/Kg-dry	1	11/05/2021 1:06 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
1,1,1-Trichloroethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
1,1,2,2-Tetrachloroethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
1,1,2-Trichloroethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
1,1-Dichloroethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
1,1-Dichloroethene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
1,2-Dichloroethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
1,2-Dichloropropane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
2-Butanone	ND	0.00839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
2-Hexanone	ND	0.0210		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
4-Methyl-2-pentanone	ND	0.0210		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Acetone	ND	0.0210	c	mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Benzene	ND	0.000210		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B12
Lab ID: 2111039-012
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Bromoform	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Bromomethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Carbon disulfide	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Carbon tetrachloride	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Chlorobenzene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Chloroethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Chloroform	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Chloromethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
cis-1,2-Dichloroethene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
cis-1,3-Dichloropropene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Dibromochloromethane	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Ethylbenzene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
m,p-Xylene	ND	0.00168		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Methyl tert-butyl ether	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Methylene chloride	ND	0.00420		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
o-Xylene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Total Xylenes	ND	0.00168		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Styrene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Tetrachloroethene	ND	0.00168		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Toluene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
trans-1,2-Dichloroethene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
trans-1,3-Dichloropropene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Trichloroethene	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Vinyl chloride	ND	0.000839		mg/Kg-dry	0.71	11/02/2021 11:21 PM	R140908
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	94.6	80-130		%Rec	0.71	11/02/2021 11:21 PM	R140908
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.71	11/02/2021 11:21 PM	R140908
SS: Toluene-d8	101	85-115		%Rec	0.71	11/02/2021 11:21 PM	R140908
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
1,2-Dichlorobenzene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
1,3-Dichlorobenzene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
1,4-Dichlorobenzene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2,4,5-Trichlorophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2,4,6-Trichlorophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2,4-Dichlorophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B12
Lab ID: 2111039-012
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2,4-Dinitrophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2,4-Dinitrotoluene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2,6-Dinitrotoluene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2-Chloronaphthalene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2-Chlorophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2-Methylnaphthalene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2-Nitroaniline	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
2-Nitrophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
3,3-Dichlorobenzidine	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
3-Nitroaniline	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
4-Bromophenyl phenyl ether	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
4-Chloro-3-methylphenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
4-Chloroaniline	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
4-Chlorophenyl phenyl ether	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
4-Nitroaniline	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
4-Nitrophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Acenaphthene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Acenaphthylene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Anthracene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Benzo(a)anthracene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Benzo(a)pyrene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Benzo(b)fluoranthene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Benzo(g,h,i)perylene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Benzo(k)fluoranthene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Bis(2-chloroethoxy)methane	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Bis(2-chloroethyl)ether	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Butyl benzyl phthalate	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Carbazole	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Chrysene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Dibenzo(a,h)anthracene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Dibenzofuran	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Diethyl phthalate	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Dimethyl phthalate	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Di-n-butyl phthalate	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Di-n-octyl phthalate	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B12
Lab ID: 2111039-012
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Fluorene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Hexachlorobenzene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Hexachlorobutadiene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Hexachlorocyclopentadiene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Hexachloroethane	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Isophorone	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
m,p-Cresol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Naphthalene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Nitrobenzene	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
N-Nitroso-di-n-propylamine	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
N-Nitrosodiphenylamine	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
o-Cresol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Pentachlorophenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Phenanthrene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Phenol	ND	0.294		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Pyrene	ND	0.0588		mg/Kg-dry	1	11/05/2021 10:02 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	112	0.1-136		%Rec	1	11/05/2021 10:02 PM	77893
SS: 2-Fluorobiphenyl	104	16.3-118		%Rec	1	11/05/2021 10:02 PM	77893
SS: 2-Fluorophenol	106	4.2-97	S	%Rec	1	11/05/2021 10:02 PM	77893
SS: 4-Terphenyl-d14	116	0.1-147		%Rec	1	11/05/2021 10:02 PM	77893
SS: Nitrobenzene-d5	108	0.1-119		%Rec	1	11/05/2021 10:02 PM	77893
SS: Phenol-d6	105	9.82-111		%Rec	1	11/05/2021 10:02 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0403	0.0182	J	mg/Kg-dry	1	11/04/2021 12:09 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.79	1.00		pH Units	1	11/02/2021 1:14 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	15	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B13
Lab ID: 2111039-013
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	3,980	2.40		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Antimony	ND	1.44		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Arsenic	5.92	1.11		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Barium	61.8	0.120		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Beryllium	0.378	0.0481		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Cadmium	0.649	0.0721		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Calcium	71,100	3.00		mg/Kg-dry	5	11/05/2021 2:09 PM	77900
Chromium	8.47	0.0577		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Cobalt	6.34	0.120		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Copper	15.5	0.144		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Iron	19,900	3.00		mg/Kg-dry	5	11/05/2021 2:09 PM	77900
Lead	9.13	0.577		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Magnesium	39,900	6.01		mg/Kg-dry	10	11/05/2021 2:49 PM	77900
Manganese	577	0.0577		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Nickel	13.5	0.226		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Potassium	551	2.40	B	mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Selenium	ND	1.25		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Silver	ND	0.0577		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Sodium	213	1.20	B	mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Thallium	ND	0.962		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Vanadium	15.2	0.144		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
Zinc	52.0	0.962		mg/Kg-dry	1	11/05/2021 1:09 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
1,1,1-Trichloroethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
1,1,2-Trichloroethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
1,1-Dichloroethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
1,1-Dichloroethene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
1,2-Dichloroethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
1,2-Dichloropropane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
2-Butanone	ND	0.00972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
2-Hexanone	ND	0.0243		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
4-Methyl-2-pentanone	ND	0.0243		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Acetone	ND	0.0243	c	mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Benzene	ND	0.000243		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B13
Lab ID: 2111039-013
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Bromoform	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Bromomethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Carbon disulfide	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Carbon tetrachloride	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Chlorobenzene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Chloroethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Chloroform	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Chloromethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
cis-1,2-Dichloroethene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
cis-1,3-Dichloropropene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Dibromochloromethane	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Ethylbenzene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
m,p-Xylene	ND	0.00194		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Methyl tert-butyl ether	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Methylene chloride	ND	0.00486		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
o-Xylene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Total Xylenes	ND	0.00194		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Styrene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Tetrachloroethene	ND	0.00194		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Toluene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
trans-1,2-Dichloroethene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
trans-1,3-Dichloropropene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Trichloroethene	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Vinyl chloride	ND	0.000972		mg/Kg-dry	0.82	11/03/2021 2:32 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	97.1	80-130		%Rec	0.82	11/03/2021 2:32 PM	R140976
SS: Dibromofluoromethane	110	76.1-120		%Rec	0.82	11/03/2021 2:32 PM	R140976
SS: Toluene-d8	101	85-115		%Rec	0.82	11/03/2021 2:32 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
1,2-Dichlorobenzene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
1,3-Dichlorobenzene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
1,4-Dichlorobenzene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2,4,5-Trichlorophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2,4,6-Trichlorophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2,4-Dichlorophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B13
Lab ID: 2111039-013
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2,4-Dinitrophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2,4-Dinitrotoluene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2,6-Dinitrotoluene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2-Chloronaphthalene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2-Chlorophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2-Methylnaphthalene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2-Nitroaniline	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
2-Nitrophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
3,3-Dichlorobenzidine	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
3-Nitroaniline	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
4,6-Dinitro-2-methylphenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
4-Bromophenyl phenyl ether	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
4-Chloro-3-methylphenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
4-Chloroaniline	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
4-Chlorophenyl phenyl ether	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
4-Nitroaniline	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
4-Nitrophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Acenaphthene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Acenaphthylene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Anthracene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Benzo(a)anthracene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Benzo(a)pyrene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Benzo(b)fluoranthene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Benzo(g,h,i)perylene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Benzo(k)fluoranthene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Bis(2-chloroethoxy)methane	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Bis(2-chloroethyl)ether	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Bis(2-chloroisopropyl)ether	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Bis(2-ethylhexyl)phthalate	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Butyl benzyl phthalate	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Carbazole	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Chrysene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Dibenzo(a,h)anthracene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Dibenzofuran	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Diethyl phthalate	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Dimethyl phthalate	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Di-n-butyl phthalate	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Di-n-octyl phthalate	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B13
Lab ID: 2111039-013
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Fluorene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Hexachlorobenzene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Hexachlorobutadiene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Hexachlorocyclopentadiene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Hexachloroethane	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Indeno(1,2,3-cd)pyrene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Isophorone	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
m,p-Cresol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Naphthalene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Nitrobenzene	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
N-Nitroso-di-n-propylamine	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
N-Nitrosodiphenylamine	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
o-Cresol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Pentachlorophenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Phenanthrene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Phenol	ND	0.296		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Pyrene	ND	0.0593		mg/Kg-dry	1	11/05/2021 10:38 PM	77893
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	117	0.1-136		%Rec	1	11/05/2021 10:38 PM	77893
SS: 2-Fluorobiphenyl	108	16.3-118		%Rec	1	11/05/2021 10:38 PM	77893
SS: 2-Fluorophenol	106	4.2-97	S	%Rec	1	11/05/2021 10:38 PM	77893
SS: 4-Terphenyl-d14	127	0.1-147		%Rec	1	11/05/2021 10:38 PM	77893
SS: Nitrobenzene-d5	110	0.1-119		%Rec	1	11/05/2021 10:38 PM	77893
SS: Phenol-d6	106	9.82-111		%Rec	1	11/05/2021 10:38 PM	77893
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0264	0.0187	J	mg/Kg-dry	1	11/04/2021 12:12 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.05	1.00		pH Units	1	11/02/2021 1:15 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	16	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:46:55 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B14
Lab ID: 2111039-014
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	4,140	2.48		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Antimony	ND	1.49		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Arsenic	3.94	1.14	J	mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Barium	45.3	0.124		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Beryllium	0.301	0.0495		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Cadmium	0.401	0.0743		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Calcium	18,700	0.619		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Chromium	7.50	0.0594		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Cobalt	5.82	0.124		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Copper	13.4	0.149		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Iron	12,700	3.09		mg/Kg-dry	5	11/05/2021 2:12 PM	77900
Lead	6.76	0.594		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Magnesium	11,400	3.09		mg/Kg-dry	5	11/05/2021 2:12 PM	77900
Manganese	379	0.0594		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Nickel	12.2	0.233		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Potassium	404	2.48	B	mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Selenium	ND	1.29		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Silver	ND	0.0594		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Sodium	68.9	1.24	B	mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Thallium	ND	0.990		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Vanadium	12.2	0.149		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
Zinc	41.5	0.990		mg/Kg-dry	1	11/05/2021 1:13 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
1,1,1-Trichloroethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
1,1,2-Trichloroethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
1,1-Dichloroethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
1,1-Dichloroethene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
1,2-Dichloroethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
1,2-Dichloropropane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
2-Butanone	ND	0.00864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
2-Hexanone	ND	0.0216		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
4-Methyl-2-pentanone	ND	0.0216		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Acetone	ND	0.0216	c	mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Benzene	ND	0.000216		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B14
Lab ID: 2111039-014
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Bromoform	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Bromomethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Carbon disulfide	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Carbon tetrachloride	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Chlorobenzene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Chloroethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Chloroform	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Chloromethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
cis-1,2-Dichloroethene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
cis-1,3-Dichloropropene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Dibromochloromethane	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Ethylbenzene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
m,p-Xylene	ND	0.00173		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Methyl tert-butyl ether	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Methylene chloride	ND	0.00432		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
o-Xylene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Total Xylenes	0.00193	0.00173		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Styrene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Tetrachloroethene	ND	0.00173		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Toluene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
trans-1,2-Dichloroethene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
trans-1,3-Dichloropropene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Trichloroethene	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Vinyl chloride	ND	0.000864		mg/Kg-dry	0.75	11/03/2021 3:06 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	98.9	80-130		%Rec	0.75	11/03/2021 3:06 PM	R140976
SS: Dibromofluoromethane	110	76.1-120		%Rec	0.75	11/03/2021 3:06 PM	R140976
SS: Toluene-d8	102	85-115		%Rec	0.75	11/03/2021 3:06 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
1,2-Dichlorobenzene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
1,3-Dichlorobenzene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
1,4-Dichlorobenzene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2,4,5-Trichlorophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2,4,6-Trichlorophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2,4-Dichlorophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B14
Lab ID: 2111039-014
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2,4-Dinitrophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2,4-Dinitrotoluene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2,6-Dinitrotoluene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2-Chloronaphthalene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2-Chlorophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2-Methylnaphthalene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2-Nitroaniline	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
2-Nitrophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
3,3-Dichlorobenzidine	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
3-Nitroaniline	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
4,6-Dinitro-2-methylphenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
4-Bromophenyl phenyl ether	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
4-Chloro-3-methylphenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
4-Chloroaniline	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
4-Chlorophenyl phenyl ether	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
4-Nitroaniline	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
4-Nitrophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Acenaphthene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Acenaphthylene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Anthracene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Benzo(a)anthracene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Benzo(a)pyrene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Benzo(b)fluoranthene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Benzo(g,h,i)perylene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Benzo(k)fluoranthene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Bis(2-chloroethoxy)methane	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Bis(2-chloroethyl)ether	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Bis(2-chloroisopropyl)ether	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Bis(2-ethylhexyl)phthalate	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Butyl benzyl phthalate	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Carbazole	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Chrysene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Dibenzo(a,h)anthracene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Dibenzofuran	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Diethyl phthalate	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Dimethyl phthalate	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Di-n-butyl phthalate	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Di-n-octyl phthalate	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B14
Lab ID: 2111039-014 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Fluorene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Hexachlorobenzene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Hexachlorobutadiene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Hexachlorocyclopentadiene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Hexachloroethane	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Isophorone	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
m,p-Cresol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Naphthalene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Nitrobenzene	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
N-Nitroso-di-n-propylamine	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
N-Nitrosodiphenylamine	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
o-Cresol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Pentachlorophenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Phenanthrene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Phenol	ND	0.286		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Pyrene	ND	0.0573		mg/Kg-dry	1	11/07/2021 11:20 AM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	81.9	0.1-136		%Rec	1	11/07/2021 11:20 AM	77911
SS: 2-Fluorobiphenyl	87.9	16.3-118		%Rec	1	11/07/2021 11:20 AM	77911
SS: 2-Fluorophenol	70.2	4.2-97		%Rec	1	11/07/2021 11:20 AM	77911
SS: 4-Terphenyl-d14	128	0.1-147		%Rec	1	11/07/2021 11:20 AM	77911
SS: Nitrobenzene-d5	93.6	0.1-119		%Rec	1	11/07/2021 11:20 AM	77911
SS: Phenol-d6	82.6	9.82-111		%Rec	1	11/07/2021 11:20 AM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0202	0.0192	J	mg/Kg-dry	1	11/04/2021 12:19 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.35	1.00		pH Units	1	11/02/2021 1:16 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	13	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B15
Lab ID: 2111039-015
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	9,500	12.3		mg/Kg-dry	5	11/05/2021 2:26 PM	77900
Antimony	ND	1.47		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Arsenic	4.63	1.13	J	mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Barium	83.3	0.123		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Beryllium	0.533	0.0490		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Cadmium	0.604	0.0735		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Calcium	14,800	0.613		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Chromium	12.4	0.0588		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Cobalt	8.62	0.123		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Copper	16.9	0.147		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Iron	19,500	3.06		mg/Kg-dry	5	11/05/2021 2:26 PM	77900
Lead	10.0	0.588		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Magnesium	10,200	3.06		mg/Kg-dry	5	11/05/2021 2:26 PM	77900
Manganese	661	0.0588		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Nickel	18.7	0.230		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Potassium	686	2.45	B	mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Selenium	ND	1.27		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Silver	ND	0.0588		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Sodium	64.7	1.23	B	mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Thallium	ND	0.980		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Vanadium	21.5	0.147		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
Zinc	52.2	0.980		mg/Kg-dry	1	11/05/2021 1:16 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
1,1,1-Trichloroethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
1,1,2-Trichloroethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
1,1-Dichloroethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
1,1-Dichloroethene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
1,2-Dichloroethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
1,2-Dichloropropane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
2-Butanone	ND	0.00937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
2-Hexanone	ND	0.0234		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
4-Methyl-2-pentanone	ND	0.0234		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Acetone	ND	0.0234	c	mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Benzene	ND	0.000234		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B15
Lab ID: 2111039-015
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Bromoform	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Bromomethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Carbon disulfide	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Carbon tetrachloride	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Chlorobenzene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Chloroethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Chloroform	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Chloromethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
cis-1,2-Dichloroethene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
cis-1,3-Dichloropropene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Dibromochloromethane	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Ethylbenzene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
m,p-Xylene	ND	0.00187		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Methyl tert-butyl ether	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Methylene chloride	ND	0.00469		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
o-Xylene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Total Xylenes	ND	0.00187		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Styrene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Tetrachloroethene	ND	0.00187		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Toluene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
trans-1,2-Dichloroethene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
trans-1,3-Dichloropropene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Trichloroethene	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Vinyl chloride	ND	0.000937		mg/Kg-dry	0.8	11/03/2021 3:40 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	94.4	80-130		%Rec	0.8	11/03/2021 3:40 PM	R140976
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.8	11/03/2021 3:40 PM	R140976
SS: Toluene-d8	100	85-115		%Rec	0.8	11/03/2021 3:40 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
1,2-Dichlorobenzene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
1,3-Dichlorobenzene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
1,4-Dichlorobenzene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2,4,5-Trichlorophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2,4,6-Trichlorophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2,4-Dichlorophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B15
Lab ID: 2111039-015
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2,4-Dinitrophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2,4-Dinitrotoluene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2,6-Dinitrotoluene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2-Chloronaphthalene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2-Chlorophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2-Methylnaphthalene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2-Nitroaniline	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
2-Nitrophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
3,3-Dichlorobenzidine	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
3-Nitroaniline	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
4,6-Dinitro-2-methylphenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
4-Bromophenyl phenyl ether	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
4-Chloro-3-methylphenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
4-Chloroaniline	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
4-Chlorophenyl phenyl ether	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
4-Nitroaniline	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
4-Nitrophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Acenaphthene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Acenaphthylene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Anthracene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Benzo(a)anthracene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Benzo(a)pyrene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Benzo(b)fluoranthene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Benzo(g,h,i)perylene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Benzo(k)fluoranthene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Bis(2-chloroethoxy)methane	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Bis(2-chloroethyl)ether	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Bis(2-chloroisopropyl)ether	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Bis(2-ethylhexyl)phthalate	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Butyl benzyl phthalate	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Carbazole	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Chrysene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Dibenzo(a,h)anthracene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Dibenzofuran	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Diethyl phthalate	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Dimethyl phthalate	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Di-n-butyl phthalate	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Di-n-octyl phthalate	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B15
Lab ID: 2111039-015 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Fluorene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Hexachlorobenzene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Hexachlorobutadiene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Hexachlorocyclopentadiene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Hexachloroethane	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Isophorone	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
m,p-Cresol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Naphthalene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Nitrobenzene	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
N-Nitroso-di-n-propylamine	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
N-Nitrosodiphenylamine	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
o-Cresol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Pentachlorophenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Phenanthrene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Phenol	ND	0.290		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Pyrene	ND	0.0581		mg/Kg-dry	1	11/07/2021 11:56 AM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	86.4	0.1-136		%Rec	1	11/07/2021 11:56 AM	77911
SS: 2-Fluorobiphenyl	77.3	16.3-118		%Rec	1	11/07/2021 11:56 AM	77911
SS: 2-Fluorophenol	74.4	4.2-97		%Rec	1	11/07/2021 11:56 AM	77911
SS: 4-Terphenyl-d14	121	0.1-147		%Rec	1	11/07/2021 11:56 AM	77911
SS: Nitrobenzene-d5	85.3	0.1-119		%Rec	1	11/07/2021 11:56 AM	77911
SS: Phenol-d6	82.3	9.82-111		%Rec	1	11/07/2021 11:56 AM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0318	0.0190	J	mg/Kg-dry	1	11/04/2021 12:22 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.54	1.00		pH Units	1	11/02/2021 1:20 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	15	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B16
Lab ID: 2111039-016
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	1,120	2.48		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Antimony	ND	1.49		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Arsenic	9.09	1.14		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Barium	23.1	0.124		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Beryllium	0.151	0.0495	J	mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Cadmium	0.675	0.0743		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Calcium	120,000	3.09	E	mg/Kg-dry	5	11/05/2021 2:35 PM	77900
Chromium	4.39	0.0594		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Cobalt	3.67	0.124		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Copper	17.8	0.149		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Iron	19,000	3.09		mg/Kg-dry	5	11/05/2021 2:35 PM	77900
Lead	8.31	0.594		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Magnesium	64,200	12.4		mg/Kg-dry	20	11/05/2021 3:09 PM	77900
Manganese	442	0.0594		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Nickel	10.4	0.233		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Potassium	329	2.48	B	mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Selenium	ND	1.29		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Silver	ND	0.0594		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Sodium	161	1.24	B	mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Thallium	ND	0.990		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Vanadium	6.45	0.149		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
Zinc	55.4	0.990		mg/Kg-dry	1	11/05/2021 1:25 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
1,1,1-Trichloroethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
1,1,2-Trichloroethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
1,1-Dichloroethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
1,1-Dichloroethene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
1,2-Dichloroethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
1,2-Dichloropropane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
2-Butanone	ND	0.00890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
2-Hexanone	ND	0.0223		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
4-Methyl-2-pentanone	ND	0.0223		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Acetone	ND	0.0223	c	mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Benzene	ND	0.000223		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B16
Lab ID: 2111039-016
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Bromoform	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Bromomethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Carbon disulfide	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Carbon tetrachloride	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Chlorobenzene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Chloroethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Chloroform	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Chloromethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
cis-1,2-Dichloroethene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
cis-1,3-Dichloropropene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Dibromochloromethane	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Ethylbenzene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
m,p-Xylene	ND	0.00178		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Methyl tert-butyl ether	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Methylene chloride	ND	0.00445		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
o-Xylene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Total Xylenes	ND	0.00178		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Styrene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Tetrachloroethene	ND	0.00178		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Toluene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
trans-1,2-Dichloroethene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
trans-1,3-Dichloropropene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Trichloroethene	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Vinyl chloride	ND	0.000890		mg/Kg-dry	0.74	11/03/2021 4:15 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	99.1	80-130		%Rec	0.74	11/03/2021 4:15 PM	R140976
SS: Dibromofluoromethane	110	76.1-120		%Rec	0.74	11/03/2021 4:15 PM	R140976
SS: Toluene-d8	103	85-115		%Rec	0.74	11/03/2021 4:15 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
1,2-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
1,3-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
1,4-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2,4,5-Trichlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2,4,6-Trichlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2,4-Dichlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B16
Lab ID: 2111039-016 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2,4-Dinitrophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2,4-Dinitrotoluene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2,6-Dinitrotoluene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2-Chloronaphthalene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2-Chlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2-Methylnaphthalene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2-Nitroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
2-Nitrophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
3,3-Dichlorobenzidine	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
3-Nitroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
4-Bromophenyl phenyl ether	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
4-Chloro-3-methylphenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
4-Chloroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
4-Chlorophenyl phenyl ether	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
4-Nitroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
4-Nitrophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Acenaphthene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Acenaphthylene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Anthracene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Benzo(a)anthracene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Benzo(a)pyrene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Benzo(b)fluoranthene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Benzo(g,h,i)perylene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Benzo(k)fluoranthene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Bis(2-chloroethoxy)methane	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Bis(2-chloroethyl)ether	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Butyl benzyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Carbazole	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Chrysene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Dibenzo(a,h)anthracene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Dibenzofuran	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Diethyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Dimethyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Di-n-butyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Di-n-octyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B16
Lab ID: 2111039-016
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Fluorene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Hexachlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Hexachlorobutadiene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Hexachlorocyclopentadiene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Hexachloroethane	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Isophorone	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
m,p-Cresol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Naphthalene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Nitrobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
N-Nitroso-di-n-propylamine	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
N-Nitrosodiphenylamine	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
o-Cresol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Pentachlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Phenanthrene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Phenol	ND	0.299		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Pyrene	ND	0.0598		mg/Kg-dry	1	11/07/2021 12:32 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	92.3	0.1-136		%Rec	1	11/07/2021 12:32 PM	77911
SS: 2-Fluorobiphenyl	88.9	16.3-118		%Rec	1	11/07/2021 12:32 PM	77911
SS: 2-Fluorophenol	80.4	4.2-97		%Rec	1	11/07/2021 12:32 PM	77911
SS: 4-Terphenyl-d14	129	0.1-147		%Rec	1	11/07/2021 12:32 PM	77911
SS: Nitrobenzene-d5	90.2	0.1-119		%Rec	1	11/07/2021 12:32 PM	77911
SS: Phenol-d6	87.5	9.82-111		%Rec	1	11/07/2021 12:32 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0202	0.0200	J	mg/Kg-dry	1	11/04/2021 12:26 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.06	1.00		pH Units	1	11/02/2021 1:21 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	17	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:47:02 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B17
Lab ID: 2111039-017
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	11,000	12.5		mg/Kg-dry	5	11/05/2021 2:29 PM	77900
Antimony	ND	1.50		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Arsenic	13.8	1.15		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Barium	75.7	0.125		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Beryllium	0.677	0.0500		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Cadmium	1.10	0.0750		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Calcium	3,100	0.625		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Chromium	16.3	0.0600		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Cobalt	8.56	0.125		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Copper	30.3	0.150		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Iron	37,800	6.25		mg/Kg-dry	10	11/05/2021 2:52 PM	77900
Lead	13.3	0.600		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Magnesium	2,960	0.625		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Manganese	532	0.0600		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Nickel	23.3	0.235		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Potassium	551	2.50	B	mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Selenium	ND	1.30		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Silver	ND	0.0600		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Sodium	176	1.25	B	mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Thallium	ND	1.00		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Vanadium	22.4	0.150		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
Zinc	78.8	1.00		mg/Kg-dry	1	11/05/2021 1:19 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
1,1,1-Trichloroethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
1,1,2-Trichloroethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
1,1-Dichloroethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
1,1-Dichloroethene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
1,2-Dichloroethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
1,2-Dichloropropane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
2-Butanone	ND	0.00931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
2-Hexanone	ND	0.0233		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
4-Methyl-2-pentanone	ND	0.0233		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Acetone	ND	0.0233	c	mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Benzene	ND	0.000233		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B17
Lab ID: 2111039-017
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Bromoform	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Bromomethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Carbon disulfide	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Carbon tetrachloride	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Chlorobenzene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Chloroethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Chloroform	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Chloromethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
cis-1,2-Dichloroethene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
cis-1,3-Dichloropropene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Dibromochloromethane	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Ethylbenzene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
m,p-Xylene	ND	0.00186		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Methyl tert-butyl ether	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Methylene chloride	ND	0.00466		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
o-Xylene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Total Xylenes	ND	0.00186		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Styrene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Tetrachloroethene	ND	0.00186		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Toluene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
trans-1,2-Dichloroethene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
trans-1,3-Dichloropropene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Trichloroethene	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Vinyl chloride	ND	0.000931		mg/Kg-dry	0.76	11/03/2021 4:48 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	100	80-130		%Rec	0.76	11/03/2021 4:48 PM	R140976
SS: Dibromofluoromethane	111	76.1-120		%Rec	0.76	11/03/2021 4:48 PM	R140976
SS: Toluene-d8	101	85-115		%Rec	0.76	11/03/2021 4:48 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
1,2-Dichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
1,3-Dichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
1,4-Dichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2,4,5-Trichlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2,4,6-Trichlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2,4-Dichlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B17
Lab ID: 2111039-017
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2,4-Dinitrophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2,4-Dinitrotoluene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2,6-Dinitrotoluene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2-Chloronaphthalene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2-Chlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2-Methylnaphthalene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2-Nitroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
2-Nitrophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
3,3-Dichlorobenzidine	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
3-Nitroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
4-Bromophenyl phenyl ether	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
4-Chloro-3-methylphenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
4-Chloroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
4-Chlorophenyl phenyl ether	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
4-Nitroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
4-Nitrophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Acenaphthene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Acenaphthylene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Anthracene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Benzo(a)anthracene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Benzo(a)pyrene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Benzo(b)fluoranthene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Benzo(g,h,i)perylene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Benzo(k)fluoranthene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Bis(2-chloroethoxy)methane	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Bis(2-chloroethyl)ether	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Butyl benzyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Carbazole	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Chrysene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Dibenzo(a,h)anthracene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Dibenzofuran	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Diethyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Dimethyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Di-n-butyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Di-n-octyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B17
Lab ID: 2111039-017
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Fluorene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Hexachlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Hexachlorobutadiene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Hexachlorocyclopentadiene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Hexachloroethane	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Isophorone	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
m,p-Cresol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Naphthalene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Nitrobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
N-Nitroso-di-n-propylamine	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
N-Nitrosodiphenylamine	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
o-Cresol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Pentachlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Phenanthrene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Phenol	ND	0.305		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Pyrene	ND	0.0611		mg/Kg-dry	1	11/07/2021 1:08 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	98.7	0.1-136		%Rec	1	11/07/2021 1:08 PM	77911
SS: 2-Fluorobiphenyl	81.7	16.3-118		%Rec	1	11/07/2021 1:08 PM	77911
SS: 2-Fluorophenol	86.1	4.2-97		%Rec	1	11/07/2021 1:08 PM	77911
SS: 4-Terphenyl-d14	127	0.1-147		%Rec	1	11/07/2021 1:08 PM	77911
SS: Nitrobenzene-d5	91.3	0.1-119		%Rec	1	11/07/2021 1:08 PM	77911
SS: Phenol-d6	89.4	9.82-111		%Rec	1	11/07/2021 1:08 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0347	0.0193	J	mg/Kg-dry	1	11/04/2021 12:29 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.37	1.00		pH Units	1	11/02/2021 1:22 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	18	1.0	c	wt%	1	11/03/2021 2:37 PM	R140931

Created: 11/9/2021 4:47:04 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B18
Lab ID: 2111039-018
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	11,100	12.5		mg/Kg-dry	5	11/05/2021 2:32 PM	77900
Antimony	ND	1.50		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Arsenic	7.20	1.15		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Barium	89.3	0.125		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Beryllium	0.614	0.0500		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Cadmium	0.902	0.0750		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Calcium	37,900	3.13		mg/Kg-dry	5	11/05/2021 2:32 PM	77900
Chromium	12.8	0.0600		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Cobalt	6.29	0.125		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Copper	17.8	0.150		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Iron	37,600	6.25		mg/Kg-dry	10	11/05/2021 3:06 PM	77900
Lead	8.67	0.600		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Magnesium	21,100	3.13		mg/Kg-dry	5	11/05/2021 2:32 PM	77900
Manganese	779	0.0600		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Nickel	25.4	0.235		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Potassium	611	2.50	B	mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Selenium	ND	1.30		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Silver	ND	0.0600		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Sodium	681	1.25	B	mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Thallium	ND	1.00		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Vanadium	20.9	0.150		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
Zinc	56.2	1.00		mg/Kg-dry	1	11/05/2021 1:22 PM	77900
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
1,1,1-Trichloroethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
1,1,2-Trichloroethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
1,1-Dichloroethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
1,1-Dichloroethene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
1,2-Dichloroethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
1,2-Dichloropropane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
2-Butanone	ND	0.0106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
2-Hexanone	ND	0.0265		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
4-Methyl-2-pentanone	ND	0.0265		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Acetone	ND	0.0265	c	mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Benzene	ND	0.000265		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B18
Lab ID: 2111039-018
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Bromoform	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Bromomethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Carbon disulfide	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Carbon tetrachloride	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Chlorobenzene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Chloroethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Chloroform	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Chloromethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
cis-1,2-Dichloroethene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
cis-1,3-Dichloropropene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Dibromochloromethane	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Ethylbenzene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
m,p-Xylene	ND	0.00212		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Methyl tert-butyl ether	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Methylene chloride	ND	0.00531		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
o-Xylene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Total Xylenes	ND	0.00212		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Styrene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Tetrachloroethene	ND	0.00212		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Toluene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
trans-1,2-Dichloroethene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
trans-1,3-Dichloropropene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Trichloroethene	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Vinyl chloride	ND	0.00106		mg/Kg-dry	0.85	11/03/2021 5:22 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	96.1	80-130		%Rec	0.85	11/03/2021 5:22 PM	R140976
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.85	11/03/2021 5:22 PM	R140976
SS: Toluene-d8	102	85-115		%Rec	0.85	11/03/2021 5:22 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
1,2-Dichlorobenzene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
1,3-Dichlorobenzene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
1,4-Dichlorobenzene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2,4,5-Trichlorophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2,4,6-Trichlorophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2,4-Dichlorophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B18
Lab ID: 2111039-018
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2,4-Dinitrophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2,4-Dinitrotoluene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2,6-Dinitrotoluene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2-Chloronaphthalene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2-Chlorophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2-Methylnaphthalene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2-Nitroaniline	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
2-Nitrophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
3,3-Dichlorobenzidine	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
3-Nitroaniline	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
4-Bromophenyl phenyl ether	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
4-Chloro-3-methylphenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
4-Chloroaniline	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
4-Chlorophenyl phenyl ether	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
4-Nitroaniline	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
4-Nitrophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Acenaphthene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Acenaphthylene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Anthracene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Benzo(a)anthracene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Benzo(a)pyrene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Benzo(b)fluoranthene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Benzo(g,h,i)perylene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Benzo(k)fluoranthene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Bis(2-chloroethoxy)methane	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Bis(2-chloroethyl)ether	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Butyl benzyl phthalate	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Carbazole	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Chrysene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Dibenzo(a,h)anthracene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Dibenzofuran	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Diethyl phthalate	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Dimethyl phthalate	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Di-n-butyl phthalate	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Di-n-octyl phthalate	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B18
Lab ID: 2111039-018
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Fluorene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Hexachlorobenzene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Hexachlorobutadiene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Hexachlorocyclopentadiene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Hexachloroethane	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Isophorone	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
m,p-Cresol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Naphthalene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Nitrobenzene	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
N-Nitroso-di-n-propylamine	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
N-Nitrosodiphenylamine	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
o-Cresol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Pentachlorophenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Phenanthrene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Phenol	ND	0.311		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Pyrene	ND	0.0621		mg/Kg-dry	1	11/07/2021 1:45 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	101	0.1-136		%Rec	1	11/07/2021 1:45 PM	77911
SS: 2-Fluorobiphenyl	82.2	16.3-118		%Rec	1	11/07/2021 1:45 PM	77911
SS: 2-Fluorophenol	82.1	4.2-97		%Rec	1	11/07/2021 1:45 PM	77911
SS: 4-Terphenyl-d14	129	0.1-147		%Rec	1	11/07/2021 1:45 PM	77911
SS: Nitrobenzene-d5	90.6	0.1-119		%Rec	1	11/07/2021 1:45 PM	77911
SS: Phenol-d6	87.2	9.82-111		%Rec	1	11/07/2021 1:45 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0412	0.0202	J	mg/Kg-dry	1	11/04/2021 12:32 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.01	1.00		pH Units	1	11/02/2021 1:23 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	20	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B19
Lab ID: 2111039-019
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	8,130	12.5		mg/Kg-dry	5	11/08/2021 2:39 PM	77942
Antimony	ND	1.50		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Arsenic	4.49	1.15	J	mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Barium	158	0.125		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Beryllium	0.493	0.0500		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Cadmium	0.550	0.0750		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Calcium	3,070	0.625		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Chromium	10.5	0.0600		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Cobalt	8.65	0.125		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Copper	9.26	0.150		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Iron	12,200	3.13		mg/Kg-dry	5	11/08/2021 2:39 PM	77942
Lead	14.6	0.600		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Magnesium	2,260	3.13		mg/Kg-dry	5	11/08/2021 2:39 PM	77942
Manganese	878	0.0600		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Nickel	10.3	0.235		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Potassium	798	2.50		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Selenium	ND	1.30		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Silver	0.190	0.0600	J	mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Sodium	481	1.25		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Thallium	ND	1.00		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Vanadium	20.6	0.150		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
Zinc	51.8	1.00		mg/Kg-dry	1	11/08/2021 12:08 PM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
1,1,1-Trichloroethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
1,1,2-Trichloroethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
1,1-Dichloroethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
1,1-Dichloroethene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
1,2-Dichloroethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
1,2-Dichloropropane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
2-Butanone	ND	0.00923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
2-Hexanone	ND	0.0231		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
4-Methyl-2-pentanone	ND	0.0231		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Acetone	ND	0.0231	c	mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Benzene	ND	0.000231		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B19
Lab ID: 2111039-019
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Bromoform	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Bromomethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Carbon disulfide	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Carbon tetrachloride	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Chlorobenzene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Chloroethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Chloroform	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Chloromethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
cis-1,2-Dichloroethene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
cis-1,3-Dichloropropene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Dibromochloromethane	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Ethylbenzene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
m,p-Xylene	ND	0.00185		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Methyl tert-butyl ether	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Methylene chloride	ND	0.00461		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
o-Xylene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Total Xylenes	ND	0.00185		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Styrene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Tetrachloroethene	ND	0.00185		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Toluene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
trans-1,2-Dichloroethene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
trans-1,3-Dichloropropene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Trichloroethene	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Vinyl chloride	ND	0.000923		mg/Kg-dry	0.76	11/03/2021 5:56 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.9	80-130		%Rec	0.76	11/03/2021 5:56 PM	R140976
SS: Dibromofluoromethane	114	76.1-120		%Rec	0.76	11/03/2021 5:56 PM	R140976
SS: Toluene-d8	101	85-115		%Rec	0.76	11/03/2021 5:56 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
1,2-Dichlorobenzene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
1,3-Dichlorobenzene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
1,4-Dichlorobenzene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2,4,5-Trichlorophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2,4,6-Trichlorophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2,4-Dichlorophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911

Created: 11/9/2021 4:47:14 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B19
Lab ID: 2111039-019
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2,4-Dinitrophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2,4-Dinitrotoluene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2,6-Dinitrotoluene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2-Chloronaphthalene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2-Chlorophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2-Methylnaphthalene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2-Nitroaniline	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
2-Nitrophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
3,3-Dichlorobenzidine	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
3-Nitroaniline	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
4-Bromophenyl phenyl ether	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
4-Chloro-3-methylphenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
4-Chloroaniline	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
4-Chlorophenyl phenyl ether	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
4-Nitroaniline	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
4-Nitrophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Acenaphthene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Acenaphthylene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Anthracene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Benzo(a)anthracene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Benzo(a)pyrene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Benzo(b)fluoranthene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Benzo(g,h,i)perylene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Benzo(k)fluoranthene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Bis(2-chloroethoxy)methane	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Bis(2-chloroethyl)ether	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Butyl benzyl phthalate	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Carbazole	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Chrysene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Dibenzo(a,h)anthracene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Dibenzofuran	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Diethyl phthalate	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Dimethyl phthalate	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Di-n-butyl phthalate	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Di-n-octyl phthalate	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B19
Lab ID: 2111039-019 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Fluorene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Hexachlorobenzene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Hexachlorobutadiene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Hexachlorocyclopentadiene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Hexachloroethane	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Isophorone	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
m,p-Cresol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Naphthalene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Nitrobenzene	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
N-Nitroso-di-n-propylamine	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
N-Nitrosodiphenylamine	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
o-Cresol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Pentachlorophenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Phenanthrene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Phenol	ND	0.303		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Pyrene	ND	0.0607		mg/Kg-dry	1	11/07/2021 2:22 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	95.2	0.1-136		%Rec	1	11/07/2021 2:22 PM	77911
SS: 2-Fluorobiphenyl	87.0	16.3-118		%Rec	1	11/07/2021 2:22 PM	77911
SS: 2-Fluorophenol	72.3	4.2-97		%Rec	1	11/07/2021 2:22 PM	77911
SS: 4-Terphenyl-d14	138	0.1-147		%Rec	1	11/07/2021 2:22 PM	77911
SS: Nitrobenzene-d5	91.9	0.1-119		%Rec	1	11/07/2021 2:22 PM	77911
SS: Phenol-d6	84.0	9.82-111		%Rec	1	11/07/2021 2:22 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0294	0.0187	J	mg/Kg-dry	1	11/04/2021 12:36 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.59	1.00		pH Units	1	11/02/2021 1:25 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	18	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B20
Lab ID: 2111039-020
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	8,010	12.0		mg/Kg-dry	5	11/08/2021 2:01 PM	77942
Antimony	ND	1.44		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Arsenic	10.3	1.11		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Barium	107	0.120		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Beryllium	0.507	0.0481		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Cadmium	0.753	0.0721		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Calcium	41,700	3.00		mg/Kg-dry	5	11/08/2021 2:01 PM	77942
Chromium	11.1	0.0577		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Cobalt	7.25	0.120		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Copper	17.5	0.144		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Iron	20,400	3.00		mg/Kg-dry	5	11/08/2021 2:01 PM	77942
Lead	19.9	0.577		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Magnesium	21,500	6.01		mg/Kg-dry	10	11/08/2021 4:27 PM	77942
Manganese	650	0.0577		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Nickel	14.7	0.226		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Potassium	751	2.40		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Selenium	ND	1.25		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Silver	0.0928	0.0577	J	mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Sodium	730	1.20		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Thallium	ND	0.962		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Vanadium	19.8	0.144		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
Zinc	68.9	0.962		mg/Kg-dry	1	11/08/2021 11:28 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
1,1,1-Trichloroethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
1,1,2-Trichloroethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
1,1-Dichloroethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
1,1-Dichloroethene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
1,2-Dichloroethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
1,2-Dichloropropane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
2-Butanone	ND	0.00922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
2-Hexanone	ND	0.0231		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
4-Methyl-2-pentanone	ND	0.0231		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Acetone	ND	0.0231	c	mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Benzene	ND	0.000231		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B20
Lab ID: 2111039-020
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Bromoform	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Bromomethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Carbon disulfide	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Carbon tetrachloride	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Chlorobenzene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Chloroethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Chloroform	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Chloromethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
cis-1,2-Dichloroethene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
cis-1,3-Dichloropropene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Dibromochloromethane	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Ethylbenzene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
m,p-Xylene	ND	0.00184		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Methyl tert-butyl ether	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Methylene chloride	ND	0.00461		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
o-Xylene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Total Xylenes	ND	0.00184		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Styrene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Tetrachloroethene	ND	0.00184		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Toluene	0.000968	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
trans-1,2-Dichloroethene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
trans-1,3-Dichloropropene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Trichloroethene	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Vinyl chloride	ND	0.000922		mg/Kg-dry	0.75	11/03/2021 6:29 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.6	80-130		%Rec	0.75	11/03/2021 6:29 PM	R140976
SS: Dibromofluoromethane	117	76.1-120		%Rec	0.75	11/03/2021 6:29 PM	R140976
SS: Toluene-d8	103	85-115		%Rec	0.75	11/03/2021 6:29 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
1,2-Dichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
1,3-Dichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
1,4-Dichlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2,4,5-Trichlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2,4,6-Trichlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2,4-Dichlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911

Created: 11/9/2021 4:47:17 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B20
Lab ID: 2111039-020
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2,4-Dinitrophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2,4-Dinitrotoluene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2,6-Dinitrotoluene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2-Chloronaphthalene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2-Chlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2-Methylnaphthalene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2-Nitroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
2-Nitrophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
3,3-Dichlorobenzidine	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
3-Nitroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
4-Bromophenyl phenyl ether	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
4-Chloro-3-methylphenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
4-Chloroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
4-Chlorophenyl phenyl ether	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
4-Nitroaniline	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
4-Nitrophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Acenaphthene	ND	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Acenaphthylene	ND	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Anthracene	ND	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Benzo(a)anthracene	ND	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Benzo(a)pyrene	0.102	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Benzo(b)fluoranthene	0.0614	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Benzo(g,h,i)perylene	0.0829	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Benzo(k)fluoranthene	0.0642	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Bis(2-chloroethoxy)methane	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Bis(2-chloroethyl)ether	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Butyl benzyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Carbazole	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Chrysene	0.131	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Dibenzo(a,h)anthracene	ND	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Dibenzofuran	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Diethyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Dimethyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Di-n-butyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Di-n-octyl phthalate	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911

Client ID: Patrick Engineering, Inc. **Report Date:** November 09, 2021
Project Name: Soil Testing **Workorder:** **2111039**

Client Sample ID: **B20** **Matrix:** SOIL
Lab ID: 2111039-020 **Date Received:** 10/29/2021 5:10 PM **Collection Date:** 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	0.253	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Fluorene	ND	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Hexachlorobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Hexachlorobutadiene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Hexachlorocyclopentadiene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Hexachloroethane	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Indeno(1,2,3-cd)pyrene	0.100	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Isophorone	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
m,p-Cresol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Naphthalene	ND	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Nitrobenzene	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
N-Nitroso-di-n-propylamine	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
N-Nitrosodiphenylamine	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
o-Cresol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Pentachlorophenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Phenanthrene	0.0939	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Phenol	ND	0.305		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Pyrene	0.196	0.0610		mg/Kg-dry	1	11/07/2021 2:58 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	97.2	0.1-136		%Rec	1	11/07/2021 2:58 PM	77911
SS: 2-Fluorobiphenyl	84.0	16.3-118		%Rec	1	11/07/2021 2:58 PM	77911
SS: 2-Fluorophenol	80.7	4.2-97		%Rec	1	11/07/2021 2:58 PM	77911
SS: 4-Terphenyl-d14	127	0.1-147		%Rec	1	11/07/2021 2:58 PM	77911
SS: Nitrobenzene-d5	87.0	0.1-119		%Rec	1	11/07/2021 2:58 PM	77911
SS: Phenol-d6	86.1	9.82-111		%Rec	1	11/07/2021 2:58 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0347	0.0205	J	mg/Kg-dry	1	11/04/2021 12:39 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.87	1.00		pH Units	1	11/02/2021 1:26 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	19	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B21
Lab ID: 2111039-021
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	9,630	12.0		mg/Kg-dry	5	11/08/2021 2:04 PM	77942
Antimony	ND	1.44		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Arsenic	11.2	1.11		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Barium	93.1	0.120	B	mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Beryllium	0.532	0.0481		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Cadmium	0.662	0.0721		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Calcium	22,600	3.00		mg/Kg-dry	5	11/08/2021 2:04 PM	77942
Chromium	11.6	0.0577		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Cobalt	7.63	0.120		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Copper	19.1	0.144		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Iron	40,600	6.01		mg/Kg-dry	10	11/08/2021 4:46 PM	77942
Lead	13.9	0.577		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Magnesium	13,400	3.00		mg/Kg-dry	5	11/08/2021 2:04 PM	77942
Manganese	621	0.0577		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Nickel	16.6	0.226		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Potassium	544	2.40	B	mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Selenium	ND	1.25		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Silver	0.0742	0.0577	J	mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Sodium	951	1.20	B	mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Thallium	ND	0.962		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Vanadium	20.0	0.144		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
Zinc	59.0	0.962		mg/Kg-dry	1	11/08/2021 11:31 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
1,1,1-Trichloroethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
1,1,2-Trichloroethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
1,1-Dichloroethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
1,1-Dichloroethene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
1,2-Dichloroethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
1,2-Dichloropropane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
2-Butanone	ND	0.0109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
2-Hexanone	ND	0.0273		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
4-Methyl-2-pentanone	ND	0.0273		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Acetone	ND	0.0273	c	mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Benzene	ND	0.000273		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B21
Lab ID: 2111039-021
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Bromoform	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Bromomethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Carbon disulfide	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Carbon tetrachloride	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Chlorobenzene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Chloroethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Chloroform	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Chloromethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
cis-1,2-Dichloroethene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
cis-1,3-Dichloropropene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Dibromochloromethane	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Ethylbenzene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
m,p-Xylene	ND	0.00218		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Methyl tert-butyl ether	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Methylene chloride	ND	0.00546		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
o-Xylene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Total Xylenes	ND	0.00218		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Styrene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Tetrachloroethene	ND	0.00218		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Toluene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
trans-1,2-Dichloroethene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
trans-1,3-Dichloropropene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Trichloroethene	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Vinyl chloride	ND	0.00109		mg/Kg-dry	0.91	11/03/2021 7:03 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	96.7	80-130		%Rec	0.91	11/03/2021 7:03 PM	R140976
SS: Dibromofluoromethane	111	76.1-120		%Rec	0.91	11/03/2021 7:03 PM	R140976
SS: Toluene-d8	102	85-115		%Rec	0.91	11/03/2021 7:03 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
1,2-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
1,3-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
1,4-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2,4,5-Trichlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2,4,6-Trichlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2,4-Dichlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B21
Lab ID: 2111039-021
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2,4-Dinitrophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2,4-Dinitrotoluene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2,6-Dinitrotoluene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2-Chloronaphthalene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2-Chlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2-Methylnaphthalene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2-Nitroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
2-Nitrophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
3,3-Dichlorobenzidine	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
3-Nitroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
4-Bromophenyl phenyl ether	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
4-Chloro-3-methylphenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
4-Chloroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
4-Chlorophenyl phenyl ether	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
4-Nitroaniline	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
4-Nitrophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Acenaphthene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Acenaphthylene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Anthracene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Benzo(a)anthracene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Benzo(a)pyrene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Benzo(b)fluoranthene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Benzo(g,h,i)perylene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Benzo(k)fluoranthene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Bis(2-chloroethoxy)methane	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Bis(2-chloroethyl)ether	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Butyl benzyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Carbazole	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Chrysene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Dibenzo(a,h)anthracene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Dibenzofuran	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Diethyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Dimethyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Di-n-butyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Di-n-octyl phthalate	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B21
Lab ID: 2111039-021
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Fluorene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Hexachlorobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Hexachlorobutadiene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Hexachlorocyclopentadiene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Hexachloroethane	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Isophorone	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
m,p-Cresol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Naphthalene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Nitrobenzene	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
N-Nitroso-di-n-propylamine	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
N-Nitrosodiphenylamine	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
o-Cresol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Pentachlorophenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Phenanthrene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Phenol	ND	0.299		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Pyrene	ND	0.0599		mg/Kg-dry	1	11/07/2021 3:35 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	86.6	0.1-136		%Rec	1	11/07/2021 3:35 PM	77911
SS: 2-Fluorobiphenyl	75.3	16.3-118		%Rec	1	11/07/2021 3:35 PM	77911
SS: 2-Fluorophenol	73.9	4.2-97		%Rec	1	11/07/2021 3:35 PM	77911
SS: 4-Terphenyl-d14	118	0.1-147		%Rec	1	11/07/2021 3:35 PM	77911
SS: Nitrobenzene-d5	76.5	0.1-119		%Rec	1	11/07/2021 3:35 PM	77911
SS: Phenol-d6	77.9	9.82-111		%Rec	1	11/07/2021 3:35 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0430	0.0200	J	mg/Kg-dry	1	11/04/2021 12:49 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.85	1.00		pH Units	1	11/02/2021 1:28 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	17	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B22
Lab ID: 2111039-022
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	13,600	12.5		mg/Kg-dry	5	11/08/2021 2:07 PM	77942
Antimony	ND	1.50		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Arsenic	9.42	1.15		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Barium	265	0.125		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Beryllium	0.738	0.0500		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Cadmium	0.697	0.0750		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Calcium	3,460	0.625		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Chromium	14.8	0.0600		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Cobalt	16.0	0.125		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Copper	14.6	0.150		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Iron	20,800	3.13		mg/Kg-dry	5	11/08/2021 2:07 PM	77942
Lead	6.71	0.600		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Magnesium	3,010	3.13		mg/Kg-dry	5	11/08/2021 2:07 PM	77942
Manganese	2,250	0.300		mg/Kg-dry	5	11/08/2021 2:07 PM	77942
Nickel	17.1	0.235		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Potassium	907	2.50		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Selenium	ND	1.30		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Silver	0.208	0.0600	J	mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Sodium	54.1	1.25	B	mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Thallium	ND	1.00		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Vanadium	29.4	0.150		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
Zinc	61.8	1.00		mg/Kg-dry	1	11/08/2021 11:34 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
1,1,1-Trichloroethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
1,1,2-Trichloroethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
1,1-Dichloroethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
1,1-Dichloroethene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
1,2-Dichloroethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
1,2-Dichloropropane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
2-Butanone	ND	0.0247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
2-Hexanone	ND	0.0619		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
4-Methyl-2-pentanone	ND	0.0619		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Acetone	ND	0.0619	c	mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Benzene	ND	0.000619		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B22
Lab ID: 2111039-022
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Bromoform	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Bromomethane	0.00359	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Carbon disulfide	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Carbon tetrachloride	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Chlorobenzene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Chloroethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Chloroform	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Chloromethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
cis-1,2-Dichloroethene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
cis-1,3-Dichloropropene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Dibromochloromethane	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Ethylbenzene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
m,p-Xylene	ND	0.00495		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Methyl tert-butyl ether	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Methylene chloride	ND	0.0124		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
o-Xylene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Total Xylenes	ND	0.00495		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Styrene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Tetrachloroethene	ND	0.00495		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Toluene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
trans-1,2-Dichloroethene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
trans-1,3-Dichloropropene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Trichloroethene	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Vinyl chloride	ND	0.00247		mg/Kg-dry	1.92	11/03/2021 7:37 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	88.9	80-130		%Rec	1.92	11/03/2021 7:37 PM	R140976
SS: Dibromofluoromethane	69.5	76.1-120	S	%Rec	1.92	11/03/2021 7:37 PM	R140976
SS: Toluene-d8	100	85-115		%Rec	1.92	11/03/2021 7:37 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
1,2-Dichlorobenzene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
1,3-Dichlorobenzene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
1,4-Dichlorobenzene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2,4,5-Trichlorophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2,4,6-Trichlorophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2,4-Dichlorophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B22
Lab ID: 2111039-022 **Date Received:** 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2,4-Dinitrophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2,4-Dinitrotoluene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2,6-Dinitrotoluene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2-Chloronaphthalene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2-Chlorophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2-Methylnaphthalene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2-Nitroaniline	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
2-Nitrophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
3,3-Dichlorobenzidine	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
3-Nitroaniline	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
4-Bromophenyl phenyl ether	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
4-Chloro-3-methylphenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
4-Chloroaniline	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
4-Chlorophenyl phenyl ether	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
4-Nitroaniline	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
4-Nitrophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Acenaphthene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Acenaphthylene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Anthracene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Benzo(a)anthracene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Benzo(a)pyrene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Benzo(b)fluoranthene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Benzo(g,h,i)perylene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Benzo(k)fluoranthene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Bis(2-chloroethoxy)methane	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Bis(2-chloroethyl)ether	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Butyl benzyl phthalate	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Carbazole	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Chrysene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Dibenzo(a,h)anthracene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Dibenzofuran	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Diethyl phthalate	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Dimethyl phthalate	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Di-n-butyl phthalate	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Di-n-octyl phthalate	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B22
Lab ID: 2111039-022
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Fluorene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Hexachlorobenzene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Hexachlorobutadiene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Hexachlorocyclopentadiene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Hexachloroethane	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Isophorone	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
m,p-Cresol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Naphthalene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Nitrobenzene	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
N-Nitroso-di-n-propylamine	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
N-Nitrosodiphenylamine	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
o-Cresol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Pentachlorophenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Phenanthrene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Phenol	ND	0.320		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Pyrene	ND	0.0640		mg/Kg-dry	1	11/07/2021 4:11 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	90.1	0.1-136		%Rec	1	11/07/2021 4:11 PM	77911
SS: 2-Fluorobiphenyl	72.8	16.3-118		%Rec	1	11/07/2021 4:11 PM	77911
SS: 2-Fluorophenol	79.6	4.2-97		%Rec	1	11/07/2021 4:11 PM	77911
SS: 4-Terphenyl-d14	130	0.1-147		%Rec	1	11/07/2021 4:11 PM	77911
SS: Nitrobenzene-d5	81.9	0.1-119		%Rec	1	11/07/2021 4:11 PM	77911
SS: Phenol-d6	83.3	9.82-111		%Rec	1	11/07/2021 4:11 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0453	0.0215	J	mg/Kg-dry	1	11/04/2021 12:52 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.22	1.00		pH Units	1	11/02/2021 1:29 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	22	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:24 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B23
Lab ID: 2111039-023
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	10,100	12.5		mg/Kg-dry	5	11/08/2021 2:10 PM	77942
Antimony	ND	1.50		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Arsenic	6.95	1.15		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Barium	112	0.125		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Beryllium	0.566	0.0500		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Cadmium	0.590	0.0750		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Calcium	7,940	0.625		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Chromium	12.4	0.0600		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Cobalt	7.18	0.125		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Copper	15.2	0.150		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Iron	17,200	3.13		mg/Kg-dry	5	11/08/2021 2:10 PM	77942
Lead	13.9	0.600		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Magnesium	5,450	3.13		mg/Kg-dry	5	11/08/2021 2:10 PM	77942
Manganese	400	0.0600		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Nickel	13.2	0.235		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Potassium	750	2.50		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Selenium	ND	1.30		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Silver	0.0907	0.0600	J	mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Sodium	165	1.25	B	mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Thallium	ND	1.00		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Vanadium	21.4	0.150		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
Zinc	52.0	1.00		mg/Kg-dry	1	11/08/2021 11:37 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
1,1,1-Trichloroethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
1,1,2-Trichloroethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
1,1-Dichloroethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
1,1-Dichloroethene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
1,2-Dichloroethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
1,2-Dichloropropane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
2-Butanone	ND	0.0102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
2-Hexanone	ND	0.0254		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
4-Methyl-2-pentanone	ND	0.0254		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Acetone	ND	0.0254	c	mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Benzene	ND	0.000254		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B23
Lab ID: 2111039-023
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Bromoform	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Bromomethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Carbon disulfide	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Carbon tetrachloride	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Chlorobenzene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Chloroethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Chloroform	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Chloromethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
cis-1,2-Dichloroethene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
cis-1,3-Dichloropropene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Dibromochloromethane	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Ethylbenzene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
m,p-Xylene	ND	0.00203		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Methyl tert-butyl ether	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Methylene chloride	ND	0.00508		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
o-Xylene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Total Xylenes	ND	0.00203		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Styrene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Tetrachloroethene	ND	0.00203		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Toluene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
trans-1,2-Dichloroethene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
trans-1,3-Dichloropropene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Trichloroethene	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Vinyl chloride	ND	0.00102		mg/Kg-dry	0.8	11/03/2021 8:11 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	93.0	80-130		%Rec	0.8	11/03/2021 8:11 PM	R140976
SS: Dibromofluoromethane	111	76.1-120		%Rec	0.8	11/03/2021 8:11 PM	R140976
SS: Toluene-d8	101	85-115		%Rec	0.8	11/03/2021 8:11 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
1,2-Dichlorobenzene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
1,3-Dichlorobenzene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
1,4-Dichlorobenzene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2,4,5-Trichlorophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2,4,6-Trichlorophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2,4-Dichlorophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911

Created: 11/9/2021 4:47:28 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B23
Lab ID: 2111039-023
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2,4-Dinitrophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2,4-Dinitrotoluene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2,6-Dinitrotoluene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2-Chloronaphthalene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2-Chlorophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2-Methylnaphthalene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2-Nitroaniline	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
2-Nitrophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
3,3-Dichlorobenzidine	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
3-Nitroaniline	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
4-Bromophenyl phenyl ether	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
4-Chloro-3-methylphenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
4-Chloroaniline	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
4-Chlorophenyl phenyl ether	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
4-Nitroaniline	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
4-Nitrophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Acenaphthene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Acenaphthylene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Anthracene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Benzo(a)anthracene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Benzo(a)pyrene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Benzo(b)fluoranthene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Benzo(g,h,i)perylene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Benzo(k)fluoranthene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Bis(2-chloroethoxy)methane	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Bis(2-chloroethyl)ether	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Butyl benzyl phthalate	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Carbazole	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Chrysene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Dibenzo(a,h)anthracene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Dibenzofuran	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Diethyl phthalate	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Dimethyl phthalate	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Di-n-butyl phthalate	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Di-n-octyl phthalate	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B23
Lab ID: 2111039-023
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Fluorene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Hexachlorobenzene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Hexachlorobutadiene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Hexachlorocyclopentadiene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Hexachloroethane	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Isophorone	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
m,p-Cresol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Naphthalene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Nitrobenzene	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
N-Nitroso-di-n-propylamine	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
N-Nitrosodiphenylamine	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
o-Cresol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Pentachlorophenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Phenanthrene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Phenol	ND	0.316		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Pyrene	ND	0.0632		mg/Kg-dry	1	11/07/2021 4:47 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	86.5	0.1-136		%Rec	1	11/07/2021 4:47 PM	77911
SS: 2-Fluorobiphenyl	77.4	16.3-118		%Rec	1	11/07/2021 4:47 PM	77911
SS: 2-Fluorophenol	73.9	4.2-97		%Rec	1	11/07/2021 4:47 PM	77911
SS: 4-Terphenyl-d14	123	0.1-147		%Rec	1	11/07/2021 4:47 PM	77911
SS: Nitrobenzene-d5	81.5	0.1-119		%Rec	1	11/07/2021 4:47 PM	77911
SS: Phenol-d6	80.6	9.82-111		%Rec	1	11/07/2021 4:47 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0358	0.0201	J	mg/Kg-dry	1	11/04/2021 12:56 PM	77865
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.54	1.00		pH Units	1	11/02/2021 1:30 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	21	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:29 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B24
Lab ID: 2111039-024
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	8,680	12.3		mg/Kg-dry	5	11/08/2021 2:13 PM	77942
Antimony	ND	1.47		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Arsenic	9.11	1.13		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Barium	116	0.123		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Beryllium	0.496	0.0490		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Cadmium	0.694	0.0735		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Calcium	37,100	3.06		mg/Kg-dry	5	11/08/2021 2:13 PM	77942
Chromium	13.3	0.0588		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Cobalt	8.28	0.123		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Copper	18.6	0.147		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Iron	19,200	3.06		mg/Kg-dry	5	11/08/2021 2:13 PM	77942
Lead	17.3	0.588		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Magnesium	20,400	3.06		mg/Kg-dry	5	11/08/2021 2:13 PM	77942
Manganese	612	0.0588		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Nickel	19.4	0.230		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Potassium	859	2.45		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Selenium	ND	1.27		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Silver	ND	0.0588		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Sodium	482	1.23		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Thallium	ND	0.980		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Vanadium	20.5	0.147		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
Zinc	66.8	0.980		mg/Kg-dry	1	11/08/2021 11:40 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
1,1,1-Trichloroethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
1,1,2-Trichloroethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
1,1-Dichloroethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
1,1-Dichloroethene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
1,2-Dichloroethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
1,2-Dichloropropane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
2-Butanone	ND	0.0101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
2-Hexanone	ND	0.0252		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
4-Methyl-2-pentanone	ND	0.0252		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Acetone	ND	0.0252	c	mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Benzene	ND	0.000252		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B24
Lab ID: 2111039-024
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Bromoform	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Bromomethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Carbon disulfide	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Carbon tetrachloride	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Chlorobenzene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Chloroethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Chloroform	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Chloromethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
cis-1,2-Dichloroethene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Dibromochloromethane	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Ethylbenzene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
m,p-Xylene	ND	0.00202		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Methyl tert-butyl ether	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Methylene chloride	ND	0.00504		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
o-Xylene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Total Xylenes	ND	0.00202		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Styrene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Tetrachloroethene	ND	0.00202		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Toluene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
trans-1,2-Dichloroethene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Trichloroethene	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Vinyl chloride	ND	0.00101		mg/Kg-dry	0.8	11/03/2021 8:44 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	93.6	80-130		%Rec	0.8	11/03/2021 8:44 PM	R140976
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.8	11/03/2021 8:44 PM	R140976
SS: Toluene-d8	99.7	85-115		%Rec	0.8	11/03/2021 8:44 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
1,2-Dichlorobenzene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
1,3-Dichlorobenzene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
1,4-Dichlorobenzene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2,4,5-Trichlorophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2,4,6-Trichlorophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2,4-Dichlorophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B24
Lab ID: 2111039-024
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2,4-Dinitrophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2,4-Dinitrotoluene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2,6-Dinitrotoluene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2-Chloronaphthalene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2-Chlorophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2-Methylnaphthalene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2-Nitroaniline	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
2-Nitrophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
3,3-Dichlorobenzidine	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
3-Nitroaniline	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
4-Bromophenyl phenyl ether	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
4-Chloro-3-methylphenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
4-Chloroaniline	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
4-Chlorophenyl phenyl ether	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
4-Nitroaniline	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
4-Nitrophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Acenaphthene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Acenaphthylene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Anthracene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Benzo(a)anthracene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Benzo(a)pyrene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Benzo(b)fluoranthene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Benzo(g,h,i)perylene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Benzo(k)fluoranthene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Bis(2-chloroethoxy)methane	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Bis(2-chloroethyl)ether	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Butyl benzyl phthalate	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Carbazole	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Chrysene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Dibenzo(a,h)anthracene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Dibenzofuran	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Diethyl phthalate	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Dimethyl phthalate	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Di-n-butyl phthalate	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Di-n-octyl phthalate	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B24
Lab ID: 2111039-024
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Fluorene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Hexachlorobenzene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Hexachlorobutadiene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Hexachlorocyclopentadiene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Hexachloroethane	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Isophorone	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
m,p-Cresol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Naphthalene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Nitrobenzene	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
N-Nitroso-di-n-propylamine	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
N-Nitrosodiphenylamine	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
o-Cresol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Pentachlorophenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Phenanthrene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Phenol	ND	0.315		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Pyrene	ND	0.0630		mg/Kg-dry	1	11/07/2021 5:24 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	91.8	0.1-136		%Rec	1	11/07/2021 5:24 PM	77911
SS: 2-Fluorobiphenyl	82.3	16.3-118		%Rec	1	11/07/2021 5:24 PM	77911
SS: 2-Fluorophenol	79.2	4.2-97		%Rec	1	11/07/2021 5:24 PM	77911
SS: 4-Terphenyl-d14	134	0.1-147		%Rec	1	11/07/2021 5:24 PM	77911
SS: Nitrobenzene-d5	85.2	0.1-119		%Rec	1	11/07/2021 5:24 PM	77911
SS: Phenol-d6	83.1	9.82-111		%Rec	1	11/07/2021 5:24 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0289	0.0194	J	mg/Kg-dry	1	11/08/2021 12:46 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	6.90	1.00		pH Units	1	11/02/2021 1:48 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	21	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:33 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B25
Lab ID: 2111039-025
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	10,000	12.4		mg/Kg-dry	5	11/08/2021 2:16 PM	77942
Antimony	ND	1.49		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Arsenic	9.90	1.14		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Barium	87.6	0.124		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Beryllium	0.568	0.0495		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Cadmium	0.538	0.0743		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Calcium	2,070	0.619		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Chromium	13.1	0.0594		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Cobalt	9.91	0.124		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Copper	16.5	0.149		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Iron	18,700	3.09		mg/Kg-dry	5	11/08/2021 2:16 PM	77942
Lead	12.0	0.594		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Magnesium	2,730	3.09		mg/Kg-dry	5	11/08/2021 2:16 PM	77942
Manganese	570	0.0594		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Nickel	17.5	0.233		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Potassium	545	2.48		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Selenium	ND	1.29		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Silver	ND	0.0594		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Sodium	260	1.24		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Thallium	ND	0.990		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Vanadium	22.1	0.149		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
Zinc	53.1	0.990		mg/Kg-dry	1	11/08/2021 11:44 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
1,1,1-Trichloroethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
1,1,2-Trichloroethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
1,1-Dichloroethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
1,1-Dichloroethene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
1,2-Dichloroethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
1,2-Dichloropropane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
2-Butanone	ND	0.00967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
2-Hexanone	ND	0.0242		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
4-Methyl-2-pentanone	ND	0.0242		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Acetone	ND	0.0242	c	mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Benzene	ND	0.000242		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B25
Lab ID: 2111039-025
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Bromoform	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Bromomethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Carbon disulfide	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Carbon tetrachloride	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Chlorobenzene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Chloroethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Chloroform	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Chloromethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
cis-1,2-Dichloroethene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
cis-1,3-Dichloropropene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Dibromochloromethane	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Ethylbenzene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
m,p-Xylene	ND	0.00193		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Methyl tert-butyl ether	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Methylene chloride	ND	0.00483		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
o-Xylene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Total Xylenes	ND	0.00193		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Styrene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Tetrachloroethene	ND	0.00193		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Toluene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
trans-1,2-Dichloroethene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
trans-1,3-Dichloropropene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Trichloroethene	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Vinyl chloride	ND	0.000967		mg/Kg-dry	0.82	11/03/2021 9:18 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	98.2	80-130		%Rec	0.82	11/03/2021 9:18 PM	R140976
SS: Dibromofluoromethane	114	76.1-120		%Rec	0.82	11/03/2021 9:18 PM	R140976
SS: Toluene-d8	103	85-115		%Rec	0.82	11/03/2021 9:18 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
1,2-Dichlorobenzene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
1,3-Dichlorobenzene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
1,4-Dichlorobenzene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2,4,5-Trichlorophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2,4,6-Trichlorophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2,4-Dichlorophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911

Created: 11/9/2021 4:47:36 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B25
Lab ID: 2111039-025
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2,4-Dinitrophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2,4-Dinitrotoluene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2,6-Dinitrotoluene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2-Chloronaphthalene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2-Chlorophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2-Methylnaphthalene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2-Nitroaniline	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
2-Nitrophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
3,3-Dichlorobenzidine	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
3-Nitroaniline	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
4-Bromophenyl phenyl ether	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
4-Chloro-3-methylphenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
4-Chloroaniline	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
4-Chlorophenyl phenyl ether	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
4-Nitroaniline	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
4-Nitrophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Acenaphthene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Acenaphthylene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Anthracene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Benzo(a)anthracene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Benzo(a)pyrene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Benzo(b)fluoranthene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Benzo(g,h,i)perylene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Benzo(k)fluoranthene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Bis(2-chloroethoxy)methane	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Bis(2-chloroethyl)ether	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Butyl benzyl phthalate	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Carbazole	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Chrysene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Dibenzo(a,h)anthracene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Dibenzofuran	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Diethyl phthalate	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Dimethyl phthalate	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Di-n-butyl phthalate	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Di-n-octyl phthalate	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B25
Lab ID: 2111039-025
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Fluorene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Hexachlorobenzene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Hexachlorobutadiene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Hexachlorocyclopentadiene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Hexachloroethane	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Isophorone	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
m,p-Cresol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Naphthalene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Nitrobenzene	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
N-Nitroso-di-n-propylamine	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
N-Nitrosodiphenylamine	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
o-Cresol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Pentachlorophenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Phenanthrene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Phenol	ND	0.293		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Pyrene	ND	0.0585		mg/Kg-dry	1	11/07/2021 5:59 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	80.0	0.1-136		%Rec	1	11/07/2021 5:59 PM	77911
SS: 2-Fluorobiphenyl	68.8	16.3-118		%Rec	1	11/07/2021 5:59 PM	77911
SS: 2-Fluorophenol	77.3	4.2-97		%Rec	1	11/07/2021 5:59 PM	77911
SS: 4-Terphenyl-d14	123	0.1-147		%Rec	1	11/07/2021 5:59 PM	77911
SS: Nitrobenzene-d5	75.2	0.1-119		%Rec	1	11/07/2021 5:59 PM	77911
SS: Phenol-d6	76.9	9.82-111		%Rec	1	11/07/2021 5:59 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0316	0.0181	J	mg/Kg-dry	1	11/08/2021 12:50 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.07	1.00		pH Units	1	11/02/2021 1:40 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	15	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:37 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B26
Lab ID: 2111039-026
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	7,730	12.5		mg/Kg-dry	5	11/08/2021 2:30 PM	77942
Antimony	ND	1.50		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Arsenic	8.06	1.15		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Barium	97.9	0.125		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Beryllium	0.491	0.0500		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Cadmium	0.562	0.0750		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Calcium	29,900	3.13		mg/Kg-dry	5	11/08/2021 2:30 PM	77942
Chromium	14.7	0.0600		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Cobalt	7.51	0.125		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Copper	18.2	0.150		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Iron	16,900	3.13		mg/Kg-dry	5	11/08/2021 2:30 PM	77942
Lead	17.1	0.600		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Magnesium	16,200	3.13		mg/Kg-dry	5	11/08/2021 2:30 PM	77942
Manganese	639	0.0600		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Nickel	13.5	0.235		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Potassium	746	2.50		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Selenium	ND	1.30		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Silver	0.0873	0.0600	J	mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Sodium	293	1.25	B	mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Thallium	ND	1.00		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Vanadium	20.8	0.150		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
Zinc	75.4	1.00		mg/Kg-dry	1	11/08/2021 11:47 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
1,1,1-Trichloroethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
1,1,2-Trichloroethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
1,1-Dichloroethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
1,1-Dichloroethene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
1,2-Dichloroethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
1,2-Dichloropropane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
2-Butanone	ND	0.00962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
2-Hexanone	ND	0.0241		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
4-Methyl-2-pentanone	ND	0.0241		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Acetone	ND	0.0241	c	mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Benzene	ND	0.000241		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B26
Lab ID: 2111039-026
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Bromoform	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Bromomethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Carbon disulfide	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Carbon tetrachloride	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Chlorobenzene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Chloroethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Chloroform	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Chloromethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
cis-1,2-Dichloroethene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
cis-1,3-Dichloropropene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Dibromochloromethane	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Ethylbenzene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
m,p-Xylene	ND	0.00192		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Methyl tert-butyl ether	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Methylene chloride	ND	0.00481		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
o-Xylene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Total Xylenes	ND	0.00192		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Styrene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Tetrachloroethene	ND	0.00192		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Toluene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
trans-1,2-Dichloroethene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
trans-1,3-Dichloropropene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Trichloroethene	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Vinyl chloride	ND	0.000962		mg/Kg-dry	0.77	11/03/2021 9:52 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.0	80-130		%Rec	0.77	11/03/2021 9:52 PM	R140976
SS: Dibromofluoromethane	110	76.1-120		%Rec	0.77	11/03/2021 9:52 PM	R140976
SS: Toluene-d8	102	85-115		%Rec	0.77	11/03/2021 9:52 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
1,2-Dichlorobenzene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
1,3-Dichlorobenzene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
1,4-Dichlorobenzene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2,4,5-Trichlorophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2,4,6-Trichlorophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2,4-Dichlorophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B26
Lab ID: 2111039-026
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2,4-Dinitrophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2,4-Dinitrotoluene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2,6-Dinitrotoluene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2-Chloronaphthalene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2-Chlorophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2-Methylnaphthalene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2-Nitroaniline	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
2-Nitrophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
3,3-Dichlorobenzidine	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
3-Nitroaniline	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
4-Bromophenyl phenyl ether	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
4-Chloro-3-methylphenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
4-Chloroaniline	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
4-Chlorophenyl phenyl ether	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
4-Nitroaniline	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
4-Nitrophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Acenaphthene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Acenaphthylene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Anthracene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Benzo(a)anthracene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Benzo(a)pyrene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Benzo(b)fluoranthene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Benzo(g,h,i)perylene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Benzo(k)fluoranthene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Bis(2-chloroethoxy)methane	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Bis(2-chloroethyl)ether	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Butyl benzyl phthalate	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Carbazole	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Chrysene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Dibenzo(a,h)anthracene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Dibenzofuran	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Diethyl phthalate	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Dimethyl phthalate	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Di-n-butyl phthalate	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Di-n-octyl phthalate	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B26
Lab ID: 2111039-026
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Fluorene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Hexachlorobenzene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Hexachlorobutadiene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Hexachlorocyclopentadiene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Hexachloroethane	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Isophorone	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
m,p-Cresol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Naphthalene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Nitrobenzene	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
N-Nitroso-di-n-propylamine	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
N-Nitrosodiphenylamine	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
o-Cresol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Pentachlorophenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Phenanthrene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Phenol	ND	0.310		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Pyrene	ND	0.0619		mg/Kg-dry	1	11/08/2021 1:47 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	104	0.1-136		%Rec	1	11/08/2021 1:47 PM	77911
SS: 2-Fluorobiphenyl	96.8	16.3-118		%Rec	1	11/08/2021 1:47 PM	77911
SS: 2-Fluorophenol	95.6	4.2-97		%Rec	1	11/08/2021 1:47 PM	77911
SS: 4-Terphenyl-d14	140	0.1-147		%Rec	1	11/08/2021 1:47 PM	77911
SS: Nitrobenzene-d5	102	0.1-119		%Rec	1	11/08/2021 1:47 PM	77911
SS: Phenol-d6	96.7	9.82-111		%Rec	1	11/08/2021 1:47 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0295	0.0208	J	mg/Kg-dry	1	11/08/2021 12:53 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.54	1.00		pH Units	1	11/02/2021 1:42 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	20	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:42 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B27
Lab ID: 2111039-027
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	9,360	12.5		mg/Kg-dry	5	11/08/2021 5:04 PM	77973
Antimony	ND	1.50		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Arsenic	10.8	1.15		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Barium	114	0.125		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Beryllium	0.536	0.0500		mg/Kg-dry	1	11/09/2021 10:48 AM	77973
Cadmium	0.741	0.0750		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Calcium	8,230	0.625		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Chromium	11.5	0.0600		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Cobalt	9.82	0.125		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Copper	14.8	0.150		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Iron	21,500	3.13		mg/Kg-dry	5	11/08/2021 5:04 PM	77973
Lead	14.1	0.600		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Magnesium	6,410	3.13		mg/Kg-dry	5	11/08/2021 5:04 PM	77973
Manganese	912	0.0600	E	mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Nickel	15.1	0.235		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Potassium	711	2.50		mg/Kg-dry	1	11/09/2021 10:48 AM	77973
Selenium	ND	1.30		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Silver	0.437	0.0600		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Sodium	462	1.25		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Thallium	ND	1.00		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Vanadium	20.8	0.150		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
Zinc	56.9	1.00		mg/Kg-dry	1	11/08/2021 3:39 PM	77973
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
1,1,1-Trichloroethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
1,1,2,2-Tetrachloroethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
1,1,2-Trichloroethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
1,1-Dichloroethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
1,1-Dichloroethene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
1,2-Dichloroethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
1,2-Dichloropropane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
2-Butanone	ND	0.00932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
2-Hexanone	ND	0.0233		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
4-Methyl-2-pentanone	ND	0.0233		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Acetone	ND	0.0233	c	mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Benzene	ND	0.000233		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B27
Lab ID: 2111039-027
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Bromoform	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Bromomethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Carbon disulfide	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Carbon tetrachloride	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Chlorobenzene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Chloroethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Chloroform	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Chloromethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
cis-1,2-Dichloroethene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
cis-1,3-Dichloropropene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Dibromochloromethane	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Ethylbenzene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
m,p-Xylene	ND	0.00186		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Methyl tert-butyl ether	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Methylene chloride	ND	0.00466		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
o-Xylene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Total Xylenes	ND	0.00186		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Styrene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Tetrachloroethene	ND	0.00186		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Toluene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
trans-1,2-Dichloroethene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
trans-1,3-Dichloropropene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Trichloroethene	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Vinyl chloride	ND	0.000932		mg/Kg-dry	0.78	11/03/2021 10:25 PM	R140976
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	98.0	80-130		%Rec	0.78	11/03/2021 10:25 PM	R140976
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.78	11/03/2021 10:25 PM	R140976
SS: Toluene-d8	101	85-115		%Rec	0.78	11/03/2021 10:25 PM	R140976
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
1,2-Dichlorobenzene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
1,3-Dichlorobenzene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
1,4-Dichlorobenzene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2,4,5-Trichlorophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2,4,6-Trichlorophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2,4-Dichlorophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911

Created: 11/9/2021 4:47:46 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B27
Lab ID: 2111039-027
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2,4-Dinitrophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2,4-Dinitrotoluene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2,6-Dinitrotoluene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2-Chloronaphthalene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2-Chlorophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2-Methylnaphthalene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2-Nitroaniline	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
2-Nitrophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
3,3-Dichlorobenzidine	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
3-Nitroaniline	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
4,6-Dinitro-2-methylphenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
4-Bromophenyl phenyl ether	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
4-Chloro-3-methylphenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
4-Chloroaniline	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
4-Chlorophenyl phenyl ether	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
4-Nitroaniline	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
4-Nitrophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Acenaphthene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Acenaphthylene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Anthracene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Benzo(a)anthracene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Benzo(a)pyrene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Benzo(b)fluoranthene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Benzo(g,h,i)perylene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Benzo(k)fluoranthene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Bis(2-chloroethoxy)methane	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Bis(2-chloroethyl)ether	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Bis(2-chloroisopropyl)ether	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Bis(2-ethylhexyl)phthalate	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Butyl benzyl phthalate	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Carbazole	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Chrysene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Dibenzo(a,h)anthracene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Dibenzofuran	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Diethyl phthalate	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Dimethyl phthalate	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Di-n-butyl phthalate	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Di-n-octyl phthalate	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B27
Lab ID: 2111039-027
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Fluorene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Hexachlorobenzene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Hexachlorobutadiene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Hexachlorocyclopentadiene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Hexachloroethane	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Indeno(1,2,3-cd)pyrene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Isophorone	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
m,p-Cresol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Naphthalene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Nitrobenzene	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
N-Nitroso-di-n-propylamine	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
N-Nitrosodiphenylamine	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
o-Cresol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Pentachlorophenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Phenanthrene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Phenol	ND	0.296		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Pyrene	ND	0.0592		mg/Kg-dry	1	11/08/2021 2:24 PM	77911
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	90.2	0.1-136		%Rec	1	11/08/2021 2:24 PM	77911
SS: 2-Fluorobiphenyl	92.6	16.3-118		%Rec	1	11/08/2021 2:24 PM	77911
SS: 2-Fluorophenol	84.1	4.2-97		%Rec	1	11/08/2021 2:24 PM	77911
SS: 4-Terphenyl-d14	140	0.1-147		%Rec	1	11/08/2021 2:24 PM	77911
SS: Nitrobenzene-d5	95.9	0.1-119		%Rec	1	11/08/2021 2:24 PM	77911
SS: Phenol-d6	89.0	9.82-111		%Rec	1	11/08/2021 2:24 PM	77911
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0310	0.0189	J	mg/Kg-dry	1	11/08/2021 12:56 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.36	1.00		pH Units	1	11/02/2021 1:43 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	16	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:46 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B28
Lab ID: 2111039-028
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	6,600	12.3		mg/Kg-dry	5	11/08/2021 2:33 PM	77942
Antimony	ND	1.47		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Arsenic	12.8	1.13		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Barium	87.2	0.123		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Beryllium	0.507	0.0490		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Cadmium	0.754	0.0735		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Calcium	63,600	3.06		mg/Kg-dry	5	11/08/2021 2:33 PM	77942
Chromium	11.5	0.0588		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Cobalt	6.26	0.123		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Copper	16.5	0.147		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Iron	25,400	6.13		mg/Kg-dry	10	11/08/2021 4:49 PM	77942
Lead	9.93	0.588		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Magnesium	35,900	6.13		mg/Kg-dry	10	11/08/2021 4:49 PM	77942
Manganese	661	0.0588		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Nickel	17.6	0.230		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Potassium	684	2.45		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Selenium	ND	1.27		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Silver	ND	0.0588		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Sodium	213	1.23	B	mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Thallium	ND	0.980		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Vanadium	15.5	0.147		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
Zinc	65.4	0.980		mg/Kg-dry	1	11/08/2021 11:50 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
1,1,1-Trichloroethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
1,1,2,2-Tetrachloroethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
1,1,2-Trichloroethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
1,1-Dichloroethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
1,1-Dichloroethene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
1,2-Dichloroethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
1,2-Dichloropropane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
2-Butanone	ND	0.0113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
2-Hexanone	ND	0.0283		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
4-Methyl-2-pentanone	ND	0.0283		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Acetone	ND	0.0283	c	mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Benzene	ND	0.000283		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B28
Lab ID: 2111039-028
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Bromoform	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Bromomethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Carbon disulfide	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Carbon tetrachloride	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Chlorobenzene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Chloroethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Chloroform	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Chloromethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
cis-1,2-Dichloroethene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
cis-1,3-Dichloropropene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Dibromochloromethane	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Ethylbenzene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
m,p-Xylene	ND	0.00227		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Methyl tert-butyl ether	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Methylene chloride	ND	0.00567		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
o-Xylene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Total Xylenes	ND	0.00227		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Styrene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Tetrachloroethene	ND	0.00227		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Toluene	0.00117	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
trans-1,2-Dichloroethene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
trans-1,3-Dichloropropene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Trichloroethene	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Vinyl chloride	ND	0.00113		mg/Kg-dry	0.94	11/04/2021 2:10 PM	R141022
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	97.1	80-130		%Rec	0.94	11/04/2021 2:10 PM	R141022
SS: Dibromofluoromethane	113	76.1-120		%Rec	0.94	11/04/2021 2:10 PM	R141022
SS: Toluene-d8	100	85-115		%Rec	0.94	11/04/2021 2:10 PM	R141022
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
1,2-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
1,3-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
1,4-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2,4,5-Trichlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2,4,6-Trichlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2,4-Dichlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B28
Lab ID: 2111039-028
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2,4-Dinitrophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2,4-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2,6-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2-Chloronaphthalene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2-Chlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2-Methylnaphthalene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2-Nitroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
2-Nitrophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
3,3-Dichlorobenzidine	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
3-Nitroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
4,6-Dinitro-2-methylphenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
4-Bromophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
4-Chloro-3-methylphenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
4-Chloroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
4-Chlorophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
4-Nitroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
4-Nitrophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Acenaphthene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Acenaphthylene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Anthracene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Benzo(a)anthracene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Benzo(a)pyrene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Benzo(b)fluoranthene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Benzo(g,h,i)perylene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Benzo(k)fluoranthene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Bis(2-chloroethoxy)methane	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Bis(2-chloroethyl)ether	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Bis(2-chloroisopropyl)ether	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Bis(2-ethylhexyl)phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Butyl benzyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Carbazole	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Chrysene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Dibenzo(a,h)anthracene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Dibenzofuran	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Diethyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Dimethyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Di-n-butyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Di-n-octyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B28
Lab ID: 2111039-028
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Fluorene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Hexachlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Hexachlorobutadiene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Hexachlorocyclopentadiene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Hexachloroethane	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Indeno(1,2,3-cd)pyrene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Isophorone	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
m,p-Cresol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Naphthalene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Nitrobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
N-Nitroso-di-n-propylamine	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
N-Nitrosodiphenylamine	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
o-Cresol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Pentachlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Phenanthrene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Phenol	ND	0.300		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Pyrene	ND	0.0599		mg/Kg-dry	1	11/08/2021 3:01 PM	77933
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	102	0.1-136		%Rec	1	11/08/2021 3:01 PM	77933
SS: 2-Fluorobiphenyl	95.4	16.3-118		%Rec	1	11/08/2021 3:01 PM	77933
SS: 2-Fluorophenol	101	4.2-97	S	%Rec	1	11/08/2021 3:01 PM	77933
SS: 4-Terphenyl-d14	142	0.1-147		%Rec	1	11/08/2021 3:01 PM	77933
SS: Nitrobenzene-d5	102	0.1-119		%Rec	1	11/08/2021 3:01 PM	77933
SS: Phenol-d6	102	9.82-111		%Rec	1	11/08/2021 3:01 PM	77933
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0302	0.0201	J	mg/Kg-dry	1	11/08/2021 1:00 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.67	1.00		pH Units	1	11/02/2021 1:45 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	17	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:50 PM

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B29
Lab ID: 2111039-029
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	4,060	2.45		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Antimony	ND	1.47		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Arsenic	7.94	1.13		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Barium	70.0	0.123		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Beryllium	0.350	0.0490		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Cadmium	0.455	0.0735		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Calcium	66,600	3.06		mg/Kg-dry	5	11/08/2021 2:36 PM	77942
Chromium	9.09	0.0588		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Cobalt	6.32	0.123		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Copper	12.5	0.147		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Iron	14,400	3.06		mg/Kg-dry	5	11/08/2021 2:36 PM	77942
Lead	10.7	0.588		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Magnesium	37,500	6.13		mg/Kg-dry	10	11/08/2021 4:52 PM	77942
Manganese	559	0.0588		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Nickel	11.0	0.230		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Potassium	561	2.45		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Selenium	ND	1.27		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Silver	0.0644	0.0588	J	mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Sodium	218	1.23		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Thallium	ND	0.980		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Vanadium	15.2	0.147		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
Zinc	45.5	0.980		mg/Kg-dry	1	11/08/2021 11:53 AM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
1,1,1-Trichloroethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
1,1,2,2-Tetrachloroethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
1,1,2-Trichloroethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
1,1-Dichloroethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
1,1-Dichloroethene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
1,2-Dichloroethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
1,2-Dichloropropane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
2-Butanone	ND	0.00977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
2-Hexanone	ND	0.0244		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
4-Methyl-2-pentanone	ND	0.0244		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Acetone	ND	0.0244	c	mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Benzene	ND	0.000244		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B29
Lab ID: 2111039-029
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Bromoform	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Bromomethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Carbon disulfide	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Carbon tetrachloride	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Chlorobenzene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Chloroethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Chloroform	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Chloromethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
cis-1,2-Dichloroethene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
cis-1,3-Dichloropropene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Dibromochloromethane	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Ethylbenzene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
m,p-Xylene	ND	0.00195		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Methyl tert-butyl ether	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Methylene chloride	ND	0.00488		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
o-Xylene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Total Xylenes	ND	0.00195		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Styrene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Tetrachloroethene	ND	0.00195		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Toluene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
trans-1,2-Dichloroethene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
trans-1,3-Dichloropropene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Trichloroethene	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Vinyl chloride	ND	0.000977		mg/Kg-dry	0.83	11/04/2021 2:44 PM	R141022
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	98.8	80-130		%Rec	0.83	11/04/2021 2:44 PM	R141022
SS: Dibromofluoromethane	111	76.1-120		%Rec	0.83	11/04/2021 2:44 PM	R141022
SS: Toluene-d8	101	85-115		%Rec	0.83	11/04/2021 2:44 PM	R141022
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
1,2-Dichlorobenzene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
1,3-Dichlorobenzene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
1,4-Dichlorobenzene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2,4,5-Trichlorophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2,4,6-Trichlorophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2,4-Dichlorophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B29
Lab ID: 2111039-029
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2,4-Dinitrophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2,4-Dinitrotoluene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2,6-Dinitrotoluene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2-Chloronaphthalene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2-Chlorophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2-Methylnaphthalene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2-Nitroaniline	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
2-Nitrophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
3,3-Dichlorobenzidine	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
3-Nitroaniline	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
4,6-Dinitro-2-methylphenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
4-Bromophenyl phenyl ether	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
4-Chloro-3-methylphenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
4-Chloroaniline	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
4-Chlorophenyl phenyl ether	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
4-Nitroaniline	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
4-Nitrophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Acenaphthene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Acenaphthylene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Anthracene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Benzo(a)anthracene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Benzo(a)pyrene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Benzo(b)fluoranthene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Benzo(g,h,i)perylene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Benzo(k)fluoranthene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Bis(2-chloroethoxy)methane	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Bis(2-chloroethyl)ether	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Bis(2-chloroisopropyl)ether	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Bis(2-ethylhexyl)phthalate	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Butyl benzyl phthalate	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Carbazole	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Chrysene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Dibenzo(a,h)anthracene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Dibenzofuran	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Diethyl phthalate	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Dimethyl phthalate	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Di-n-butyl phthalate	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Di-n-octyl phthalate	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B29
Lab ID: 2111039-029
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Fluorene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Hexachlorobenzene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Hexachlorobutadiene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Hexachlorocyclopentadiene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Hexachloroethane	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Indeno(1,2,3-cd)pyrene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Isophorone	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
m,p-Cresol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Naphthalene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Nitrobenzene	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
N-Nitroso-di-n-propylamine	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
N-Nitrosodiphenylamine	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
o-Cresol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Pentachlorophenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Phenanthrene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Phenol	ND	0.293		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Pyrene	ND	0.0585		mg/Kg-dry	1	11/08/2021 3:38 PM	77933
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	102	0.1-136		%Rec	1	11/08/2021 3:38 PM	77933
SS: 2-Fluorobiphenyl	90.9	16.3-118		%Rec	1	11/08/2021 3:38 PM	77933
SS: 2-Fluorophenol	0	4.2-97	S	%Rec	1	11/08/2021 3:38 PM	77933
SS: 4-Terphenyl-d14	142	0.1-147		%Rec	1	11/08/2021 3:38 PM	77933
SS: Nitrobenzene-d5	105	0.1-119		%Rec	1	11/08/2021 3:38 PM	77933
SS: Phenol-d6	99.3	9.82-111		%Rec	1	11/08/2021 3:38 PM	77933
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0181		mg/Kg-dry	1	11/08/2021 1:03 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.88	1.00		pH Units	1	11/02/2021 1:46 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	15	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:54 PM

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B30
Lab ID: 2111039-030
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	3,920	2.48		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Antimony	ND	1.49		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Arsenic	7.68	1.14		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Barium	56.3	0.124		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Beryllium	0.344	0.0495		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Cadmium	0.405	0.0743		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Calcium	82,100	3.09		mg/Kg-dry	5	11/08/2021 2:41 PM	77942
Chromium	9.65	0.0594		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Cobalt	5.70	0.124		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Copper	14.0	0.149		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Iron	15,500	3.09		mg/Kg-dry	5	11/08/2021 2:41 PM	77942
Lead	6.95	0.594		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Magnesium	43,800	12.4		mg/Kg-dry	20	11/08/2021 4:55 PM	77942
Manganese	478	0.0594		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Nickel	11.7	0.233		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Potassium	411	2.48		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Selenium	ND	1.29		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Silver	ND	0.0594		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Sodium	338	1.24		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Thallium	ND	0.990		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Vanadium	14.7	0.149		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
Zinc	40.7	0.990		mg/Kg-dry	1	11/08/2021 12:17 PM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
1,1,1-Trichloroethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
1,1,2,2-Tetrachloroethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
1,1,2-Trichloroethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
1,1-Dichloroethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
1,1-Dichloroethene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
1,2-Dichloroethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
1,2-Dichloropropane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
2-Butanone	ND	0.00952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
2-Hexanone	ND	0.0238		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
4-Methyl-2-pentanone	ND	0.0238		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Acetone	ND	0.0238	c	mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Benzene	ND	0.000238		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022

Created: 11/9/2021 4:47:58 PM

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B30
Lab ID: 2111039-030
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Bromoform	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Bromomethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Carbon disulfide	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Carbon tetrachloride	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Chlorobenzene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Chloroethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Chloroform	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Chloromethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
cis-1,2-Dichloroethene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
cis-1,3-Dichloropropene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Dibromochloromethane	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Ethylbenzene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
m,p-Xylene	ND	0.00190		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Methyl tert-butyl ether	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Methylene chloride	ND	0.00476		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
o-Xylene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Total Xylenes	ND	0.00190		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Styrene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Tetrachloroethene	ND	0.00190		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Toluene	0.000961	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
trans-1,2-Dichloroethene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
trans-1,3-Dichloropropene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Trichloroethene	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Vinyl chloride	ND	0.000952		mg/Kg-dry	0.77	11/04/2021 3:18 PM	R141022
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	97.3	80-130		%Rec	0.77	11/04/2021 3:18 PM	R141022
SS: Dibromofluoromethane	110	76.1-120		%Rec	0.77	11/04/2021 3:18 PM	R141022
SS: Toluene-d8	103	85-115		%Rec	0.77	11/04/2021 3:18 PM	R141022
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
1,2-Dichlorobenzene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
1,3-Dichlorobenzene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
1,4-Dichlorobenzene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2,4,5-Trichlorophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2,4,6-Trichlorophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2,4-Dichlorophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933

Created: 11/9/2021 4:47:58 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B30
Lab ID: 2111039-030
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2,4-Dinitrophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2,4-Dinitrotoluene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2,6-Dinitrotoluene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2-Chloronaphthalene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2-Chlorophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2-Methylnaphthalene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2-Nitroaniline	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
2-Nitrophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
3,3-Dichlorobenzidine	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
3-Nitroaniline	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
4,6-Dinitro-2-methylphenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
4-Bromophenyl phenyl ether	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
4-Chloro-3-methylphenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
4-Chloroaniline	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
4-Chlorophenyl phenyl ether	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
4-Nitroaniline	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
4-Nitrophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Acenaphthene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Acenaphthylene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Anthracene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Benzo(a)anthracene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Benzo(a)pyrene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Benzo(b)fluoranthene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Benzo(g,h,i)perylene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Benzo(k)fluoranthene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Bis(2-chloroethoxy)methane	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Bis(2-chloroethyl)ether	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Bis(2-chloroisopropyl)ether	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Bis(2-ethylhexyl)phthalate	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Butyl benzyl phthalate	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Carbazole	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Chrysene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Dibenzo(a,h)anthracene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Dibenzofuran	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Diethyl phthalate	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Dimethyl phthalate	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Di-n-butyl phthalate	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Di-n-octyl phthalate	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933

Client ID: Patrick Engineering, Inc. **Report Date:** November 09, 2021
Project Name: Soil Testing **Workorder:** **2111039**

Client Sample ID: **B30** **Matrix:** SOIL
Lab ID: 2111039-030 **Date Received:** 10/29/2021 5:10 PM **Collection Date:** 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Fluorene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Hexachlorobenzene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Hexachlorobutadiene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Hexachlorocyclopentadiene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Hexachloroethane	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Indeno(1,2,3-cd)pyrene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Isophorone	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
m,p-Cresol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Naphthalene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Nitrobenzene	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
N-Nitroso-di-n-propylamine	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
N-Nitrosodiphenylamine	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
o-Cresol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Pentachlorophenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Phenanthrene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Phenol	ND	0.308		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Pyrene	ND	0.0617		mg/Kg-dry	1	11/08/2021 4:15 PM	77933
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	109	0.1-136		%Rec	1	11/08/2021 4:15 PM	77933
SS: 2-Fluorobiphenyl	99.2	16.3-118		%Rec	1	11/08/2021 4:15 PM	77933
SS: 2-Fluorophenol	106	4.2-97	S	%Rec	1	11/08/2021 4:15 PM	77933
SS: 4-Terphenyl-d14	150	0.1-147	S	%Rec	1	11/08/2021 4:15 PM	77933
SS: Nitrobenzene-d5	108	0.1-119		%Rec	1	11/08/2021 4:15 PM	77933
SS: Phenol-d6	107	9.82-111		%Rec	1	11/08/2021 4:15 PM	77933
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0215	0.0195	J	mg/Kg-dry	1	11/08/2021 1:06 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.02	1.00		pH Units	1	11/02/2021 1:51 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	19	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:47:58 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B31
Lab ID: 2111039-031
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	6,520	12.1		mg/Kg-dry	5	11/08/2021 2:44 PM	77942
Antimony	ND	1.46		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Arsenic	13.0	1.12		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Barium	65.3	0.121		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Beryllium	0.419	0.0485		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Cadmium	0.607	0.0728		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Calcium	47,100	3.03		mg/Kg-dry	5	11/08/2021 2:44 PM	77942
Chromium	9.81	0.0583		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Cobalt	6.47	0.121		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Copper	18.2	0.146		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Iron	20,200	3.03		mg/Kg-dry	5	11/08/2021 2:44 PM	77942
Lead	11.0	0.583		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Magnesium	25,800	6.07		mg/Kg-dry	10	11/08/2021 4:58 PM	77942
Manganese	540	0.0583		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Nickel	15.9	0.228		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Potassium	517	2.43		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Selenium	ND	1.26		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Silver	0.113	0.0583	J	mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Sodium	280	1.21		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Thallium	ND	0.971		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Vanadium	16.6	0.146		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
Zinc	55.7	0.971		mg/Kg-dry	1	11/08/2021 12:20 PM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
1,1,1-Trichloroethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
1,1,2,2-Tetrachloroethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
1,1,2-Trichloroethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
1,1-Dichloroethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
1,1-Dichloroethene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
1,2-Dichloroethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
1,2-Dichloropropane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
2-Butanone	ND	0.00962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
2-Hexanone	ND	0.0241		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
4-Methyl-2-pentanone	ND	0.0241		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Acetone	0.0532	0.0241	c	mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Benzene	ND	0.000241		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B31
Lab ID: 2111039-031
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Bromoform	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Bromomethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Carbon disulfide	0.00187	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Carbon tetrachloride	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Chlorobenzene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Chloroethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Chloroform	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Chloromethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
cis-1,2-Dichloroethene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
cis-1,3-Dichloropropene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Dibromochloromethane	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Ethylbenzene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
m,p-Xylene	ND	0.00192		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Methyl tert-butyl ether	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Methylene chloride	ND	0.00481		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
o-Xylene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Total Xylenes	ND	0.00192		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Styrene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Tetrachloroethene	ND	0.00192		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Toluene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
trans-1,2-Dichloroethene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
trans-1,3-Dichloropropene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Trichloroethene	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Vinyl chloride	ND	0.000962		mg/Kg-dry	0.8	11/04/2021 3:53 PM	R141022
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	97.3	80-130		%Rec	0.8	11/04/2021 3:53 PM	R141022
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.8	11/04/2021 3:53 PM	R141022
SS: Toluene-d8	101	85-115		%Rec	0.8	11/04/2021 3:53 PM	R141022
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
1,2-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
1,3-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
1,4-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2,4,5-Trichlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2,4,6-Trichlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2,4-Dichlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933

Created: 11/9/2021 4:48:03 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B31
Lab ID: 2111039-031
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2,4-Dinitrophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2,4-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2,6-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2-Chloronaphthalene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2-Chlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2-Methylnaphthalene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2-Nitroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
2-Nitrophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
3,3-Dichlorobenzidine	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
3-Nitroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
4,6-Dinitro-2-methylphenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
4-Bromophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
4-Chloro-3-methylphenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
4-Chloroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
4-Chlorophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
4-Nitroaniline	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
4-Nitrophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Acenaphthene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Acenaphthylene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Anthracene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Benzo(a)anthracene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Benzo(a)pyrene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Benzo(b)fluoranthene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Benzo(g,h,i)perylene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Benzo(k)fluoranthene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Bis(2-chloroethoxy)methane	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Bis(2-chloroethyl)ether	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Bis(2-chloroisopropyl)ether	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Bis(2-ethylhexyl)phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Butyl benzyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Carbazole	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Chrysene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Dibenzo(a,h)anthracene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Dibenzofuran	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Diethyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Dimethyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Di-n-butyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Di-n-octyl phthalate	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B31
Lab ID: 2111039-031
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Fluorene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Hexachlorobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Hexachlorobutadiene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Hexachlorocyclopentadiene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Hexachloroethane	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Indeno(1,2,3-cd)pyrene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Isophorone	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
m,p-Cresol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Naphthalene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Nitrobenzene	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
N-Nitroso-di-n-propylamine	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
N-Nitrosodiphenylamine	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
o-Cresol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Pentachlorophenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Phenanthrene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Phenol	ND	0.300		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Pyrene	ND	0.0601		mg/Kg-dry	1	11/08/2021 4:51 PM	77933
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	100	0.1-136		%Rec	1	11/08/2021 4:51 PM	77933
SS: 2-Fluorobiphenyl	88.4	16.3-118		%Rec	1	11/08/2021 4:51 PM	77933
SS: 2-Fluorophenol	104	4.2-97	S	%Rec	1	11/08/2021 4:51 PM	77933
SS: 4-Terphenyl-d14	143	0.1-147		%Rec	1	11/08/2021 4:51 PM	77933
SS: Nitrobenzene-d5	95.1	0.1-119		%Rec	1	11/08/2021 4:51 PM	77933
SS: Phenol-d6	102	9.82-111		%Rec	1	11/08/2021 4:51 PM	77933
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0226	0.0190	J	mg/Kg-dry	1	11/08/2021 1:10 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.20	1.00		pH Units	1	11/02/2021 1:47 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	17	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:48:03 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B32
Lab ID: 2111039-032
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	8,810	12.5		mg/Kg-dry	5	11/08/2021 2:47 PM	77942
Antimony	ND	1.50		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Arsenic	6.80	1.15		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Barium	178	0.125		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Beryllium	0.529	0.0500		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Cadmium	0.513	0.0750		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Calcium	7,970	0.625		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Chromium	11.0	0.0600		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Cobalt	7.91	0.125		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Copper	12.4	0.150		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Iron	12,700	3.13		mg/Kg-dry	5	11/08/2021 2:47 PM	77942
Lead	16.3	0.600		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Magnesium	5,380	3.13		mg/Kg-dry	5	11/08/2021 2:47 PM	77942
Manganese	715	0.0600		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Nickel	11.2	0.235		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Potassium	1,090	2.50		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Selenium	ND	1.30		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Silver	0.183	0.0600	J	mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Sodium	652	1.25		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Thallium	ND	1.00		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Vanadium	21.9	0.150		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
Zinc	68.0	1.00		mg/Kg-dry	1	11/08/2021 12:23 PM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
1,1,1-Trichloroethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
1,1,2,2-Tetrachloroethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
1,1,2-Trichloroethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
1,1-Dichloroethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
1,1-Dichloroethene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
1,2-Dichloroethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
1,2-Dichloropropane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
2-Butanone	ND	0.0103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
2-Hexanone	ND	0.0258		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
4-Methyl-2-pentanone	ND	0.0258		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Acetone	0.0813	0.0258	c	mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Benzene	ND	0.000258		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022

Created: 11/9/2021 4:48:06 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B32
Lab ID: 2111039-032
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Bromoform	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Bromomethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Carbon disulfide	0.00223	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Carbon tetrachloride	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Chlorobenzene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Chloroethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Chloroform	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Chloromethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
cis-1,2-Dichloroethene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
cis-1,3-Dichloropropene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Dibromochloromethane	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Ethylbenzene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
m,p-Xylene	ND	0.00207		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Methyl tert-butyl ether	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Methylene chloride	ND	0.00516		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
o-Xylene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Total Xylenes	ND	0.00207		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Styrene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Tetrachloroethene	ND	0.00207		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Toluene	0.00105	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
trans-1,2-Dichloroethene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
trans-1,3-Dichloropropene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Trichloroethene	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Vinyl chloride	ND	0.00103		mg/Kg-dry	0.85	11/04/2021 4:27 PM	R141022
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	97.5	80-130		%Rec	0.85	11/04/2021 4:27 PM	R141022
SS: Dibromofluoromethane	110	76.1-120		%Rec	0.85	11/04/2021 4:27 PM	R141022
SS: Toluene-d8	103	85-115		%Rec	0.85	11/04/2021 4:27 PM	R141022
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
1,2-Dichlorobenzene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
1,3-Dichlorobenzene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
1,4-Dichlorobenzene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2,4,5-Trichlorophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2,4,6-Trichlorophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2,4-Dichlorophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933

Created: 11/9/2021 4:48:06 PM

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B32
Lab ID: 2111039-032
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2,4-Dinitrophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2,4-Dinitrotoluene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2,6-Dinitrotoluene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2-Chloronaphthalene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2-Chlorophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2-Methylnaphthalene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2-Nitroaniline	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
2-Nitrophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
3,3-Dichlorobenzidine	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
3-Nitroaniline	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
4,6-Dinitro-2-methylphenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
4-Bromophenyl phenyl ether	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
4-Chloro-3-methylphenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
4-Chloroaniline	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
4-Chlorophenyl phenyl ether	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
4-Nitroaniline	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
4-Nitrophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Acenaphthene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Acenaphthylene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Anthracene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Benzo(a)anthracene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Benzo(a)pyrene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Benzo(b)fluoranthene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Benzo(g,h,i)perylene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Benzo(k)fluoranthene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Bis(2-chloroethoxy)methane	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Bis(2-chloroethyl)ether	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Bis(2-chloroisopropyl)ether	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Bis(2-ethylhexyl)phthalate	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Butyl benzyl phthalate	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Carbazole	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Chrysene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Dibenzo(a,h)anthracene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Dibenzofuran	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Diethyl phthalate	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Dimethyl phthalate	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Di-n-butyl phthalate	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Di-n-octyl phthalate	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B32
Lab ID: 2111039-032
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Fluorene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Hexachlorobenzene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Hexachlorobutadiene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Hexachlorocyclopentadiene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Hexachloroethane	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Indeno(1,2,3-cd)pyrene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Isophorone	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
m,p-Cresol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Naphthalene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Nitrobenzene	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
N-Nitroso-di-n-propylamine	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
N-Nitrosodiphenylamine	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
o-Cresol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Pentachlorophenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Phenanthrene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Phenol	ND	0.302		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Pyrene	ND	0.0604		mg/Kg-dry	1	11/08/2021 5:28 PM	77933
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	98.4	0.1-136		%Rec	1	11/08/2021 5:28 PM	77933
SS: 2-Fluorobiphenyl	88.1	16.3-118		%Rec	1	11/08/2021 5:28 PM	77933
SS: 2-Fluorophenol	101	4.2-97	S	%Rec	1	11/08/2021 5:28 PM	77933
SS: 4-Terphenyl-d14	133	0.1-147		%Rec	1	11/08/2021 5:28 PM	77933
SS: Nitrobenzene-d5	98.1	0.1-119		%Rec	1	11/08/2021 5:28 PM	77933
SS: Phenol-d6	98.1	9.82-111		%Rec	1	11/08/2021 5:28 PM	77933
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0256	0.0192	J	mg/Kg-dry	1	11/08/2021 1:20 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	7.62	1.00		pH Units	1	11/02/2021 1:49 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	18	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

Created: 11/9/2021 4:48:06 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B33
Lab ID: 2111039-033
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	842	2.45		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Antimony	ND	1.47		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Arsenic	8.19	1.13		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Barium	13.9	0.123		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Beryllium	0.133	0.0490	J	mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Cadmium	0.404	0.0735		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Calcium	154,000	12.3		mg/Kg-dry	20	11/08/2021 5:01 PM	77942
Chromium	4.19	0.0588		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Cobalt	3.27	0.123		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Copper	11.9	0.147		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Iron	11,500	3.06		mg/Kg-dry	5	11/08/2021 3:16 PM	77942
Lead	5.46	0.588		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Magnesium	83,600	12.3		mg/Kg-dry	20	11/08/2021 5:01 PM	77942
Manganese	409	0.0588		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Nickel	7.59	0.230		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Potassium	331	2.45		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Selenium	ND	1.27		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Silver	ND	0.0588		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Sodium	210	1.23		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Thallium	ND	0.980		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Vanadium	6.13	0.147		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
Zinc	33.5	0.980		mg/Kg-dry	1	11/08/2021 12:53 PM	77942
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Total 1,3-Dichloropropene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
1,1,1-Trichloroethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
1,1,2-Trichloroethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
1,1-Dichloroethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
1,1-Dichloroethene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
1,2-Dichloroethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
1,2-Dichloropropane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
2-Butanone	ND	0.0101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
2-Hexanone	ND	0.0252		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
4-Methyl-2-pentanone	ND	0.0252		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Acetone	ND	0.0252	c	mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Benzene	ND	0.000252		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B33
Lab ID: 2111039-033
Date Received: 10/29/2021 5:10 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RWM	
Bromodichloromethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Bromoform	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Bromomethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Carbon disulfide	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Carbon tetrachloride	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Chlorobenzene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Chloroethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Chloroform	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Chloromethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
cis-1,2-Dichloroethene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Dibromochloromethane	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Ethylbenzene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
m,p-Xylene	ND	0.00202		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Methyl tert-butyl ether	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Methylene chloride	ND	0.00504		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
o-Xylene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Total Xylenes	ND	0.00202		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Styrene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Tetrachloroethene	ND	0.00202		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Toluene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
trans-1,2-Dichloroethene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Trichloroethene	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Vinyl chloride	ND	0.00101		mg/Kg-dry	0.96	11/04/2021 5:01 PM	R141022
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	97.9	80-130		%Rec	0.96	11/04/2021 5:01 PM	R141022
SS: Dibromofluoromethane	112	76.1-120		%Rec	0.96	11/04/2021 5:01 PM	R141022
SS: Toluene-d8	102	85-115		%Rec	0.96	11/04/2021 5:01 PM	R141022
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
1,2,4-Trichlorobenzene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
1,2-Dichlorobenzene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
1,3-Dichlorobenzene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
1,4-Dichlorobenzene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2,4,5-Trichlorophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2,4,6-Trichlorophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2,4-Dichlorophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B33
Lab ID: 2111039-033
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
2,4-Dimethylphenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2,4-Dinitrophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2,4-Dinitrotoluene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2,6-Dinitrotoluene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2-Chloronaphthalene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2-Chlorophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2-Methylnaphthalene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2-Nitroaniline	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
2-Nitrophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
3,3-Dichlorobenzidine	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
3-Nitroaniline	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
4,6-Dinitro-2-methylphenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
4-Bromophenyl phenyl ether	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
4-Chloro-3-methylphenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
4-Chloroaniline	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
4-Chlorophenyl phenyl ether	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
4-Nitroaniline	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
4-Nitrophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Acenaphthene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Acenaphthylene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Anthracene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Benzo(a)anthracene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Benzo(a)pyrene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Benzo(b)fluoranthene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Benzo(g,h,i)perylene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Benzo(k)fluoranthene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Bis(2-chloroethoxy)methane	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Bis(2-chloroethyl)ether	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Bis(2-chloroisopropyl)ether	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Bis(2-ethylhexyl)phthalate	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Butyl benzyl phthalate	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Carbazole	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Chrysene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Dibenzo(a,h)anthracene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Dibenzofuran	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Diethyl phthalate	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Dimethyl phthalate	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Di-n-butyl phthalate	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Di-n-octyl phthalate	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Soil Testing

Report Date: November 09, 2021
Workorder: 2111039

Client Sample ID: B33
Lab ID: 2111039-033
Date Received: 10/29/2021 5:10 PM

Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: JCN	
Fluoranthene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Fluorene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Hexachlorobenzene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Hexachlorobutadiene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Hexachlorocyclopentadiene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Hexachloroethane	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Indeno(1,2,3-cd)pyrene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Isophorone	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
m,p-Cresol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Naphthalene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Nitrobenzene	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
N-Nitroso-di-n-propylamine	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
N-Nitrosodiphenylamine	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
o-Cresol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Pentachlorophenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Phenanthrene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Phenol	ND	0.262		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Pyrene	ND	0.0524		mg/Kg-dry	1	11/08/2021 6:04 PM	77933
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	113	0.1-136		%Rec	1	11/08/2021 6:04 PM	77933
SS: 2-Fluorobiphenyl	114	16.3-118		%Rec	1	11/08/2021 6:04 PM	77933
SS: 2-Fluorophenol	110	4.2-97	S	%Rec	1	11/08/2021 6:04 PM	77933
SS: 4-Terphenyl-d14	156	0.1-147	S	%Rec	1	11/08/2021 6:04 PM	77933
SS: Nitrobenzene-d5	117	0.1-119		%Rec	1	11/08/2021 6:04 PM	77933
SS: Phenol-d6	114	9.82-111	S	%Rec	1	11/08/2021 6:04 PM	77933
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0170		mg/Kg-dry	1	11/08/2021 1:23 PM	77963
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: MW	
pH	8.08	1.00		pH Units	1	11/02/2021 1:50 PM	R140878
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: JNG	
Percent Moisture	4.8	1.0	c	wt%	1	11/04/2021 2:15 PM	R140987

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PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Soil Testing

Report Date: November 09, 2021
Lab Order: **2111039**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2111039-001A	10/28/2021	77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-001C		77829	Mercury Prep for Solids		11/3/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-002A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-002C		77829	Mercury Prep for Solids		11/3/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-003A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-003C		77829	Mercury Prep for Solids		11/3/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-004A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-004C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-005A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-005C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-006A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-006C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-007A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-007C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-008A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-008C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021

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PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Soil Testing

Report Date: November 09, 2021
Lab Order: **2111039**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2111039-008C	10/28/2021	77868	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-009A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-009C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-010A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-010C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-011A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-011C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-012A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-012C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-013A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-013C		77865	Mercury Prep for Solids		11/4/2021
		77893	SOLID PREP SONICATION: BNA		11/4/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-014A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-014C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-015A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-015C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-016A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-016C		77865	Mercury Prep for Solids		11/4/2021

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PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Soil Testing

Report Date: November 09, 2021
Lab Order: 2111039

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2111039-016C	10/28/2021	77911	SOLID PREP SONICATION: BNA		11/5/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-017A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-017C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-018A	10/29/2021	77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-018C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77900	SOLID PREP TOTAL METALS: ICP		11/4/2021
2111039-019A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-019C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-020A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-020C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-021A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-021C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-022A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-022C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-023A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-023C		77865	Mercury Prep for Solids		11/4/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Soil Testing

Report Date: November 09, 2021
Lab Order: 2111039

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2111039-024A	10/29/2021	77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-024C		77963	Mercury Prep for Solids		11/8/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-025A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-025C		77963	Mercury Prep for Solids		11/8/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-026A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-026C		77963	Mercury Prep for Solids		11/8/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-027A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-027C		77963	Mercury Prep for Solids		11/8/2021
		77911	SOLID PREP SONICATION: BNA		11/5/2021
		77973	SOLID PREP TOTAL METALS: ICP		11/8/2021
2111039-028A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-028C		77963	Mercury Prep for Solids		11/8/2021
		77933	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-029A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-029C		77963	Mercury Prep for Solids		11/8/2021
		77933	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-030A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-030C		77963	Mercury Prep for Solids		11/8/2021
		77933	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-031A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-031C		77963	Mercury Prep for Solids		11/8/2021
		77933	SOLID PREP SONICATION: BNA		11/5/2021

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Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Soil Testing

Report Date: November 09, 2021
Lab Order: **2111039**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2111039-031C	10/29/2021	77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-032A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-032C		77963	Mercury Prep for Solids		11/8/2021
		77933	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021
2111039-033A		77835	CLOSED SYSTEM P&T VOC Prep		11/3/2021
2111039-033C		77963	Mercury Prep for Solids		11/8/2021
		77933	SOLID PREP SONICATION: BNA		11/5/2021
		77942	SOLID PREP TOTAL METALS: ICP		11/5/2021

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Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Qualifier Definitions

WO#: **2111039**
Date: **11/9/2021**

Qualifiers:

*/x	Value exceeds Maximum Contaminant Level
B	Analyte detected in the associated Method Blank
C	Value is below Minimum Concentration Limit
c	Analyte not in SLI scope of accreditation
E	Estimated, detected above quantitation range
G	Refer to case narrative page for specific comments
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limit (QL)
N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit
P	Present
Q	Accreditation is not available from Wisconsin
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
T	Analyte detected in sample trip blank
V	EPA requires field analysis/filtration. Lab analysis would be considered past hold time.
WI	This sample was ran at the Wisconsin Laboratory, WI DNR Certified #246179890

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave., Suite 150 Geneva, Illinois 60134
Tel. (708) 544-3260 • Toll Free (800) 783-LABS
Fax (708) 544-8587
www.suburbanlabs.com

November 30, 2021

Workorder: 2111D23

Steve Kroll
Patrick Engineering, Inc.
4970 Varsity Drive
Lisle, IL 60532

TEL: (630) 957-7245
FAX: (630) 249-9290
RE: SPLP Soil Testing

Dear Steve Kroll:

Suburban Laboratories, Inc. received 33 sample(s) on 11/11/2021 for the analyses presented in the following report.

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the case narrative. If you are comparing these results to external QC specifications or compliance limits and have any questions, please contact us.

This final report of laboratory analysis consists of this cover letter, case narrative, analytical report, dates report, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call me at (708) 544-3260.

Sincerely,

Keith Sinon
Project Manager
708-544-3260 ext 212
keith@suburbanlabs.com

Case Narrative

Client: Patrick Engineering, Inc.
Project: SPLP Soil Testing
WorkOrder: 2111D23
Temperature of samples upon receipt at SLI: 1 C

Date: November 30, 2021
PO #:
QC Level: LEVEL I
Chain of Custody #:

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of 35 IAC Part 186 unless otherwise indicated.
- Waste water analysis follows the rules set forth in 40 CFR part 136 except where otherwise noted.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated.
- For more information about the laboratories' scope of accreditation, please contact us at (708) 544-3260 or the Agency at (217) 782-6455.
- All radiological results are reported to the 95% confidence level.

Abbreviations:
- Reporting Limit: The concentration at which an analyte can be routinely detected on a day to day basis, and which also meets regulatory and client needs.
- Quantitation Limit: The lowest concentration at which results can be accurately quantitated.
- J: The analyte was positively identified above our Method Detection Limit and is considered detectable and usable; however, the associated numerical value is the approximate concentration of the analyte in the sample.
- ATC: Automatic Temperature Correction. - TNTC: Too Numerous To Count
- TIC: Tentatively Identified Compound (GCMS library search identification, concentration estimated to nearest internal standard).
- SS (Surrogate Standard): Quality control compound added to the sample by the lab.

Method References:
For a complete list of method references please contact us.
- E: USEPA Reference methods
- SW: USEPA, Test Methods for Evaluating Solid Waste (SW-846)
- M: Standard Methods for the Examination of Water and Wastewater
- USP: Latest version of United States Pharmacopeia

Workorder Specific Comments:

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: SPLP Soil Testing

Report Date: November 30, 2021
Workorder: 2111D23

Client Sample ID: B1
Lab ID: 2111D23-001 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	100	1.3		mg/L	5	11/22/2021 7:27 PM	78337

Client Sample ID: B2
Lab ID: 2111D23-002 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	110	1.3		mg/L	5	11/22/2021 7:31 PM	78337

Client Sample ID: B4
Lab ID: 2111D23-004 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	170	1.3		mg/L	5	11/22/2021 7:35 PM	78337

Client Sample ID: B5
Lab ID: 2111D23-005 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	140	1.3		mg/L	5	11/22/2021 7:40 PM	78337
Manganese	1.3	0.050		mg/L	1	11/22/2021 5:28 PM	78337

Created: 11/30/2021 9:41:23 AM

Client ID: Patrick Engineering, Inc. **Report Date:** November 30, 2021
Project Name: SPLP Soil Testing **Workorder:** **2111D23**

Client Sample ID: B7 **Matrix:** SOIL
Lab ID: 2111D23-007 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	210	1.3		mg/L	5	11/22/2021 7:44 PM	78337
Manganese	3.0	0.050		mg/L	1	11/22/2021 5:33 PM	78337

Client Sample ID: B8 **Matrix:** SOIL
Lab ID: 2111D23-008 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	7.8	0.25		mg/L	1	11/22/2021 5:54 PM	78337

Client Sample ID: B9 **Matrix:** SOIL
Lab ID: 2111D23-009 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	21	0.25		mg/L	1	11/22/2021 5:58 PM	78337

Client Sample ID: B10 **Matrix:** SOIL
Lab ID: 2111D23-010 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	ND	0.25		mg/L	1	11/22/2021 6:03 PM	78383

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: SPLP Soil Testing

Report Date: November 30, 2021
Workorder: 2111D23

Client Sample ID: B11
Lab ID: 2111D23-011 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	0.42	0.25		mg/L	1	11/22/2021 7:14 PM	78383

Client Sample ID: B12
Lab ID: 2111D23-012 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	120	1.3		mg/L	5	11/22/2021 7:48 PM	78383
Manganese	2.2	0.050		mg/L	1	11/22/2021 6:15 PM	78383

Client Sample ID: B13
Lab ID: 2111D23-013 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	170	1.3		mg/L	5	11/22/2021 8:09 PM	78383

Client Sample ID: B15
Lab ID: 2111D23-015 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	300	2.5		mg/L	10	11/22/2021 8:47 PM	78383
Manganese	4.9	0.050		mg/L	1	11/22/2021 6:25 PM	78383

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: SPLP Soil Testing

Report Date: November 30, 2021
Workorder: 2111D23

Client Sample ID: B16
Lab ID: 2111D23-016 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	150	1.3		mg/L	5	11/22/2021 8:18 PM	78383

Client Sample ID: B17
Lab ID: 2111D23-017 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/28/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	340	2.5		mg/L	10	11/22/2021 8:51 PM	78383

Client Sample ID: B18
Lab ID: 2111D23-018 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	240	2.5		mg/L	10	11/22/2021 8:27 PM	78383
Manganese	5.6	0.050		mg/L	1	11/22/2021 6:39 PM	78383

Client Sample ID: B19
Lab ID: 2111D23-019 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Manganese	6.6	0.050		mg/L	1	11/22/2021 7:00 PM	78383

Created: 11/30/2021 9:41:25 AM

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: SPLP Soil Testing

Report Date: November 30, 2021
Workorder: 2111D23

Client Sample ID: B20
Lab ID: 2111D23-020 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	260	2.5		mg/L	10	11/22/2021 8:38 PM	78383
Manganese	3.7	0.050		mg/L	1	11/22/2021 7:05 PM	78383

Client Sample ID: B21
Lab ID: 2111D23-021 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	350	2.5		mg/L	10	11/22/2021 8:42 PM	78383

Client Sample ID: B22
Lab ID: 2111D23-022 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	240	2.5		mg/L	10	11/29/2021 2:56 PM	78486
Manganese	2.5	0.050		mg/L	1	11/29/2021 2:12 PM	78486

Client Sample ID: B23
Lab ID: 2111D23-023 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	380	2.5		mg/L	10	11/29/2021 2:59 PM	78486

Client ID: Patrick Engineering, Inc. **Report Date:** November 30, 2021
Project Name: SPLP Soil Testing **Workorder:** **2111D23**

Client Sample ID: B24 **Matrix:** SOIL
Lab ID: 2111D23-024 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	280	2.5		mg/L	10	11/29/2021 3:02 PM	78486

Client Sample ID: B25 **Matrix:** SOIL
Lab ID: 2111D23-025 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	270	2.5		mg/L	10	11/29/2021 3:05 PM	78486

Client Sample ID: B26 **Matrix:** SOIL
Lab ID: 2111D23-026 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	300	2.5		mg/L	10	11/29/2021 3:08 PM	78486
Manganese	5.2	0.050		mg/L	1	11/29/2021 2:24 PM	78486

Client Sample ID: B27 **Matrix:** SOIL
Lab ID: 2111D23-027 **Date Received:** 11/11/2021 1:57 PM **Collection Date:** 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	260	2.5		mg/L	10	11/29/2021 3:25 PM	78486
Manganese	3.0	0.050		mg/L	1	11/29/2021 2:38 PM	78486

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: SPLP Soil Testing

Report Date: November 30, 2021
Workorder: 2111D23

Client Sample ID: B28
Lab ID: 2111D23-028 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	260	2.5		mg/L	10	11/29/2021 3:28 PM	78486
Manganese	4.1	0.050		mg/L	1	11/29/2021 2:41 PM	78486

Client Sample ID: B31
Lab ID: 2111D23-031 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	270	2.5		mg/L	10	11/29/2021 3:31 PM	78486

Client Sample ID: B32
Lab ID: 2111D23-032 **Date Received:** 11/11/2021 1:57 PM
Matrix: SOIL
Collection Date: 10/29/2021 12:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Manganese	2.1	0.050		mg/L	1	11/29/2021 2:47 PM	78486

Created: 11/30/2021 9:41:27 AM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: SPLP Soil Testing

Report Date: November 30, 2021
Lab Order: **2111D23**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2111D23-001A	10/28/2021	78337	AQUEOUS PREP TOTAL METALS: ICP		11/18/2021
		78273	SPLP SAMPLE PREP (Metals)		11/16/2021
2111D23-002A		78337	AQUEOUS PREP TOTAL METALS: ICP		11/18/2021
		78273	SPLP SAMPLE PREP (Metals)		11/16/2021
2111D23-004A		78337	AQUEOUS PREP TOTAL METALS: ICP		11/18/2021
		78273	SPLP SAMPLE PREP (Metals)		11/16/2021
2111D23-005A		78337	AQUEOUS PREP TOTAL METALS: ICP		11/18/2021
		78273	SPLP SAMPLE PREP (Metals)		11/16/2021
2111D23-007A		78337	AQUEOUS PREP TOTAL METALS: ICP		11/18/2021
		78273	SPLP SAMPLE PREP (Metals)		11/16/2021
2111D23-008A		78337	AQUEOUS PREP TOTAL METALS: ICP		11/18/2021
		78273	SPLP SAMPLE PREP (Metals)		11/16/2021
2111D23-009A		78337	AQUEOUS PREP TOTAL METALS: ICP		11/18/2021
		78273	SPLP SAMPLE PREP (Metals)		11/16/2021
2111D23-010A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-011A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-012A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-013A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-015A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-016A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-017A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021

Created: 11/30/2021 9:41:28 AM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: SPLP Soil Testing

Report Date: November 30, 2021
Lab Order: **2111D23**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2111D23-018A	10/29/2021	78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-019A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-020A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-021A		78383	AQUEOUS PREP TOTAL METALS: ICP		11/19/2021
		78363	SPLP SAMPLE PREP (Metals)		11/18/2021
2111D23-022A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-023A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-024A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-025A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-026A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-027A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-028A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-031A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021
2111D23-032A		78486	AQUEOUS PREP TOTAL METALS: ICP		11/24/2021
		78460	SPLP SAMPLE PREP (Metals)		11/23/2021

Created: 11/30/2021 9:41:28 AM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Qualifier Definitions

WO#: **2111D23**
Date: **11/30/2021**

Qualifiers:

*/x	Value exceeds Maximum Contaminant Level
B	Analyte detected in the associated Method Blank
C	Value is below Minimum Concentration Limit
c	Analyte not in SLI scope of accreditation
E	Estimated, detected above quantitation range
G	Refer to case narrative page for specific comments
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limit (QL)
N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit
P	Present
Q	Accreditation is not available from Wisconsin
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
T	Analyte detected in sample trip blank
V	EPA requires field analysis/filtration. Lab analysis would be considered past hold time.
WI	This sample was ran at the Wisconsin Laboratory, WI DNR Certified #246179890

SUBURBAN LABORATORIES, Inc.

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Tel. (708) 544-3260 • Toll Free (800) 783-LABS
Fax (708) 544-8587
www.suburbanlabs.com

June 20, 2022

Workorder: 2206741

Steve Kroll
Patrick Engineering, Inc.
4970 Varsity Drive
Lisle, IL 60532

TEL: (630) 957-7245
FAX: (630) 249-9290
RE: Olympic Blvd

Dear Steve Kroll:

Suburban Laboratories, Inc. received 15 sample(s) on 6/8/2022 for the analyses presented in the following report.

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the case narrative. If you are comparing these results to external QC specifications or compliance limits and have any questions, please contact us.

This final report of laboratory analysis consists of this cover letter, case narrative, analytical report, dates report, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call me at (708) 544-3260.

Sincerely,

Dan Galeher
Vice President of Sales and Service
708-544-3260 ext 216
dan@SuburbanLabs.com

Case Narrative

Client: Patrick Engineering, Inc.
Project: Olympic Blvd
WorkOrder: 2206741
Temperature of samples upon receipt at SLI: C

Date: June 20, 2022
PO #:
QC Level: LEVEL I
Chain of Custody #:

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of 35 IAC Part 186 unless otherwise indicated.
- Waste water analysis follows the rules set forth in 40 CFR part 136 except where otherwise noted.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated.
- For more information about the laboratories' scope of accreditation, please contact us at (708) 544-3260 or the Agency at (217) 782-6455.
- All radiological results are reported to the 95% confidence level.

Abbreviations:
- Reporting Limit: The concentration at which an analyte can be routinely detected on a day to day basis, and which also meets regulatory and client needs.
- Quantitation Limit: The lowest concentration at which results can be accurately quantitated.
- J: The analyte was positively identified above our Method Detection Limit and is considered detectable and usable; however, the associated numerical value is the approximate concentration of the analyte in the sample.
- ATC: Automatic Temperature Correction. - TNTC: Too Numerous To Count
- TIC: Tentatively Identified Compound (GCMS library search identification, concentration estimated to nearest internal standard).
- SS (Surrogate Standard): Quality control compound added to the sample by the lab.

Method References:
For a complete list of method references please contact us.
- E: USEPA Reference methods
- SW: USEPA, Test Methods for Evaluating Solid Waste (SW-846)
- M: Standard Methods for the Examination of Water and Wastewater
- USP: Latest version of United States Pharmacopeia

Workorder Specific Comments:

Volatiles:
Sample 2206741-005A and -015A: G=Methanol vials not provided. Sample was analyzed from the jar provided via method 5035.

8270:
Sample 2206741-001A through -015A: S=The LCS percent recoveries for 3,3-Dichlorobenzidine was outside laboratory control limits (50% - 150%): 49.20%

6010:
Samples 2206741-001C through -004C: B=The method blank contained Sodium at 20.8 mg/kg. (MDL is 2.45 mg/kg).

6010:
Sample 2206741-007C: S=For Antimony, the MS percent recovery (57%) was outside laboratory control limits (70% - 130%).

6010:
Sample 2206741-015C: S=The MS and the MSD percent recoveries for the following analytes were outside laboratory control limits (70% - 130%):

Antimony; 38.9%, 41.7%
Calcium; 232.7%, 34.7%

6010:
Sample 2206741-015C: R=For Calcium, the duplicate RPD (40.8%) was greater than laboratory control limits (20%).

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-34 0-2'**
Lab ID: 2206741-001 **Date Received:** 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 10:45 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	10,300	12.4		mg/Kg-dry	5	06/16/2022 11:04 AM	82740
Antimony	ND	1.49		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Arsenic	5.77	1.14		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Barium	118	0.124		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Beryllium	0.771	0.0495		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Cadmium	2.06	0.0743		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Calcium	28,900	3.09		mg/Kg-dry	5	06/16/2022 11:04 AM	82740
Chromium	15.0	0.0594		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Cobalt	11.2	0.124		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Copper	13.1	0.149		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Iron	25,300	6.19		mg/Kg-dry	10	06/16/2022 12:34 PM	82740
Lead	10.4	0.594		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Magnesium	16,400	3.09		mg/Kg-dry	5	06/16/2022 11:04 AM	82740
Manganese	1,650	0.297		mg/Kg-dry	5	06/16/2022 11:04 AM	82740
Nickel	21.2	0.233		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Potassium	969	2.48		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Selenium	ND	1.29		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Silver	ND	0.0594		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Sodium	188	1.24	B	mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Thallium	ND	0.990		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Vanadium	27.7	0.149		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
Zinc	47.9	0.990		mg/Kg-dry	1	06/14/2022 2:42 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
1,1,1-Trichloroethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
1,1,2-Trichloroethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
1,1-Dichloroethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
1,1-Dichloroethene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
1,2-Dichloroethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
1,2-Dichloropropane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
2-Butanone	ND	0.0113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
2-Hexanone	ND	0.0283		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
4-Methyl-2-pentanone	ND	0.0283		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Acetone	ND	0.0283		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Benzene	ND	0.000283		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-34 0-2'
Lab ID: 2206741-001
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 10:45 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Bromoform	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Bromomethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Carbon disulfide	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Carbon tetrachloride	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Chlorobenzene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Chloroethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Chloroform	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Chloromethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
cis-1,2-Dichloroethene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
cis-1,3-Dichloropropene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Dibromochloromethane	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Ethylbenzene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
m,p-Xylene	ND	0.00227		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Methyl tert-butyl ether	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Methylene chloride	ND	0.00567		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
o-Xylene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Total Xylenes	ND	0.00227		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Styrene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Tetrachloroethene	ND	0.00227		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Toluene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
trans-1,2-Dichloroethene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
trans-1,3-Dichloropropene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Trichloroethene	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Vinyl chloride	ND	0.00113		mg/Kg-dry	0.88	06/14/2022 7:29 PM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	96.7	80-130		%Rec	0.88	06/14/2022 7:29 PM	R149980
SS: Dibromofluoromethane	103	76.1-120		%Rec	0.88	06/14/2022 7:29 PM	R149980
SS: Toluene-d8	98.4	85-115		%Rec	0.88	06/14/2022 7:29 PM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
1,2-Dichlorobenzene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
1,3-Dichlorobenzene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
1,4-Dichlorobenzene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2,4,5-Trichlorophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2,4,6-Trichlorophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2,4-Dichlorophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-34 0-2'**
Lab ID: 2206741-001 **Date Received:** 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 10:45 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2,4-Dinitrophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2,4-Dinitrotoluene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2,6-Dinitrotoluene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2-Chloronaphthalene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2-Chlorophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2-Methylnaphthalene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2-Nitroaniline	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
2-Nitrophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
3,3-Dichlorobenzidine	ND	0.283	S	mg/Kg-dry	1	06/13/2022 11:43 AM	82769
3-Nitroaniline	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
4,6-Dinitro-2-methylphenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
4-Bromophenyl phenyl ether	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
4-Chloro-3-methylphenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
4-Chloroaniline	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
4-Chlorophenyl phenyl ether	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
4-Nitroaniline	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
4-Nitrophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Acenaphthene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Acenaphthylene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Anthracene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Benzo(a)anthracene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Benzo(a)pyrene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Benzo(b)fluoranthene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Benzo(g,h,i)perylene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Benzo(k)fluoranthene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Bis(2-chloroethoxy)methane	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Bis(2-chloroethyl)ether	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Bis(2-chloroisopropyl)ether	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Bis(2-ethylhexyl)phthalate	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Butyl benzyl phthalate	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Carbazole	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Chrysene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Dibenzo(a,h)anthracene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Dibenzofuran	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Diethyl phthalate	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Dimethyl phthalate	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Di-n-butyl phthalate	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Di-n-octyl phthalate	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-34 0-2'**
Lab ID: 2206741-001 **Date Received:** 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 10:45 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Fluorene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Hexachlorobenzene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Hexachlorobutadiene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Hexachlorocyclopentadiene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Hexachloroethane	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Isophorone	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
m,p-Cresol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Naphthalene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Nitrobenzene	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
N-Nitroso-di-n-propylamine	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
N-Nitrosodiphenylamine	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
o-Cresol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Pentachlorophenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Phenanthrene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Phenol	ND	0.283		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Pyrene	ND	0.0567		mg/Kg-dry	1	06/13/2022 11:43 AM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	65.0	45-152		%Rec	1	06/13/2022 11:43 AM	82769
SS: 2-Fluorobiphenyl	60.8	58-141		%Rec	1	06/13/2022 11:43 AM	82769
SS: 2-Fluorophenol	61.0	45-164		%Rec	1	06/13/2022 11:43 AM	82769
SS: 4-Terphenyl-d14	69.2	10-243		%Rec	1	06/13/2022 11:43 AM	82769
SS: Nitrobenzene-d5	61.0	45-150		%Rec	1	06/13/2022 11:43 AM	82769
SS: Phenol-d6	59.5	57-141		%Rec	1	06/13/2022 11:43 AM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0506	0.0221	J	mg/Kg-dry	1	06/14/2022 12:14 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	8.04	1.00		pH Units	1	06/13/2022 4:20 PM	R149898
Temperature	22.0	0		pH Units	1	06/13/2022 4:20 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	12	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:21 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-35 0-2'
Lab ID: 2206741-002
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 10:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	9,880	12.4		mg/Kg-dry	5	06/16/2022 11:09 AM	82740
Antimony	ND	1.49		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Arsenic	5.06	1.14		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Barium	125	0.124		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Beryllium	0.571	0.0495		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Cadmium	1.45	0.0743		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Calcium	13,700	0.619		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Chromium	13.2	0.0594		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Cobalt	9.39	0.124		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Copper	12.2	0.149		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Iron	17,100	3.09		mg/Kg-dry	5	06/16/2022 11:09 AM	82740
Lead	11.8	0.594		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Magnesium	9,240	3.09		mg/Kg-dry	5	06/16/2022 11:09 AM	82740
Manganese	844	0.0594		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Nickel	14.2	0.233		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Potassium	961	2.48		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Selenium	ND	1.29		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Silver	ND	0.0594		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Sodium	86.6	1.24	B	mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Thallium	ND	0.990		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Vanadium	24.7	0.149		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
Zinc	53.9	0.990		mg/Kg-dry	1	06/14/2022 2:46 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
1,1,1-Trichloroethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
1,1,2-Trichloroethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
1,1-Dichloroethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
1,1-Dichloroethene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
1,2-Dichloroethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
1,2-Dichloropropane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
2-Butanone	ND	0.0127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
2-Hexanone	ND	0.0318		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
4-Methyl-2-pentanone	ND	0.0318		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Acetone	ND	0.0318		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Benzene	ND	0.000318		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980

Created: 6/20/2022 1:38:23 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-35 0-2'
Lab ID: 2206741-002
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 10:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Bromoform	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Bromomethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Carbon disulfide	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Carbon tetrachloride	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Chlorobenzene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Chloroethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Chloroform	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Chloromethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
cis-1,2-Dichloroethene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
cis-1,3-Dichloropropene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Dibromochloromethane	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Ethylbenzene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
m,p-Xylene	ND	0.00255		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Methyl tert-butyl ether	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Methylene chloride	ND	0.00636		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
o-Xylene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Total Xylenes	ND	0.00255		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Styrene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Tetrachloroethene	ND	0.00255		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Toluene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
trans-1,2-Dichloroethene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
trans-1,3-Dichloropropene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Trichloroethene	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Vinyl chloride	ND	0.00127		mg/Kg-dry	0.69	06/14/2022 7:56 PM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	77.3	80-130	S	%Rec	0.69	06/14/2022 7:56 PM	R149980
SS: Dibromofluoromethane	101	76.1-120		%Rec	0.69	06/14/2022 7:56 PM	R149980
SS: Toluene-d8	98.8	85-115		%Rec	0.69	06/14/2022 7:56 PM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
1,2-Dichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
1,3-Dichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
1,4-Dichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2,4,5-Trichlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2,4,6-Trichlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2,4-Dichlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-35 0-2'**
Lab ID: 2206741-002 **Date Received:** 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 10:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2,4-Dinitrophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2,4-Dinitrotoluene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2,6-Dinitrotoluene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2-Chloronaphthalene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2-Chlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2-Methylnaphthalene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2-Nitroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
2-Nitrophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
3,3-Dichlorobenzidine	ND	0.318	S	mg/Kg-dry	1	06/13/2022 12:15 PM	82769
3-Nitroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
4-Bromophenyl phenyl ether	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
4-Chloro-3-methylphenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
4-Chloroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
4-Chlorophenyl phenyl ether	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
4-Nitroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
4-Nitrophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Acenaphthene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Acenaphthylene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Anthracene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Benzo(a)anthracene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Benzo(a)pyrene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Benzo(b)fluoranthene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Benzo(g,h,i)perylene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Benzo(k)fluoranthene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Bis(2-chloroethoxy)methane	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Bis(2-chloroethyl)ether	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Butyl benzyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Carbazole	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Chrysene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Dibenzo(a,h)anthracene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Dibenzofuran	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Diethyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Dimethyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Di-n-butyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Di-n-octyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-35 0-2'
Lab ID: 2206741-002
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 10:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Fluorene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Hexachlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Hexachlorobutadiene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Hexachlorocyclopentadiene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Hexachloroethane	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Isophorone	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
m,p-Cresol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Naphthalene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Nitrobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
N-Nitroso-di-n-propylamine	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
N-Nitrosodiphenylamine	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
o-Cresol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Pentachlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Phenanthrene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Phenol	ND	0.318		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Pyrene	ND	0.0636		mg/Kg-dry	1	06/13/2022 12:15 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	63.8	45-152		%Rec	1	06/13/2022 12:15 PM	82769
SS: 2-Fluorobiphenyl	60.9	58-141		%Rec	1	06/13/2022 12:15 PM	82769
SS: 2-Fluorophenol	61.4	45-164		%Rec	1	06/13/2022 12:15 PM	82769
SS: 4-Terphenyl-d14	83.2	10-243		%Rec	1	06/13/2022 12:15 PM	82769
SS: Nitrobenzene-d5	61.9	45-150		%Rec	1	06/13/2022 12:15 PM	82769
SS: Phenol-d6	59.9	57-141		%Rec	1	06/13/2022 12:15 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0311	0.0248	J	mg/Kg-dry	1	06/14/2022 12:17 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.63	1.00		pH Units	1	06/13/2022 4:30 PM	R149898
Temperature	21.9	0		pH Units	1	06/13/2022 4:30 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	21	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:23 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-36 0-2'
Lab ID: 2206741-003
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 11:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	10,700	12.5		mg/Kg-dry	5	06/15/2022 5:47 PM	82740
Antimony	ND	1.50		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Arsenic	4.32	1.15	J	mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Barium	139	0.125		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Beryllium	0.574	0.0500		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Cadmium	1.46	0.0750		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Calcium	3,880	0.625		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Chromium	13.5	0.0600		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Cobalt	9.47	0.125		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Copper	12.2	0.150		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Iron	17,900	3.13		mg/Kg-dry	5	06/15/2022 5:47 PM	82740
Lead	10.3	0.600		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Magnesium	3,020	0.625		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Manganese	858	0.0600		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Nickel	14.0	0.235		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Potassium	854	2.50		mg/Kg-dry	1	06/15/2022 1:26 PM	82740
Selenium	ND	1.30		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Silver	ND	0.0600		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Sodium	51.8	1.25	B	mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Thallium	ND	1.00		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Vanadium	24.9	0.150		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
Zinc	54.7	1.00		mg/Kg-dry	1	06/14/2022 3:05 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
1,1,1-Trichloroethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
1,1,2-Trichloroethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
1,1-Dichloroethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
1,1-Dichloroethene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
1,2-Dichloroethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
1,2-Dichloropropane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
2-Butanone	ND	0.0118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
2-Hexanone	ND	0.0294		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
4-Methyl-2-pentanone	ND	0.0294		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Acetone	ND	0.0294		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Benzene	ND	0.000294		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980

Created: 6/20/2022 1:38:24 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-36 0-2'
Lab ID: 2206741-003
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 11:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Bromoform	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Bromomethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Carbon disulfide	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Carbon tetrachloride	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Chlorobenzene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Chloroethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Chloroform	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Chloromethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
cis-1,2-Dichloroethene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
cis-1,3-Dichloropropene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Dibromochloromethane	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Ethylbenzene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
m,p-Xylene	ND	0.00235		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Methyl tert-butyl ether	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Methylene chloride	ND	0.00588		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
o-Xylene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Total Xylenes	ND	0.00235		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Styrene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Tetrachloroethene	ND	0.00235		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Toluene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
trans-1,2-Dichloroethene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
trans-1,3-Dichloropropene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Trichloroethene	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Vinyl chloride	ND	0.00118		mg/Kg-dry	0.74	06/14/2022 8:24 PM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	91.5	80-130		%Rec	0.74	06/14/2022 8:24 PM	R149980
SS: Dibromofluoromethane	92.9	76.1-120		%Rec	0.74	06/14/2022 8:24 PM	R149980
SS: Toluene-d8	102	85-115		%Rec	0.74	06/14/2022 8:24 PM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
1,2-Dichlorobenzene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
1,3-Dichlorobenzene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
1,4-Dichlorobenzene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2,4,5-Trichlorophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2,4,6-Trichlorophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2,4-Dichlorophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-36 0-2'**
Lab ID: 2206741-003 **Date Received:** 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 11:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2,4-Dinitrophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2,4-Dinitrotoluene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2,6-Dinitrotoluene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2-Chloronaphthalene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2-Chlorophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2-Methylnaphthalene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2-Nitroaniline	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
2-Nitrophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
3,3-Dichlorobenzidine	ND	0.294	S	mg/Kg-dry	1	06/13/2022 12:47 PM	82769
3-Nitroaniline	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
4-Bromophenyl phenyl ether	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
4-Chloro-3-methylphenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
4-Chloroaniline	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
4-Chlorophenyl phenyl ether	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
4-Nitroaniline	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
4-Nitrophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Acenaphthene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Acenaphthylene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Anthracene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Benzo(a)anthracene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Benzo(a)pyrene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Benzo(b)fluoranthene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Benzo(g,h,i)perylene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Benzo(k)fluoranthene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Bis(2-chloroethoxy)methane	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Bis(2-chloroethyl)ether	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Butyl benzyl phthalate	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Carbazole	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Chrysene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Dibenzo(a,h)anthracene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Dibenzofuran	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Diethyl phthalate	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Dimethyl phthalate	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Di-n-butyl phthalate	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Di-n-octyl phthalate	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-36 0-2'
Lab ID: 2206741-003
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 11:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Fluorene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Hexachlorobenzene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Hexachlorobutadiene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Hexachlorocyclopentadiene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Hexachloroethane	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Isophorone	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
m,p-Cresol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Naphthalene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Nitrobenzene	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
N-Nitroso-di-n-propylamine	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
N-Nitrosodiphenylamine	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
o-Cresol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Pentachlorophenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Phenanthrene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Phenol	ND	0.294		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Pyrene	ND	0.0587		mg/Kg-dry	1	06/13/2022 12:47 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	66.9	45-152		%Rec	1	06/13/2022 12:47 PM	82769
SS: 2-Fluorobiphenyl	65.1	58-141		%Rec	1	06/13/2022 12:47 PM	82769
SS: 2-Fluorophenol	70.2	45-164		%Rec	1	06/13/2022 12:47 PM	82769
SS: 4-Terphenyl-d14	79.2	10-243		%Rec	1	06/13/2022 12:47 PM	82769
SS: Nitrobenzene-d5	67.1	45-150		%Rec	1	06/13/2022 12:47 PM	82769
SS: Phenol-d6	67.6	57-141		%Rec	1	06/13/2022 12:47 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0302	0.0229	J	mg/Kg-dry	1	06/14/2022 12:21 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.85	1.00		pH Units	1	06/13/2022 4:33 PM	R149898
Temperature	22.6	0		pH Units	1	06/13/2022 4:33 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	15	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:25 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-37 0-2'
Lab ID: 2206741-004
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 11:05 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	12,400	11.9		mg/Kg-dry	5	06/16/2022 11:13 AM	82740
Antimony	ND	1.43		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Arsenic	3.10	1.10	J	mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Barium	130	0.119		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Beryllium	0.718	0.0476		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Cadmium	1.83	0.0714		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Calcium	14,200	0.595		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Chromium	14.8	0.0571		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Cobalt	7.77	0.119		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Copper	12.9	0.143		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Iron	20,100	2.98		mg/Kg-dry	5	06/16/2022 11:13 AM	82740
Lead	12.4	0.571		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Magnesium	9,570	2.98		mg/Kg-dry	5	06/16/2022 11:13 AM	82740
Manganese	694	0.0571		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Nickel	15.0	0.224		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Potassium	1,080	2.38		mg/Kg-dry	1	06/15/2022 1:46 PM	82740
Selenium	ND	1.24		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Silver	ND	0.0571		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Sodium	55.3	1.19	B	mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Thallium	ND	0.952		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Vanadium	26.1	0.143		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
Zinc	55.9	0.952		mg/Kg-dry	1	06/14/2022 3:09 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
1,1,1-Trichloroethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
1,1,2,2-Tetrachloroethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
1,1,2-Trichloroethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
1,1-Dichloroethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
1,1-Dichloroethene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
1,2-Dichloroethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
1,2-Dichloropropane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
2-Butanone	ND	0.701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
2-Hexanone	ND	1.75		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
4-Methyl-2-pentanone	ND	1.75		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Acetone	ND	1.75		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Benzene	ND	0.0175		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-37 0-2'** **Matrix:** SOIL
Lab ID: 2206741-004 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:05 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Bromoform	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Bromomethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Carbon disulfide	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Carbon tetrachloride	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Chlorobenzene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Chloroethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Chloroform	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Chloromethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
cis-1,2-Dichloroethene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
cis-1,3-Dichloropropene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Dibromochloromethane	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Ethylbenzene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
m,p-Xylene	ND	0.140		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Methyl tert-butyl ether	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Methylene chloride	ND	0.350		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
o-Xylene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Total Xylenes	ND	0.140		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Styrene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Tetrachloroethene	ND	0.140		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Toluene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
trans-1,2-Dichloroethene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
trans-1,3-Dichloropropene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Trichloroethene	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Vinyl chloride	ND	0.0701		mg/Kg-dry	52.02	06/09/2022 1:02 PM	R149796
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	87.8	80-130		%Rec	52.02	06/09/2022 1:02 PM	R149796
SS: Dibromofluoromethane	115	76.1-120		%Rec	52.02	06/09/2022 1:02 PM	R149796
SS: Toluene-d8	97.5	85-115		%Rec	52.02	06/09/2022 1:02 PM	R149796
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
1,2-Dichlorobenzene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
1,3-Dichlorobenzene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
1,4-Dichlorobenzene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2,4,5-Trichlorophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2,4,6-Trichlorophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2,4-Dichlorophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-37 0-2'** **Matrix:** SOIL
Lab ID: 2206741-004 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:05 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2,4-Dinitrophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2,4-Dinitrotoluene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2,6-Dinitrotoluene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2-Chloronaphthalene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2-Chlorophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2-Methylnaphthalene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2-Nitroaniline	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
2-Nitrophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
3,3-Dichlorobenzidine	ND	0.337	S	mg/Kg-dry	1	06/13/2022 1:20 PM	82769
3-Nitroaniline	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
4-Bromophenyl phenyl ether	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
4-Chloro-3-methylphenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
4-Chloroaniline	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
4-Chlorophenyl phenyl ether	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
4-Nitroaniline	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
4-Nitrophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Acenaphthene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Acenaphthylene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Anthracene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Benzo(a)anthracene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Benzo(a)pyrene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Benzo(b)fluoranthene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Benzo(g,h,i)perylene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Benzo(k)fluoranthene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Bis(2-chloroethoxy)methane	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Bis(2-chloroethyl)ether	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Butyl benzyl phthalate	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Carbazole	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Chrysene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Dibenzo(a,h)anthracene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Dibenzofuran	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Diethyl phthalate	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Dimethyl phthalate	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Di-n-butyl phthalate	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Di-n-octyl phthalate	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-37 0-2'
Lab ID: 2206741-004
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 11:05 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Fluorene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Hexachlorobenzene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Hexachlorobutadiene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Hexachlorocyclopentadiene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Hexachloroethane	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Isophorone	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
m,p-Cresol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Naphthalene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Nitrobenzene	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
N-Nitroso-di-n-propylamine	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
N-Nitrosodiphenylamine	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
o-Cresol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Pentachlorophenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Phenanthrene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Phenol	ND	0.337		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Pyrene	ND	0.0673		mg/Kg-dry	1	06/13/2022 1:20 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	59.1	45-152		%Rec	1	06/13/2022 1:20 PM	82769
SS: 2-Fluorobiphenyl	55.7	58-141	S	%Rec	1	06/13/2022 1:20 PM	82769
SS: 2-Fluorophenol	57.7	45-164		%Rec	1	06/13/2022 1:20 PM	82769
SS: 4-Terphenyl-d14	58.1	10-243		%Rec	1	06/13/2022 1:20 PM	82769
SS: Nitrobenzene-d5	57.0	45-150		%Rec	1	06/13/2022 1:20 PM	82769
SS: Phenol-d6	56.4	57-141	S	%Rec	1	06/13/2022 1:20 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0378	0.0249	J	mg/Kg-dry	1	06/14/2022 12:24 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.68	1.00		pH Units	1	06/13/2022 4:34 PM	R149898
Temperature	22.6	0		pH Units	1	06/13/2022 4:34 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	26	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:26 PM

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-38 3-5'** **Matrix:** SOIL
Lab ID: 2206741-005 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:30 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	2,380	2.40		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Antimony	ND	1.44		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Arsenic	ND	1.11		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Barium	50.1	0.120		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Beryllium	0.323	0.0481		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Cadmium	0.800	0.0721		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Calcium	106,000	3.00		mg/Kg-dry	5	06/16/2022 11:17 AM	82740
Chromium	6.90	0.0577		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Cobalt	3.72	0.120		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Copper	9.67	0.144		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Iron	9,410	3.00		mg/Kg-dry	5	06/16/2022 11:17 AM	82740
Lead	3.48	0.577		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Magnesium	61,900	12.0		mg/Kg-dry	20	06/16/2022 12:38 PM	82740
Manganese	388	0.0577		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Nickel	8.22	0.226		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Potassium	942	2.40		mg/Kg-dry	1	06/15/2022 1:50 PM	82740
Selenium	ND	1.25		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Silver	ND	0.0577		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Sodium	2,540	1.20		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Thallium	ND	0.962		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Vanadium	9.55	0.144		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
Zinc	21.2	0.962		mg/Kg-dry	1	06/14/2022 3:13 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
1,1,1-Trichloroethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
1,1,2,2-Tetrachloroethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
1,1,2-Trichloroethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
1,1-Dichloroethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
1,1-Dichloroethene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
1,2-Dichloroethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
1,2-Dichloropropane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
2-Butanone	4.24	0.525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
2-Hexanone	ND	1.31	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
4-Methyl-2-pentanone	ND	1.31	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Acetone	ND	1.31	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Benzene	ND	0.0131	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-38 3-5'
Lab ID: 2206741-005
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 11:30 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Bromoform	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Bromomethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Carbon disulfide	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Carbon tetrachloride	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Chlorobenzene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Chloroethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Chloroform	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Chloromethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
cis-1,2-Dichloroethene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
cis-1,3-Dichloropropene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Dibromochloromethane	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Ethylbenzene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
m,p-Xylene	ND	0.105	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Methyl tert-butyl ether	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Methylene chloride	ND	0.262	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
o-Xylene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Total Xylenes	ND	0.105	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Styrene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Tetrachloroethene	ND	0.105	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Toluene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
trans-1,2-Dichloroethene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
trans-1,3-Dichloropropene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Trichloroethene	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Vinyl chloride	ND	0.0525	G	mg/Kg-dry	42.59	06/09/2022 1:28 PM	R149796
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	90.3	80-130		%Rec	42.59	06/09/2022 1:28 PM	R149796
SS: Dibromofluoromethane	113	76.1-120		%Rec	42.59	06/09/2022 1:28 PM	R149796
SS: Toluene-d8	97.6	85-115		%Rec	42.59	06/09/2022 1:28 PM	R149796
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
1,2-Dichlorobenzene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
1,3-Dichlorobenzene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
1,4-Dichlorobenzene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2,4,5-Trichlorophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2,4,6-Trichlorophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2,4-Dichlorophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-38 3-5'**
Lab ID: 2206741-005
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 11:30 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2,4-Dinitrophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2,4-Dinitrotoluene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2,6-Dinitrotoluene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2-Chloronaphthalene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2-Chlorophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2-Methylnaphthalene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2-Nitroaniline	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
2-Nitrophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
3,3-Dichlorobenzidine	ND	0.308	S	mg/Kg-dry	1	06/13/2022 1:52 PM	82769
3-Nitroaniline	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
4-Bromophenyl phenyl ether	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
4-Chloro-3-methylphenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
4-Chloroaniline	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
4-Chlorophenyl phenyl ether	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
4-Nitroaniline	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
4-Nitrophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Acenaphthene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Acenaphthylene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Anthracene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Benzo(a)anthracene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Benzo(a)pyrene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Benzo(b)fluoranthene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Benzo(g,h,i)perylene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Benzo(k)fluoranthene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Bis(2-chloroethoxy)methane	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Bis(2-chloroethyl)ether	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Butyl benzyl phthalate	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Carbazole	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Chrysene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Dibenzo(a,h)anthracene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Dibenzofuran	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Diethyl phthalate	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Dimethyl phthalate	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Di-n-butyl phthalate	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Di-n-octyl phthalate	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-38 3-5'** **Matrix:** SOIL
Lab ID: 2206741-005 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:30 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Fluorene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Hexachlorobenzene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Hexachlorobutadiene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Hexachlorocyclopentadiene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Hexachloroethane	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Isophorone	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
m,p-Cresol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Naphthalene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Nitrobenzene	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
N-Nitroso-di-n-propylamine	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
N-Nitrosodiphenylamine	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
o-Cresol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Pentachlorophenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Phenanthrene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Phenol	ND	0.308		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Pyrene	ND	0.0616		mg/Kg-dry	1	06/13/2022 1:52 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	62.6	45-152		%Rec	1	06/13/2022 1:52 PM	82769
SS: 2-Fluorobiphenyl	58.0	58-141	S	%Rec	1	06/13/2022 1:52 PM	82769
SS: 2-Fluorophenol	62.4	45-164		%Rec	1	06/13/2022 1:52 PM	82769
SS: 4-Terphenyl-d14	57.6	10-243		%Rec	1	06/13/2022 1:52 PM	82769
SS: Nitrobenzene-d5	60.7	45-150		%Rec	1	06/13/2022 1:52 PM	82769
SS: Phenol-d6	60.0	57-141		%Rec	1	06/13/2022 1:52 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0246		mg/Kg-dry	1	06/14/2022 12:28 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	9.20	1.00	*	pH Units	1	06/13/2022 4:35 PM	R149898
Temperature	22.6	0		pH Units	1	06/13/2022 4:35 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	19	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-39 2-4'** **Matrix:** SOIL
Lab ID: 2206741-006 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	3,220	2.50		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Antimony	ND	1.50		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Arsenic	3.22	1.15	J	mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Barium	60.2	0.125		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Beryllium	0.325	0.0500		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Cadmium	0.969	0.0750		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Calcium	97,300	3.13		mg/Kg-dry	5	06/16/2022 11:25 AM	82740
Chromium	7.40	0.0600		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Cobalt	3.55	0.125		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Copper	6.89	0.150		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Iron	11,400	3.13		mg/Kg-dry	5	06/16/2022 11:25 AM	82740
Lead	4.96	0.600		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Magnesium	56,600	12.5		mg/Kg-dry	20	06/16/2022 1:18 PM	82740
Manganese	338	0.0600		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Nickel	8.78	0.235		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Potassium	609	2.50		mg/Kg-dry	1	06/15/2022 2:07 PM	82740
Selenium	ND	1.30		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Silver	ND	0.0600		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Sodium	385	1.25		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Thallium	ND	1.00		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Vanadium	12.7	0.150		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
Zinc	26.2	1.00		mg/Kg-dry	1	06/14/2022 3:30 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
1,1,1-Trichloroethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
1,1,2-Trichloroethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
1,1-Dichloroethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
1,1-Dichloroethene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
1,2-Dichloroethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
1,2-Dichloropropane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
2-Butanone	0.0126	0.0119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
2-Hexanone	ND	0.0299		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
4-Methyl-2-pentanone	ND	0.0299		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Acetone	0.0662	0.0299		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Benzene	ND	0.000299		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-39 2-4'** **Matrix:** SOIL
Lab ID: 2206741-006 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Bromoform	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Bromomethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Carbon disulfide	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Carbon tetrachloride	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Chlorobenzene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Chloroethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Chloroform	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Chloromethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
cis-1,2-Dichloroethene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
cis-1,3-Dichloropropene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Dibromochloromethane	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Ethylbenzene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
m,p-Xylene	ND	0.00239		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Methyl tert-butyl ether	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Methylene chloride	ND	0.00597		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
o-Xylene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Total Xylenes	ND	0.00239		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Styrene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Tetrachloroethene	ND	0.00239		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Toluene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
trans-1,2-Dichloroethene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
trans-1,3-Dichloropropene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Trichloroethene	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Vinyl chloride	ND	0.00119		mg/Kg-dry	0.72	06/14/2022 9:45 PM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	78.6	80-130	S	%Rec	0.72	06/14/2022 9:45 PM	R149980
SS: Dibromofluoromethane	103	76.1-120		%Rec	0.72	06/14/2022 9:45 PM	R149980
SS: Toluene-d8	112	85-115		%Rec	0.72	06/14/2022 9:45 PM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
1,2-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
1,3-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
1,4-Dichlorobenzene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2,4,5-Trichlorophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2,4,6-Trichlorophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2,4-Dichlorophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-39 2-4'** **Matrix:** SOIL
Lab ID: 2206741-006 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2,4-Dinitrophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2,4-Dinitrotoluene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2,6-Dinitrotoluene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2-Chloronaphthalene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2-Chlorophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2-Methylnaphthalene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2-Nitroaniline	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
2-Nitrophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
3,3-Dichlorobenzidine	ND	0.299	S	mg/Kg-dry	1	06/13/2022 2:24 PM	82769
3-Nitroaniline	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
4-Bromophenyl phenyl ether	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
4-Chloro-3-methylphenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
4-Chloroaniline	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
4-Chlorophenyl phenyl ether	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
4-Nitroaniline	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
4-Nitrophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Acenaphthene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Acenaphthylene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Anthracene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Benzo(a)anthracene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Benzo(a)pyrene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Benzo(b)fluoranthene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Benzo(g,h,i)perylene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Benzo(k)fluoranthene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Bis(2-chloroethoxy)methane	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Bis(2-chloroethyl)ether	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Butyl benzyl phthalate	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Carbazole	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Chrysene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Dibenzo(a,h)anthracene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Dibenzofuran	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Diethyl phthalate	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Dimethyl phthalate	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Di-n-butyl phthalate	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Di-n-octyl phthalate	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-39 2-4'** **Matrix:** SOIL
Lab ID: 2206741-006 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Fluorene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Hexachlorobenzene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Hexachlorobutadiene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Hexachlorocyclopentadiene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Hexachloroethane	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Isophorone	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
m,p-Cresol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Naphthalene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Nitrobenzene	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
N-Nitroso-di-n-propylamine	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
N-Nitrosodiphenylamine	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
o-Cresol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Pentachlorophenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Phenanthrene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Phenol	ND	0.299		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Pyrene	ND	0.0597		mg/Kg-dry	1	06/13/2022 2:24 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	70.3	45-152		%Rec	1	06/13/2022 2:24 PM	82769
SS: 2-Fluorobiphenyl	64.0	58-141		%Rec	1	06/13/2022 2:24 PM	82769
SS: 2-Fluorophenol	66.0	45-164		%Rec	1	06/13/2022 2:24 PM	82769
SS: 4-Terphenyl-d14	69.4	10-243		%Rec	1	06/13/2022 2:24 PM	82769
SS: Nitrobenzene-d5	63.7	45-150		%Rec	1	06/13/2022 2:24 PM	82769
SS: Phenol-d6	64.0	57-141		%Rec	1	06/13/2022 2:24 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0250	0.0233	J	mg/Kg-dry	1	06/14/2022 12:31 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	8.10	1.00		pH Units	1	06/13/2022 4:37 PM	R149898
Temperature	22.6	0		pH Units	1	06/13/2022 4:37 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	16	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-40 2-4'
Lab ID: 2206741-007
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 11:40 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	7,010	12.5		mg/Kg-dry	5	06/16/2022 11:21 AM	82740
Antimony	ND	1.50	S	mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Arsenic	2.13	1.15	J	mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Barium	52.3	0.125		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Beryllium	0.400	0.0500		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Cadmium	1.27	0.0750		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Calcium	66,600	3.13		mg/Kg-dry	5	06/16/2022 11:21 AM	82740
Chromium	11.0	0.0600		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Cobalt	4.23	0.125		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Copper	5.68	0.150		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Iron	16,600	3.13		mg/Kg-dry	5	06/16/2022 11:21 AM	82740
Lead	5.93	0.600		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Magnesium	37,900	6.25		mg/Kg-dry	10	06/16/2022 12:42 PM	82740
Manganese	174	0.0600		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Nickel	9.60	0.235		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Potassium	493	2.50		mg/Kg-dry	1	06/15/2022 1:54 PM	82740
Selenium	ND	1.30		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Silver	ND	0.0600		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Sodium	545	1.25		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Thallium	ND	1.00		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Vanadium	24.3	0.150		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
Zinc	30.0	1.00		mg/Kg-dry	1	06/14/2022 3:18 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
1,1,1-Trichloroethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
1,1,2-Trichloroethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
1,1-Dichloroethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
1,1-Dichloroethene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
1,2-Dichloroethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
1,2-Dichloropropane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
2-Butanone	0.0163	0.0122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
2-Hexanone	ND	0.0306		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
4-Methyl-2-pentanone	ND	0.0306		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Acetone	0.0762	0.0306		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Benzene	ND	0.000306		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-40 2-4'**
Lab ID: 2206741-007
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 11:40 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Bromoform	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Bromomethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Carbon disulfide	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Carbon tetrachloride	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Chlorobenzene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Chloroethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Chloroform	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Chloromethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
cis-1,2-Dichloroethene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
cis-1,3-Dichloropropene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Dibromochloromethane	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Ethylbenzene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
m,p-Xylene	ND	0.00245		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Methyl tert-butyl ether	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Methylene chloride	ND	0.00612		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
o-Xylene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Total Xylenes	ND	0.00245		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Styrene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Tetrachloroethene	ND	0.00245		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Toluene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
trans-1,2-Dichloroethene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
trans-1,3-Dichloropropene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Trichloroethene	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Vinyl chloride	ND	0.00122		mg/Kg-dry	0.7	06/14/2022 10:12 PM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	88.3	80-130		%Rec	0.7	06/14/2022 10:12 PM	R149980
SS: Dibromofluoromethane	95.0	76.1-120		%Rec	0.7	06/14/2022 10:12 PM	R149980
SS: Toluene-d8	98.5	85-115		%Rec	0.7	06/14/2022 10:12 PM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
1,2-Dichlorobenzene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
1,3-Dichlorobenzene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
1,4-Dichlorobenzene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2,4,5-Trichlorophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2,4,6-Trichlorophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2,4-Dichlorophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-40 2-4'** **Matrix:** SOIL
Lab ID: 2206741-007 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:40 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2,4-Dinitrophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2,4-Dinitrotoluene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2,6-Dinitrotoluene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2-Chloronaphthalene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2-Chlorophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2-Methylnaphthalene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2-Nitroaniline	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
2-Nitrophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
3,3-Dichlorobenzidine	ND	0.306	S	mg/Kg-dry	1	06/13/2022 2:56 PM	82769
3-Nitroaniline	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
4-Bromophenyl phenyl ether	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
4-Chloro-3-methylphenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
4-Chloroaniline	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
4-Chlorophenyl phenyl ether	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
4-Nitroaniline	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
4-Nitrophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Acenaphthene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Acenaphthylene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Anthracene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Benzo(a)anthracene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Benzo(a)pyrene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Benzo(b)fluoranthene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Benzo(g,h,i)perylene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Benzo(k)fluoranthene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Bis(2-chloroethoxy)methane	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Bis(2-chloroethyl)ether	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Butyl benzyl phthalate	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Carbazole	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Chrysene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Dibenzo(a,h)anthracene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Dibenzofuran	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Diethyl phthalate	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Dimethyl phthalate	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Di-n-butyl phthalate	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Di-n-octyl phthalate	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-40 2-4'** **Matrix:** SOIL
Lab ID: 2206741-007 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:40 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Fluorene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Hexachlorobenzene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Hexachlorobutadiene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Hexachlorocyclopentadiene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Hexachloroethane	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Isophorone	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
m,p-Cresol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Naphthalene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Nitrobenzene	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
N-Nitroso-di-n-propylamine	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
N-Nitrosodiphenylamine	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
o-Cresol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Pentachlorophenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Phenanthrene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Phenol	ND	0.306		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Pyrene	ND	0.0611		mg/Kg-dry	1	06/13/2022 2:56 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	57.7	45-152		%Rec	1	06/13/2022 2:56 PM	82769
SS: 2-Fluorobiphenyl	55.0	58-141	S	%Rec	1	06/13/2022 2:56 PM	82769
SS: 2-Fluorophenol	59.5	45-164		%Rec	1	06/13/2022 2:56 PM	82769
SS: 4-Terphenyl-d14	53.6	10-243		%Rec	1	06/13/2022 2:56 PM	82769
SS: Nitrobenzene-d5	56.8	45-150		%Rec	1	06/13/2022 2:56 PM	82769
SS: Phenol-d6	57.2	57-141		%Rec	1	06/13/2022 2:56 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0457	0.0238	J	mg/Kg-dry	1	06/14/2022 12:34 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	8.31	1.00		pH Units	1	06/13/2022 4:38 PM	R149898
Temperature	22.5	0		pH Units	1	06/13/2022 4:38 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	18	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-41 3-5'
Lab ID: 2206741-008
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 12:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	8,090	12.5		mg/Kg-dry	5	06/16/2022 11:29 AM	82740
Antimony	ND	1.50		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Arsenic	6.14	1.15		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Barium	71.6	0.125		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Beryllium	0.479	0.0500		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Cadmium	1.62	0.0750		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Calcium	47,400	3.13		mg/Kg-dry	5	06/16/2022 11:29 AM	82740
Chromium	12.8	0.0600		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Cobalt	7.88	0.125		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Copper	15.8	0.150		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Iron	20,600	3.13		mg/Kg-dry	5	06/16/2022 11:29 AM	82740
Lead	20.5	0.600		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Magnesium	29,000	12.5		mg/Kg-dry	20	06/16/2022 1:06 PM	82740
Manganese	388	0.0600		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Nickel	18.3	0.235		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Potassium	794	2.50		mg/Kg-dry	1	06/15/2022 2:11 PM	82740
Selenium	ND	1.30		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Silver	ND	0.0600		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Sodium	919	1.25		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Thallium	ND	1.00		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Vanadium	22.1	0.150		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
Zinc	47.5	1.00		mg/Kg-dry	1	06/14/2022 3:35 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
1,1,1-Trichloroethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
1,1,2,2-Tetrachloroethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
1,1,2-Trichloroethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
1,1-Dichloroethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
1,1-Dichloroethene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
1,2-Dichloroethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
1,2-Dichloropropane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
2-Butanone	ND	0.550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
2-Hexanone	ND	1.38		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
4-Methyl-2-pentanone	ND	1.38		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Acetone	ND	1.38		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Benzene	ND	0.0138		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-41 3-5'** **Matrix:** SOIL
Lab ID: 2206741-008 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Bromoform	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Bromomethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Carbon disulfide	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Carbon tetrachloride	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Chlorobenzene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Chloroethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Chloroform	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Chloromethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
cis-1,2-Dichloroethene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
cis-1,3-Dichloropropene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Dibromochloromethane	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Ethylbenzene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
m,p-Xylene	0.322	0.110		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Methyl tert-butyl ether	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Methylene chloride	ND	0.275		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
o-Xylene	0.114	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Total Xylenes	0.436	0.110		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Styrene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Tetrachloroethene	ND	0.110		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Toluene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
trans-1,2-Dichloroethene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
trans-1,3-Dichloropropene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Trichloroethene	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Vinyl chloride	ND	0.0550		mg/Kg-dry	45.81	06/09/2022 2:46 PM	R149796
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	86.6	80-130		%Rec	45.81	06/09/2022 2:46 PM	R149796
SS: Dibromofluoromethane	111	76.1-120		%Rec	45.81	06/09/2022 2:46 PM	R149796
SS: Toluene-d8	98.0	85-115		%Rec	45.81	06/09/2022 2:46 PM	R149796
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
1,2-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
1,3-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
1,4-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2,4,5-Trichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2,4,6-Trichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2,4-Dichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-41 3-5'** **Matrix:** SOIL
Lab ID: 2206741-008 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2,4-Dinitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2,4-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2,6-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2-Chloronaphthalene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2-Chlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2-Methylnaphthalene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
2-Nitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
3,3-Dichlorobenzidine	ND	0.300	S	mg/Kg-dry	1	06/13/2022 3:28 PM	82769
3-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
4-Bromophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
4-Chloro-3-methylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
4-Chloroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
4-Chlorophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
4-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
4-Nitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Acenaphthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Acenaphthylene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Benzo(a)anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Benzo(a)pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Benzo(b)fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Benzo(g,h,i)perylene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Benzo(k)fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Bis(2-chloroethoxy)methane	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Bis(2-chloroethyl)ether	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Butyl benzyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Carbazole	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Chrysene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Dibenzo(a,h)anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Dibenzofuran	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Diethyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Dimethyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Di-n-butyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Di-n-octyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-41 3-5'** **Matrix:** SOIL
Lab ID: 2206741-008 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Fluorene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Hexachlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Hexachlorobutadiene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Hexachlorocyclopentadiene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Hexachloroethane	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Isophorone	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
m,p-Cresol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Naphthalene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Nitrobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
N-Nitroso-di-n-propylamine	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
N-Nitrosodiphenylamine	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
o-Cresol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Pentachlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Phenanthrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Phenol	ND	0.300		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 3:28 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	43.6	45-152	S	%Rec	1	06/13/2022 3:28 PM	82769
SS: 2-Fluorobiphenyl	41.1	58-141	S	%Rec	1	06/13/2022 3:28 PM	82769
SS: 2-Fluorophenol	43.5	45-164	S	%Rec	1	06/13/2022 3:28 PM	82769
SS: 4-Terphenyl-d14	58.5	10-243		%Rec	1	06/13/2022 3:28 PM	82769
SS: Nitrobenzene-d5	41.2	45-150	S	%Rec	1	06/13/2022 3:28 PM	82769
SS: Phenol-d6	41.9	57-141	S	%Rec	1	06/13/2022 3:28 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0552	0.0228	J	mg/Kg-dry	1	06/14/2022 12:44 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	8.39	1.00		pH Units	1	06/13/2022 4:39 PM	R149898
Temperature	22.4	0		pH Units	1	06/13/2022 4:39 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	17	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-42 5-7'** **Matrix:** SOIL
Lab ID: 2206741-009 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:40 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	7,890	12.4		mg/Kg-dry	5	06/15/2022 5:51 PM	82740
Antimony	ND	1.49		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Arsenic	11.2	1.14		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Barium	67.4	0.124		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Beryllium	0.497	0.0495		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Cadmium	1.89	0.0743		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Calcium	1,900	0.619		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Chromium	11.9	0.0594		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Cobalt	9.02	0.124		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Copper	26.7	0.149		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Iron	26,100	6.19		mg/Kg-dry	10	06/16/2022 11:33 AM	82740
Lead	11.7	0.594		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Magnesium	2,150	0.619		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Manganese	705	0.0594		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Nickel	27.4	0.233		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Potassium	789	2.48		mg/Kg-dry	1	06/15/2022 2:15 PM	82740
Selenium	ND	1.29		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Silver	ND	0.0594		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Sodium	701	1.24		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Thallium	ND	0.990		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Vanadium	18.5	0.149		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
Zinc	69.4	0.990		mg/Kg-dry	1	06/14/2022 3:39 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
1,1,1-Trichloroethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
1,1,2-Trichloroethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
1,1-Dichloroethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
1,1-Dichloroethene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
1,2-Dichloroethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
1,2-Dichloropropane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
2-Butanone	ND	0.0126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
2-Hexanone	ND	0.0315		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
4-Methyl-2-pentanone	ND	0.0315		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Acetone	ND	0.0315		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Benzene	ND	0.000315		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-42 5-7'**
Lab ID: 2206741-009
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 12:40 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Bromoform	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Bromomethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Carbon disulfide	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Carbon tetrachloride	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Chlorobenzene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Chloroethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Chloroform	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Chloromethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
cis-1,2-Dichloroethene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
cis-1,3-Dichloropropene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Dibromochloromethane	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Ethylbenzene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
m,p-Xylene	0.00407	0.00252		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Methyl tert-butyl ether	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Methylene chloride	ND	0.00631		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
o-Xylene	0.00216	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Total Xylenes	0.00623	0.00252		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Styrene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Tetrachloroethene	ND	0.00252		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Toluene	0.0574	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
trans-1,2-Dichloroethene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
trans-1,3-Dichloropropene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Trichloroethene	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Vinyl chloride	ND	0.00126		mg/Kg-dry	0.72	06/14/2022 11:06 PM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	98.0	80-130		%Rec	0.72	06/14/2022 11:06 PM	R149980
SS: Dibromofluoromethane	96.8	76.1-120		%Rec	0.72	06/14/2022 11:06 PM	R149980
SS: Toluene-d8	99.9	85-115		%Rec	0.72	06/14/2022 11:06 PM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
1,2-Dichlorobenzene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
1,3-Dichlorobenzene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
1,4-Dichlorobenzene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2,4,5-Trichlorophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2,4,6-Trichlorophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2,4-Dichlorophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-42 5-7'** **Matrix:** SOIL
Lab ID: 2206741-009 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:40 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2,4-Dinitrophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2,4-Dinitrotoluene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2,6-Dinitrotoluene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2-Chloronaphthalene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2-Chlorophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2-Methylnaphthalene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2-Nitroaniline	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
2-Nitrophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
3,3-Dichlorobenzidine	ND	0.315	S	mg/Kg-dry	1	06/13/2022 4:01 PM	82769
3-Nitroaniline	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
4-Bromophenyl phenyl ether	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
4-Chloro-3-methylphenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
4-Chloroaniline	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
4-Chlorophenyl phenyl ether	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
4-Nitroaniline	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
4-Nitrophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Acenaphthene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Acenaphthylene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Anthracene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Benzo(a)anthracene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Benzo(a)pyrene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Benzo(b)fluoranthene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Benzo(g,h,i)perylene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Benzo(k)fluoranthene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Bis(2-chloroethoxy)methane	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Bis(2-chloroethyl)ether	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Butyl benzyl phthalate	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Carbazole	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Chrysene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Dibenzo(a,h)anthracene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Dibenzofuran	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Diethyl phthalate	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Dimethyl phthalate	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Di-n-butyl phthalate	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Di-n-octyl phthalate	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-42 5-7'
Lab ID: 2206741-009
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 12:40 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Fluorene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Hexachlorobenzene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Hexachlorobutadiene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Hexachlorocyclopentadiene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Hexachloroethane	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Isophorone	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
m,p-Cresol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Naphthalene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Nitrobenzene	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
N-Nitroso-di-n-propylamine	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
N-Nitrosodiphenylamine	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
o-Cresol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Pentachlorophenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Phenanthrene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Phenol	ND	0.315		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Pyrene	ND	0.0630		mg/Kg-dry	1	06/13/2022 4:01 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	67.8	45-152		%Rec	1	06/13/2022 4:01 PM	82769
SS: 2-Fluorobiphenyl	62.9	58-141		%Rec	1	06/13/2022 4:01 PM	82769
SS: 2-Fluorophenol	67.0	45-164		%Rec	1	06/13/2022 4:01 PM	82769
SS: 4-Terphenyl-d14	124	10-243		%Rec	1	06/13/2022 4:01 PM	82769
SS: Nitrobenzene-d5	65.2	45-150		%Rec	1	06/13/2022 4:01 PM	82769
SS: Phenol-d6	65.2	57-141		%Rec	1	06/13/2022 4:01 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0360	0.0245	J	mg/Kg-dry	1	06/14/2022 12:48 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.97	1.00		pH Units	1	06/13/2022 4:40 PM	R149898
Temperature	22.4	0		pH Units	1	06/13/2022 4:40 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	21	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:38 PM

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-47 3-5'** **Matrix:** SOIL
Lab ID: 2206741-010 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:45 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	4,160	2.45		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Antimony	ND	1.47		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Arsenic	9.80	1.13		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Barium	43.2	0.123		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Beryllium	0.354	0.0490		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Cadmium	1.63	0.0735		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Calcium	18,700	0.613		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Chromium	9.78	0.0588		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Cobalt	9.20	0.123		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Copper	23.5	0.147		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Iron	19,200	3.06		mg/Kg-dry	5	06/16/2022 11:38 AM	82740
Lead	10.7	0.588		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Magnesium	13,300	3.06		mg/Kg-dry	5	06/16/2022 11:38 AM	82740
Manganese	517	0.0588		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Nickel	23.3	0.230		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Potassium	639	2.45		mg/Kg-dry	1	06/15/2022 2:19 PM	82740
Selenium	ND	1.27		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Silver	ND	0.0588		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Sodium	1,350	1.23		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Thallium	ND	0.980		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Vanadium	16.0	0.147		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
Zinc	71.9	0.980		mg/Kg-dry	1	06/14/2022 3:43 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
1,1,1-Trichloroethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
1,1,2-Trichloroethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
1,1-Dichloroethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
1,1-Dichloroethene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
1,2-Dichloroethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
1,2-Dichloropropane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
2-Butanone	ND	0.0119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
2-Hexanone	ND	0.0298		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
4-Methyl-2-pentanone	ND	0.0298		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Acetone	ND	0.0298		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Benzene	ND	0.000298		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-47 3-5'
Lab ID: 2206741-010
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 12:45 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Bromoform	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Bromomethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Carbon disulfide	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Carbon tetrachloride	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Chlorobenzene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Chloroethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Chloroform	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Chloromethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
cis-1,2-Dichloroethene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
cis-1,3-Dichloropropene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Dibromochloromethane	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Ethylbenzene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
m,p-Xylene	ND	0.00238		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Methyl tert-butyl ether	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Methylene chloride	ND	0.00595		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
o-Xylene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Total Xylenes	ND	0.00238		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Styrene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Tetrachloroethene	ND	0.00238		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Toluene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
trans-1,2-Dichloroethene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
trans-1,3-Dichloropropene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Trichloroethene	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Vinyl chloride	ND	0.00119		mg/Kg-dry	0.73	06/14/2022 11:34 PM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	95.6	80-130		%Rec	0.73	06/14/2022 11:34 PM	R149980
SS: Dibromofluoromethane	104	76.1-120		%Rec	0.73	06/14/2022 11:34 PM	R149980
SS: Toluene-d8	106	85-115		%Rec	0.73	06/14/2022 11:34 PM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
1,2-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
1,3-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
1,4-Dichlorobenzene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2,4,5-Trichlorophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2,4,6-Trichlorophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2,4-Dichlorophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-47 3-5'** **Matrix:** SOIL
Lab ID: 2206741-010 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:45 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2,4-Dinitrophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2,4-Dinitrotoluene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2,6-Dinitrotoluene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2-Chloronaphthalene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2-Chlorophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2-Methylnaphthalene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2-Nitroaniline	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
2-Nitrophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
3,3-Dichlorobenzidine	ND	0.298	S	mg/Kg-dry	1	06/13/2022 4:33 PM	82769
3-Nitroaniline	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
4-Bromophenyl phenyl ether	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
4-Chloro-3-methylphenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
4-Chloroaniline	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
4-Chlorophenyl phenyl ether	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
4-Nitroaniline	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
4-Nitrophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Acenaphthene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Acenaphthylene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Anthracene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Benzo(a)anthracene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Benzo(a)pyrene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Benzo(b)fluoranthene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Benzo(g,h,i)perylene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Benzo(k)fluoranthene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Bis(2-chloroethoxy)methane	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Bis(2-chloroethyl)ether	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Butyl benzyl phthalate	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Carbazole	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Chrysene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Dibenzo(a,h)anthracene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Dibenzofuran	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Diethyl phthalate	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Dimethyl phthalate	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Di-n-butyl phthalate	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Di-n-octyl phthalate	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-47 3-5'
Lab ID: 2206741-010
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 12:45 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Fluorene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Hexachlorobenzene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Hexachlorobutadiene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Hexachlorocyclopentadiene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Hexachloroethane	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Isophorone	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
m,p-Cresol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Naphthalene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Nitrobenzene	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
N-Nitroso-di-n-propylamine	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
N-Nitrosodiphenylamine	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
o-Cresol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Pentachlorophenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Phenanthrene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Phenol	ND	0.298		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Pyrene	ND	0.0595		mg/Kg-dry	1	06/13/2022 4:33 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	60.6	45-152		%Rec	1	06/13/2022 4:33 PM	82769
SS: 2-Fluorobiphenyl	60.2	58-141		%Rec	1	06/13/2022 4:33 PM	82769
SS: 2-Fluorophenol	64.0	45-164		%Rec	1	06/13/2022 4:33 PM	82769
SS: 4-Terphenyl-d14	107	10-243		%Rec	1	06/13/2022 4:33 PM	82769
SS: Nitrobenzene-d5	63.0	45-150		%Rec	1	06/13/2022 4:33 PM	82769
SS: Phenol-d6	63.1	57-141		%Rec	1	06/13/2022 4:33 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0238		mg/Kg-dry	1	06/14/2022 12:54 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.79	1.00		pH Units	1	06/13/2022 4:41 PM	R149898
Temperature	22.5	0		pH Units	1	06/13/2022 4:41 PM	R149898
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	16	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:40 PM

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-48 3-5'** **Matrix:** SOIL
Lab ID: 2206741-011 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 1:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	6,010	12.3		mg/Kg-dry	5	06/16/2022 11:42 AM	82740
Antimony	ND	1.47		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Arsenic	7.62	1.13		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Barium	47.8	0.123		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Beryllium	0.359	0.0490		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Cadmium	1.33	0.0735		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Calcium	10,800	0.613		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Chromium	9.82	0.0588		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Cobalt	7.96	0.123		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Copper	20.7	0.147		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Iron	17,200	3.06		mg/Kg-dry	5	06/16/2022 11:42 AM	82740
Lead	9.64	0.588		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Magnesium	8,170	3.06		mg/Kg-dry	5	06/16/2022 11:42 AM	82740
Manganese	451	0.0588		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Nickel	19.3	0.230		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Potassium	462	2.45		mg/Kg-dry	1	06/15/2022 2:23 PM	82740
Selenium	ND	1.27		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Silver	ND	0.0588		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Sodium	667	1.23		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Thallium	ND	0.980		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Vanadium	14.4	0.147		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
Zinc	60.3	0.980		mg/Kg-dry	1	06/14/2022 3:47 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
1,1,1-Trichloroethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
1,1,2-Trichloroethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
1,1-Dichloroethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
1,1-Dichloroethene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
1,2-Dichloroethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
1,2-Dichloropropane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
2-Butanone	ND	0.0120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
2-Hexanone	ND	0.0300		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
4-Methyl-2-pentanone	ND	0.0300		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Acetone	ND	0.0300		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Benzene	ND	0.000300		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-48 3-5'
Lab ID: 2206741-011
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 1:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Bromoform	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Bromomethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Carbon disulfide	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Carbon tetrachloride	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Chlorobenzene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Chloroethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Chloroform	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Chloromethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
cis-1,2-Dichloroethene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
cis-1,3-Dichloropropene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Dibromochloromethane	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Ethylbenzene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
m,p-Xylene	ND	0.00240		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Methyl tert-butyl ether	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Methylene chloride	ND	0.00601		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
o-Xylene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Total Xylenes	ND	0.00240		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Styrene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Tetrachloroethene	ND	0.00240		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Toluene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
trans-1,2-Dichloroethene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
trans-1,3-Dichloropropene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Trichloroethene	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Vinyl chloride	ND	0.00120		mg/Kg-dry	0.66	06/15/2022 12:01 AM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	88.2	80-130		%Rec	0.66	06/15/2022 12:01 AM	R149980
SS: Dibromofluoromethane	99.6	76.1-120		%Rec	0.66	06/15/2022 12:01 AM	R149980
SS: Toluene-d8	97.9	85-115		%Rec	0.66	06/15/2022 12:01 AM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
1,2-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
1,3-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
1,4-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2,4,5-Trichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2,4,6-Trichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2,4-Dichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-48 3-5'** **Matrix:** SOIL
Lab ID: 2206741-011 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 1:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2,4-Dinitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2,4-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2,6-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2-Chloronaphthalene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2-Chlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2-Methylnaphthalene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
2-Nitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
3,3-Dichlorobenzidine	ND	0.300	S	mg/Kg-dry	1	06/13/2022 5:06 PM	82769
3-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
4-Bromophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
4-Chloro-3-methylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
4-Chloroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
4-Chlorophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
4-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
4-Nitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Acenaphthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Acenaphthylene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Benzo(a)anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Benzo(a)pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Benzo(b)fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Benzo(g,h,i)perylene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Benzo(k)fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Bis(2-chloroethoxy)methane	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Bis(2-chloroethyl)ether	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Butyl benzyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Carbazole	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Chrysene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Dibenzo(a,h)anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Dibenzofuran	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Diethyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Dimethyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Di-n-butyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Di-n-octyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-48 3-5'
Lab ID: 2206741-011
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 1:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Fluorene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Hexachlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Hexachlorobutadiene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Hexachlorocyclopentadiene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Hexachloroethane	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Isophorone	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
m,p-Cresol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Naphthalene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Nitrobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
N-Nitroso-di-n-propylamine	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
N-Nitrosodiphenylamine	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
o-Cresol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Pentachlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Phenanthrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Phenol	ND	0.300		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 5:06 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	65.4	45-152		%Rec	1	06/13/2022 5:06 PM	82769
SS: 2-Fluorobiphenyl	62.5	58-141		%Rec	1	06/13/2022 5:06 PM	82769
SS: 2-Fluorophenol	59.4	45-164		%Rec	1	06/13/2022 5:06 PM	82769
SS: 4-Terphenyl-d14	42.7	10-243		%Rec	1	06/13/2022 5:06 PM	82769
SS: Nitrobenzene-d5	64.2	45-150		%Rec	1	06/13/2022 5:06 PM	82769
SS: Phenol-d6	56.0	57-141	S	%Rec	1	06/13/2022 5:06 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0252	0.0240	J	mg/Kg-dry	1	06/14/2022 12:57 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	8.68	1.00		pH Units	1	06/14/2022 2:21 PM	R149967
Temperature	23.0	0		pH Units	1	06/14/2022 2:21 PM	R149967
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	17	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:43 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: **2206741**

Client Sample ID: **B-43 5-7'**
Lab ID: 2206741-012
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 1:20 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	958	2.48		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Antimony	ND	1.49		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Arsenic	11.5	1.14		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Barium	15.4	0.124		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Beryllium	0.141	0.0495	J	mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Cadmium	1.45	0.0743		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Calcium	148,000	12.4		mg/Kg-dry	20	06/16/2022 1:10 PM	82740
Chromium	3.89	0.0594		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Cobalt	3.67	0.124		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Copper	16.4	0.149		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Iron	17,800	3.09		mg/Kg-dry	5	06/16/2022 12:02 PM	82740
Lead	6.22	0.594		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Magnesium	79,800	12.4		mg/Kg-dry	20	06/16/2022 1:10 PM	82740
Manganese	424	0.0594		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Nickel	10.0	0.233		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Potassium	501	2.48		mg/Kg-dry	1	06/15/2022 2:28 PM	82740
Selenium	ND	1.29		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Silver	ND	0.0594		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Sodium	432	1.24		mg/Kg-dry	1	06/15/2022 2:28 PM	82740
Thallium	ND	0.990		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Vanadium	6.30	0.149		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
Zinc	50.0	0.990		mg/Kg-dry	1	06/14/2022 4:14 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
1,1,1-Trichloroethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
1,1,2,2-Tetrachloroethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
1,1,2-Trichloroethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
1,1-Dichloroethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
1,1-Dichloroethene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
1,2-Dichloroethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
1,2-Dichloropropane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
2-Butanone	ND	0.0115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
2-Hexanone	ND	0.0288		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
4-Methyl-2-pentanone	ND	0.0288		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Acetone	ND	0.0288		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Benzene	ND	0.000288		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-43 5-7'** **Matrix:** SOIL
Lab ID: 2206741-012 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 1:20 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Bromoform	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Bromomethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Carbon disulfide	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Carbon tetrachloride	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Chlorobenzene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Chloroethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Chloroform	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Chloromethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
cis-1,2-Dichloroethene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
cis-1,3-Dichloropropene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Dibromochloromethane	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Ethylbenzene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
m,p-Xylene	ND	0.00231		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Methyl tert-butyl ether	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Methylene chloride	ND	0.00577		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
o-Xylene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Total Xylenes	ND	0.00231		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Styrene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Tetrachloroethene	ND	0.00231		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Toluene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
trans-1,2-Dichloroethene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
trans-1,3-Dichloropropene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Trichloroethene	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Vinyl chloride	ND	0.00115		mg/Kg-dry	0.79	06/15/2022 12:28 AM	R149980
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	89.8	80-130		%Rec	0.79	06/15/2022 12:28 AM	R149980
SS: Dibromofluoromethane	98.3	76.1-120		%Rec	0.79	06/15/2022 12:28 AM	R149980
SS: Toluene-d8	95.0	85-115		%Rec	0.79	06/15/2022 12:28 AM	R149980
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
1,2-Dichlorobenzene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
1,3-Dichlorobenzene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
1,4-Dichlorobenzene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2,4,5-Trichlorophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2,4,6-Trichlorophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2,4-Dichlorophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-43 5-7'** **Matrix:** SOIL
Lab ID: 2206741-012 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 1:20 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2,4-Dinitrophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2,4-Dinitrotoluene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2,6-Dinitrotoluene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2-Chloronaphthalene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2-Chlorophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2-Methylnaphthalene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2-Nitroaniline	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
2-Nitrophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
3,3-Dichlorobenzidine	ND	0.288	S	mg/Kg-dry	1	06/13/2022 5:38 PM	82769
3-Nitroaniline	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
4-Bromophenyl phenyl ether	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
4-Chloro-3-methylphenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
4-Chloroaniline	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
4-Chlorophenyl phenyl ether	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
4-Nitroaniline	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
4-Nitrophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Acenaphthene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Acenaphthylene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Anthracene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Benzo(a)anthracene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Benzo(a)pyrene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Benzo(b)fluoranthene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Benzo(g,h,i)perylene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Benzo(k)fluoranthene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Bis(2-chloroethoxy)methane	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Bis(2-chloroethyl)ether	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Butyl benzyl phthalate	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Carbazole	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Chrysene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Dibenzo(a,h)anthracene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Dibenzofuran	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Diethyl phthalate	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Dimethyl phthalate	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Di-n-butyl phthalate	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Di-n-octyl phthalate	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-43 5-7'** **Matrix:** SOIL
Lab ID: 2206741-012 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 1:20 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Fluorene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Hexachlorobenzene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Hexachlorobutadiene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Hexachlorocyclopentadiene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Hexachloroethane	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Isophorone	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
m,p-Cresol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Naphthalene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Nitrobenzene	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
N-Nitroso-di-n-propylamine	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
N-Nitrosodiphenylamine	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
o-Cresol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Pentachlorophenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Phenanthrene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Phenol	ND	0.288		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Pyrene	ND	0.0576		mg/Kg-dry	1	06/13/2022 5:38 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	69.7	45-152		%Rec	1	06/13/2022 5:38 PM	82769
SS: 2-Fluorobiphenyl	69.5	58-141		%Rec	1	06/13/2022 5:38 PM	82769
SS: 2-Fluorophenol	70.3	45-164		%Rec	1	06/13/2022 5:38 PM	82769
SS: 4-Terphenyl-d14	48.8	10-243		%Rec	1	06/13/2022 5:38 PM	82769
SS: Nitrobenzene-d5	71.2	45-150		%Rec	1	06/13/2022 5:38 PM	82769
SS: Phenol-d6	66.4	57-141		%Rec	1	06/13/2022 5:38 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	ND	0.0213		mg/Kg-dry	1	06/14/2022 1:01 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	8.39	1.00		pH Units	1	06/14/2022 1:57 PM	R149967
Temperature	22.4	0		pH Units	1	06/14/2022 1:57 PM	R149967
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	13	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:45 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-46 5-7'
Lab ID: 2206741-013
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 2:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	4,140	2.50		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Antimony	ND	1.50		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Arsenic	11.4	1.15		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Barium	69.7	0.125		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Beryllium	0.400	0.0500		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Cadmium	1.85	0.0750		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Calcium	63,900	3.13		mg/Kg-dry	5	06/16/2022 12:06 PM	82740
Chromium	9.96	0.0600		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Cobalt	6.74	0.125		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Copper	22.9	0.150		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Iron	22,200	3.13		mg/Kg-dry	5	06/16/2022 12:06 PM	82740
Lead	8.80	0.600		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Magnesium	36,900	6.25		mg/Kg-dry	10	06/16/2022 1:14 PM	82740
Manganese	701	0.0600		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Nickel	20.6	0.235		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Potassium	587	2.50		mg/Kg-dry	1	06/16/2022 12:10 PM	82740
Selenium	ND	1.30		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Silver	ND	0.0600		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Sodium	803	1.25		mg/Kg-dry	1	06/16/2022 12:10 PM	82740
Thallium	ND	1.00		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Vanadium	15.1	0.150		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
Zinc	78.3	1.00		mg/Kg-dry	1	06/14/2022 4:18 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
1,1,1-Trichloroethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
1,1,2,2-Tetrachloroethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
1,1,2-Trichloroethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
1,1-Dichloroethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
1,1-Dichloroethene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
1,2-Dichloroethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
1,2-Dichloropropane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
2-Butanone	ND	0.595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
2-Hexanone	ND	1.49		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
4-Methyl-2-pentanone	ND	1.49		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Acetone	ND	1.49		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Benzene	ND	0.0149		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-46 5-7'** **Matrix:** SOIL
Lab ID: 2206741-013 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Bromoform	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Bromomethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Carbon disulfide	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Carbon tetrachloride	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Chlorobenzene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Chloroethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Chloroform	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Chloromethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
cis-1,2-Dichloroethene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
cis-1,3-Dichloropropene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Dibromochloromethane	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Ethylbenzene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
m,p-Xylene	ND	0.119		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Methyl tert-butyl ether	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Methylene chloride	ND	0.297		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
o-Xylene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Total Xylenes	ND	0.119		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Styrene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Tetrachloroethene	ND	0.119		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Toluene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
trans-1,2-Dichloroethene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
trans-1,3-Dichloropropene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Trichloroethene	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Vinyl chloride	ND	0.0595		mg/Kg-dry	46.64	06/09/2022 4:54 PM	R149796
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	86.5	80-130		%Rec	46.64	06/09/2022 4:54 PM	R149796
SS: Dibromofluoromethane	112	76.1-120		%Rec	46.64	06/09/2022 4:54 PM	R149796
SS: Toluene-d8	96.4	85-115		%Rec	46.64	06/09/2022 4:54 PM	R149796
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
1,2-Dichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
1,3-Dichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
1,4-Dichlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2,4,5-Trichlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2,4,6-Trichlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2,4-Dichlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-46 5-7'** **Matrix:** SOIL
Lab ID: 2206741-013 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2,4-Dinitrophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2,4-Dinitrotoluene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2,6-Dinitrotoluene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2-Chloronaphthalene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2-Chlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2-Methylnaphthalene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2-Nitroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
2-Nitrophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
3,3-Dichlorobenzidine	ND	0.318	S	mg/Kg-dry	1	06/13/2022 6:11 PM	82769
3-Nitroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
4-Bromophenyl phenyl ether	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
4-Chloro-3-methylphenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
4-Chloroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
4-Chlorophenyl phenyl ether	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
4-Nitroaniline	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
4-Nitrophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Acenaphthene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Acenaphthylene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Anthracene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Benzo(a)anthracene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Benzo(a)pyrene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Benzo(b)fluoranthene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Benzo(g,h,i)perylene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Benzo(k)fluoranthene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Bis(2-chloroethoxy)methane	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Bis(2-chloroethyl)ether	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Butyl benzyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Carbazole	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Chrysene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Dibenzo(a,h)anthracene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Dibenzofuran	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Diethyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Dimethyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Di-n-butyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Di-n-octyl phthalate	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-46 5-7'
Lab ID: 2206741-013
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 2:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Fluorene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Hexachlorobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Hexachlorobutadiene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Hexachlorocyclopentadiene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Hexachloroethane	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Isophorone	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
m,p-Cresol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Naphthalene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Nitrobenzene	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
N-Nitroso-di-n-propylamine	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
N-Nitrosodiphenylamine	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
o-Cresol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Pentachlorophenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Phenanthrene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Phenol	ND	0.318		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Pyrene	ND	0.0637		mg/Kg-dry	1	06/13/2022 6:11 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	83.4	45-152		%Rec	1	06/13/2022 6:11 PM	82769
SS: 2-Fluorobiphenyl	77.7	58-141		%Rec	1	06/13/2022 6:11 PM	82769
SS: 2-Fluorophenol	82.4	45-164		%Rec	1	06/13/2022 6:11 PM	82769
SS: 4-Terphenyl-d14	54.1	10-243		%Rec	1	06/13/2022 6:11 PM	82769
SS: Nitrobenzene-d5	79.6	45-150		%Rec	1	06/13/2022 6:11 PM	82769
SS: Phenol-d6	80.4	57-141		%Rec	1	06/13/2022 6:11 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0355	0.0248	J	mg/Kg-dry	1	06/14/2022 1:04 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	8.47	1.00		pH Units	1	06/14/2022 2:19 PM	R149967
Temperature	22.9	0		pH Units	1	06/14/2022 2:19 PM	R149967
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	22	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:47 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-45 3-5'
Lab ID: 2206741-014
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 2:15 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	10,400	12.4		mg/Kg-dry	5	06/15/2022 5:55 PM	82740
Antimony	ND	1.49		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Arsenic	6.55	1.14		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Barium	112	0.124		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Beryllium	0.602	0.0495		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Cadmium	1.53	0.0743		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Calcium	2,450	0.619		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Chromium	13.4	0.0594		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Cobalt	8.47	0.124		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Copper	17.1	0.149		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Iron	20,700	3.09		mg/Kg-dry	5	06/15/2022 5:55 PM	82740
Lead	9.59	0.594		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Magnesium	2,660	0.619		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Manganese	581	0.0594		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Nickel	19.1	0.233		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Potassium	598	2.48		mg/Kg-dry	1	06/16/2022 12:14 PM	82740
Selenium	ND	1.29		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Silver	ND	0.0594		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Sodium	525	1.24		mg/Kg-dry	1	06/16/2022 12:14 PM	82740
Thallium	ND	0.990		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Vanadium	22.3	0.149		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
Zinc	57.5	0.990		mg/Kg-dry	1	06/14/2022 4:23 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
1,1,1-Trichloroethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
1,1,2,2-Tetrachloroethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
1,1,2-Trichloroethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
1,1-Dichloroethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
1,1-Dichloroethene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
1,2-Dichloroethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
1,2-Dichloropropane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
2-Butanone	ND	0.480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
2-Hexanone	ND	1.20		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
4-Methyl-2-pentanone	ND	1.20		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Acetone	ND	1.20		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Benzene	ND	0.0120		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-45 3-5'** **Matrix:** SOIL
Lab ID: 2206741-014 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:15 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Bromoform	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Bromomethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Carbon disulfide	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Carbon tetrachloride	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Chlorobenzene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Chloroethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Chloroform	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Chloromethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
cis-1,2-Dichloroethene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
cis-1,3-Dichloropropene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Dibromochloromethane	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Ethylbenzene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
m,p-Xylene	ND	0.0960		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Methyl tert-butyl ether	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Methylene chloride	ND	0.240		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
o-Xylene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Total Xylenes	ND	0.0960		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Styrene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Tetrachloroethene	ND	0.0960		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Toluene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
trans-1,2-Dichloroethene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
trans-1,3-Dichloropropene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Trichloroethene	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Vinyl chloride	ND	0.0480		mg/Kg-dry	40.01	06/09/2022 5:20 PM	R149796
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	83.7	80-130		%Rec	40.01	06/09/2022 5:20 PM	R149796
SS: Dibromofluoromethane	112	76.1-120		%Rec	40.01	06/09/2022 5:20 PM	R149796
SS: Toluene-d8	96.8	85-115		%Rec	40.01	06/09/2022 5:20 PM	R149796
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
1,2-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
1,3-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
1,4-Dichlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2,4,5-Trichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2,4,6-Trichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2,4-Dichlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-45 3-5'** **Matrix:** SOIL
Lab ID: 2206741-014 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:15 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2,4-Dinitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2,4-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2,6-Dinitrotoluene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2-Chloronaphthalene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2-Chlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2-Methylnaphthalene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
2-Nitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
3,3-Dichlorobenzidine	ND	0.300	S	mg/Kg-dry	1	06/13/2022 6:43 PM	82769
3-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
4-Bromophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
4-Chloro-3-methylphenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
4-Chloroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
4-Chlorophenyl phenyl ether	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
4-Nitroaniline	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
4-Nitrophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Acenaphthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Acenaphthylene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Benzo(a)anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Benzo(a)pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Benzo(b)fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Benzo(g,h,i)perylene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Benzo(k)fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Bis(2-chloroethoxy)methane	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Bis(2-chloroethyl)ether	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Butyl benzyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Carbazole	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Chrysene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Dibenzo(a,h)anthracene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Dibenzofuran	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Diethyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Dimethyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Di-n-butyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Di-n-octyl phthalate	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769

Suburban Laboratories, Inc.
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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-45 3-5'
Lab ID: 2206741-014
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 2:15 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Fluorene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Hexachlorobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Hexachlorobutadiene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Hexachlorocyclopentadiene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Hexachloroethane	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Isophorone	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
m,p-Cresol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Naphthalene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Nitrobenzene	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
N-Nitroso-di-n-propylamine	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
N-Nitrosodiphenylamine	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
o-Cresol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Pentachlorophenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Phenanthrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Phenol	ND	0.300		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Pyrene	ND	0.0600		mg/Kg-dry	1	06/13/2022 6:43 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	77.9	45-152		%Rec	1	06/13/2022 6:43 PM	82769
SS: 2-Fluorobiphenyl	69.8	58-141		%Rec	1	06/13/2022 6:43 PM	82769
SS: 2-Fluorophenol	74.1	45-164		%Rec	1	06/13/2022 6:43 PM	82769
SS: 4-Terphenyl-d14	51.3	10-243		%Rec	1	06/13/2022 6:43 PM	82769
SS: Nitrobenzene-d5	71.1	45-150		%Rec	1	06/13/2022 6:43 PM	82769
SS: Phenol-d6	70.4	57-141		%Rec	1	06/13/2022 6:43 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0319	0.0233	J	mg/Kg-dry	1	06/14/2022 1:08 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.36	1.00		pH Units	1	06/14/2022 2:24 PM	R149967
Temperature	22.8	0		pH Units	1	06/14/2022 2:24 PM	R149967
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	17	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:49 PM

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1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-44 3-5'
Lab ID: 2206741-015
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 2:30 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP		Method: EPA-6010B-Rev 2, Dec-96				Analyst: SCT	
Aluminum	9,390	12.4		mg/Kg-dry	5	06/15/2022 5:59 PM	82740
Antimony	ND	1.49	S	mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Arsenic	6.96	1.14		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Barium	58.6	0.124		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Beryllium	0.493	0.0495		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Cadmium	1.56	0.0743		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Calcium	1,760	0.619	SR	mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Chromium	12.1	0.0594		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Cobalt	9.61	0.124		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Copper	21.6	0.149		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Iron	21,700	3.09		mg/Kg-dry	5	06/15/2022 5:59 PM	82740
Lead	11.2	0.594		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Magnesium	2,480	0.619		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Manganese	506	0.0594		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Nickel	20.7	0.233		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Potassium	571	2.48		mg/Kg-dry	1	06/16/2022 12:18 PM	82740
Selenium	ND	1.29		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Silver	ND	0.0594		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Sodium	562	1.24		mg/Kg-dry	1	06/16/2022 12:18 PM	82740
Thallium	ND	0.990		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Vanadium	18.3	0.149		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
Zinc	60.3	0.990		mg/Kg-dry	1	06/14/2022 4:27 PM	82740
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Total 1,3-Dichloropropene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
1,1,1-Trichloroethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
1,1,2,2-Tetrachloroethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
1,1,2-Trichloroethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
1,1-Dichloroethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
1,1-Dichloroethene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
1,2-Dichloroethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
1,2-Dichloropropane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
2-Butanone	4.31	0.550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
2-Hexanone	ND	1.37	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
4-Methyl-2-pentanone	ND	1.37	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Acetone	ND	1.37	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Benzene	ND	0.0137	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796

Created: 6/20/2022 1:38:52 PM

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Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 20, 2022
Workorder: 2206741

Client Sample ID: B-44 3-5'
Lab ID: 2206741-015
Date Received: 06/08/2022 5:12 PM
Matrix: SOIL
Collection Date: 06/08/2022 2:30 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
VOLATILE ORGANIC COMPOUNDS		Method: EPA-8260B-Rev 2, Dec-96				Analyst: RY	
Bromodichloromethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Bromoform	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Bromomethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Carbon disulfide	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Carbon tetrachloride	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Chlorobenzene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Chloroethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Chloroform	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Chloromethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
cis-1,2-Dichloroethene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
cis-1,3-Dichloropropene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Dibromochloromethane	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Ethylbenzene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
m,p-Xylene	ND	0.110	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Methyl tert-butyl ether	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Methylene chloride	ND	0.275	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
o-Xylene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Total Xylenes	ND	0.110	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Styrene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Tetrachloroethene	ND	0.110	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Toluene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
trans-1,2-Dichloroethene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
trans-1,3-Dichloropropene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Trichloroethene	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Vinyl chloride	ND	0.0550	G	mg/Kg-dry	43.78	06/09/2022 5:46 PM	R149796
Internal Quality Control Compounds							
SS: 4-Bromofluorobenzene	83.2	80-130		%Rec	43.78	06/09/2022 5:46 PM	R149796
SS: Dibromofluoromethane	110	76.1-120		%Rec	43.78	06/09/2022 5:46 PM	R149796
SS: Toluene-d8	99.8	85-115		%Rec	43.78	06/09/2022 5:46 PM	R149796
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
1,2,4-Trichlorobenzene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
1,2-Dichlorobenzene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
1,3-Dichlorobenzene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
1,4-Dichlorobenzene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2,4,5-Trichlorophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2,4,6-Trichlorophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2,4-Dichlorophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-44 3-5'** **Matrix:** SOIL
Lab ID: 2206741-015 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:30 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
2,4-Dimethylphenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2,4-Dinitrophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2,4-Dinitrotoluene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2,6-Dinitrotoluene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2-Chloronaphthalene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2-Chlorophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2-Methylnaphthalene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2-Nitroaniline	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
2-Nitrophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
3,3-Dichlorobenzidine	ND	0.313	S	mg/Kg-dry	1	06/13/2022 7:15 PM	82769
3-Nitroaniline	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
4,6-Dinitro-2-methylphenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
4-Bromophenyl phenyl ether	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
4-Chloro-3-methylphenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
4-Chloroaniline	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
4-Chlorophenyl phenyl ether	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
4-Nitroaniline	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
4-Nitrophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Acenaphthene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Acenaphthylene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Anthracene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Benzo(a)anthracene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Benzo(a)pyrene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Benzo(b)fluoranthene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Benzo(g,h,i)perylene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Benzo(k)fluoranthene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Bis(2-chloroethoxy)methane	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Bis(2-chloroethyl)ether	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Bis(2-chloroisopropyl)ether	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Bis(2-ethylhexyl)phthalate	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Butyl benzyl phthalate	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Carbazole	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Chrysene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Dibenzo(a,h)anthracene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Dibenzofuran	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Diethyl phthalate	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Dimethyl phthalate	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Di-n-butyl phthalate	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Di-n-octyl phthalate	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769

Client ID: Patrick Engineering, Inc. **Report Date:** June 20, 2022
Project Name: Olympic Blvd **Workorder:** **2206741**

Client Sample ID: **B-44 3-5'** **Matrix:** SOIL
Lab ID: 2206741-015 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:30 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
SEMIVOLATILE ORGANICS (BNAS)		Method: EPA-8270C-Rev 3, Dec-96				Analyst: BM	
Fluoranthene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Fluorene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Hexachlorobenzene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Hexachlorobutadiene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Hexachlorocyclopentadiene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Hexachloroethane	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Indeno(1,2,3-cd)pyrene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Isophorone	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
m,p-Cresol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Naphthalene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Nitrobenzene	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
N-Nitroso-di-n-propylamine	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
N-Nitrosodiphenylamine	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
o-Cresol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Pentachlorophenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Phenanthrene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Phenol	ND	0.313		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Pyrene	ND	0.0627		mg/Kg-dry	1	06/13/2022 7:15 PM	82769
Internal Quality Control Compounds							
SS: 2,4,6-Tribromophenol	72.4	45-152		%Rec	1	06/13/2022 7:15 PM	82769
SS: 2-Fluorobiphenyl	72.2	58-141		%Rec	1	06/13/2022 7:15 PM	82769
SS: 2-Fluorophenol	76.1	45-164		%Rec	1	06/13/2022 7:15 PM	82769
SS: 4-Terphenyl-d14	48.6	10-243		%Rec	1	06/13/2022 7:15 PM	82769
SS: Nitrobenzene-d5	74.3	45-150		%Rec	1	06/13/2022 7:15 PM	82769
SS: Phenol-d6	73.5	57-141		%Rec	1	06/13/2022 7:15 PM	82769
MERCURY BY CVAA		Method: EPA-7471B-Rev 2, Feb-07				Analyst: MTS	
Mercury	0.0377	0.0244	J	mg/Kg-dry	1	06/14/2022 1:11 PM	82827
PH (IN LABORATORY) <ATC>		Method: EPA-9045C-Rev 3, Jan-95				Analyst: CSS	
pH	7.75	1.00		pH Units	1	06/14/2022 2:25 PM	R149967
Temperature	23.0	0		pH Units	1	06/14/2022 2:25 PM	R149967
PERCENT MOISTURE		Method: ASTM-D2216-Rev 2005				Analyst: NH	
Percent Moisture	20	1.0	c	wt%	1	06/09/2022 10:37 AM	R149753

Created: 6/20/2022 1:38:52 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Olympic Blvd

Report Date: June 20, 2022
Lab Order: **2206741**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2206741-001A	6/8/2022 10:45:00 AM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-001C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-002A	6/8/2022 10:55:00 AM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-002C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-003A	6/8/2022 11:00:00 AM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-003C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-004A	6/8/2022 11:05:00 AM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-004C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-005A	6/8/2022 11:30:00 AM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-005C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-006A	6/8/2022 11:55:00 AM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-006C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-007A	6/8/2022 11:40:00 AM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-007C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-008A	6/8/2022 12:10:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-008C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022

Created: 6/20/2022 1:38:53 PM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Olympic Blvd

Report Date: June 20, 2022
Lab Order: **2206741**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2206741-008C	6/8/2022 12:10:00 PM	82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-009A	6/8/2022 12:40:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-009C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-010A	6/8/2022 12:45:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-010C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-011A	6/8/2022 1:10:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-011C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-012A	6/8/2022 1:20:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-012C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-013A	6/8/2022 2:00:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-013C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-014A	6/8/2022 2:15:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-014C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022
2206741-015A	6/8/2022 2:30:00 PM	82756	CLOSED SYSTEM P&T VOC Prep		6/10/2022
2206741-015C		82827	Mercury Prep for Solids		6/14/2022
		82769	SOLID PREP SONICATION: BNA		6/10/2022
		82740	SOLID PREP TOTAL METALS: ICP		6/9/2022

Created: 6/20/2022 1:38:53 PM

Qualifier Definitions

WO#: **2206741**
Date: **6/20/2022**

Qualifiers:

*/x	Value exceeds Maximum Contaminant Level
B	Analyte detected in the associated Method Blank
C	Value is below Minimum Concentration Limit
c	Analyte not in SLI scope of accreditation
E	Estimated, detected above quantitation range
G	Refer to case narrative page for specific comments
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limit (QL)
N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit
P	Present
Q	Accreditation is not available from Wisconsin
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
T	Analyte detected in sample trip blank
V	EPA requires field analysis/filtration. Lab analysis would be considered past hold time.
WI	This sample was ran at the Wisconsin Laboratory, WI DNR Certified #246179890

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave., Suite 150 Geneva, Illinois 60134
Tel. (708) 544-3260 • Toll Free (800) 783-LABS
Fax (708) 544-8587
www.suburbanlabs.com

June 28, 2022

Workorder: 2206I03

Steve Kroll
Patrick Engineering, Inc.
4970 Varsity Drive
Lisle, IL 60532

TEL: (630) 957-7245
FAX: (630) 249-9290
RE: Olympic Blvd

Dear Steve Kroll:

Suburban Laboratories, Inc. received 13 sample(s) on 6/8/2022 for the analyses presented in the following report.

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the case narrative. If you are comparing these results to external QC specifications or compliance limits and have any questions, please contact us.

This final report of laboratory analysis consists of this cover letter, case narrative, analytical report, dates report, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call me at (708) 544-3260.

Sincerely,

Dan Galeher
Vice President of Sales and Service
708-544-3260 ext 216
dan@SuburbanLabs.com

Case Narrative

Client: Patrick Engineering, Inc.
Project: Olympic Blvd
WorkOrder: 2206I03
Temperature of samples upon receipt at SLI: C

Date: June 28, 2022
PO #:
QC Level: LEVEL I
Chain of Custody #:

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of 35 IAC Part 186 unless otherwise indicated.
- Waste water analysis follows the rules set forth in 40 CFR part 136 except where otherwise noted.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated.
- For more information about the laboratories' scope of accreditation, please contact us at (708) 544-3260 or the Agency at (217) 782-6455.
- All radiological results are reported to the 95% confidence level.

Abbreviations:
- Reporting Limit: The concentration at which an analyte can be routinely detected on a day to day basis, and which also meets regulatory and client needs.
- Quantitation Limit: The lowest concentration at which results can be accurately quantitated.
- J: The analyte was positively identified above our Method Detection Limit and is considered detectable and usable; however, the associated numerical value is the approximate concentration of the analyte in the sample.
- ATC: Automatic Temperature Correction. - TNTC: Too Numerous To Count
- TIC: Tentatively Identified Compound (GCMS library search identification, concentration estimated to nearest internal standard).
- SS (Surrogate Standard): Quality control compound added to the sample by the lab.

Method References:
For a complete list of method references please contact us.
- E: USEPA Reference methods
- SW: USEPA, Test Methods for Evaluating Solid Waste (SW-846)
- M: Standard Methods for the Examination of Water and Wastewater
- USP: Latest version of United States Pharmacopeia

Workorder Specific Comments:

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc. **Report Date:** June 28, 2022
Project Name: Olympic Blvd **Workorder:** **2206I03**

Client Sample ID: B-34 0-2' **Matrix:** SOIL
Lab ID: 2206I03-001 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 10:45 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	160	1.3		mg/L	5	06/27/2022 1:55 PM	83073
Manganese	3.6	0.050		mg/L	1	06/27/2022 12:25 PM	83073

Client Sample ID: B-35 0-2' **Matrix:** SOIL
Lab ID: 2206I03-002 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 10:55 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	310	2.5		mg/L	10	06/27/2022 1:59 PM	83073
Manganese	5.2	0.050		mg/L	1	06/27/2022 12:30 PM	83073

Client Sample ID: B-36 0-2' **Matrix:** SOIL
Lab ID: 2206I03-003 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:00 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	240	2.5		mg/L	10	06/27/2022 2:03 PM	83073
Manganese	4.0	0.050		mg/L	1	06/27/2022 12:34 PM	83073

Client Sample ID: B-37 0-2' **Matrix:** SOIL
Lab ID: 2206I03-004 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:05 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	230	2.5		mg/L	10	06/27/2022 2:23 PM	83073
Manganese	2.3	0.050		mg/L	1	06/27/2022 12:39 PM	83073

Created: 6/28/2022 10:21:12 AM

Client ID: Patrick Engineering, Inc. **Report Date:** June 28, 2022
Project Name: Olympic Blvd **Workorder:** **2206I03**

Client Sample ID: B-40 2-4' **Matrix:** SOIL
Lab ID: 2206I03-005 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 11:40 AM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	590	5.0		mg/L	20	06/27/2022 2:27 PM	83073

Client Sample ID: B-41 3-5' **Matrix:** SOIL
Lab ID: 2206I03-006 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	420	2.5		mg/L	10	06/27/2022 2:32 PM	83073

Client Sample ID: B-42 5-7' **Matrix:** SOIL
Lab ID: 2206I03-007 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:40 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	370	2.5		mg/L	10	06/27/2022 2:36 PM	83073
Manganese	5.9	0.050		mg/L	1	06/27/2022 12:52 PM	83073

Client Sample ID: B-43 5-7' **Matrix:** SOIL
Lab ID: 2206I03-008 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 1:20 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	ND	0.25		mg/L	1	06/27/2022 1:21 PM	83073

Client ID: Patrick Engineering, Inc. **Report Date:** June 28, 2022
Project Name: Olympic Blvd **Workorder:** **2206I03**

Client Sample ID: B-44 3-5' **Matrix:** SOIL
Lab ID: 2206I03-009 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:30 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	390	2.5		mg/L	10	06/27/2022 2:40 PM	83073

Client Sample ID: B-45 3-5' **Matrix:** SOIL
Lab ID: 2206I03-010 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:15 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	330	2.5		mg/L	10	06/27/2022 2:44 PM	83073

Client Sample ID: B-46 5-7' **Matrix:** SOIL
Lab ID: 2206I03-011 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 2:00 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	590	5.0		mg/L	20	06/27/2022 2:48 PM	83073
Manganese	6.9	0.050		mg/L	1	06/27/2022 1:33 PM	83073

Client Sample ID: B-47 3-5' **Matrix:** SOIL
Lab ID: 2206I03-012 **Date Received:** 06/08/2022 5:12 PM **Collection Date:** 06/08/2022 12:45 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	250	2.5		mg/L	10	06/27/2022 2:53 PM	83073

Created: 6/28/2022 10:21:14 AM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Laboratory Results

Client ID: Patrick Engineering, Inc.
Project Name: Olympic Blvd

Report Date: June 28, 2022
Workorder: **2206I03**

Client Sample ID: **B-48 3-5'**
Lab ID: 2206I03-013
Date Received: 06/08/2022 5:12 PM

Matrix: SOIL
Collection Date: 06/08/2022 1:10 PM

Parameter	Result	Report Limit	Qual.	Units	Dilution Factor	Date Analyzed	Batch ID
METALS BY ICP, SPLP LEACHED		Method: EPA-1312/6010B-Rev 2, Dec-96				Analyst: SCT	
Iron	320	2.5		mg/L	10	06/27/2022 2:57 PM	83073

Created: 6/28/2022 10:21:14 AM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

PREP DATES REPORT

Client: Patrick Engineering, Inc.
Project: Olympic Blvd

Report Date: June 28, 2022
Lab Order: **2206I03**

Sample ID	Collection Date	Batch ID	Prep Test Name	TCLP Date	Prep Date
2206I03-001A	6/8/2022 10:45:00 AM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-002A	6/8/2022 10:55:00 AM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-003A	6/8/2022 11:00:00 AM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-004A	6/8/2022 11:05:00 AM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-005A	6/8/2022 11:40:00 AM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-006A	6/8/2022 12:10:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-007A	6/8/2022 12:40:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-008A	6/8/2022 1:20:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-009A	6/8/2022 2:30:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-010A	6/8/2022 2:15:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-011A	6/8/2022 2:00:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-012A	6/8/2022 12:45:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022
2206I03-013A	6/8/2022 1:10:00 PM	83073	AQUEOUS PREP TOTAL METALS: ICP		6/23/2022
		83031	SPLP SAMPLE PREP (Metals)		6/22/2022

Created: 6/28/2022 10:21:15 AM

Suburban Laboratories, Inc.
1950 S. Batavia Ave., Suite 150, Geneva, IL 60134 (708) 544-3260

Qualifier Definitions

WO#: **2206I03**
Date: **6/28/2022**

Qualifiers:

*/x	Value exceeds Maximum Contaminant Level
B	Analyte detected in the associated Method Blank
C	Value is below Minimum Concentration Limit
c	Analyte not in SLI scope of accreditation
E	Estimated, detected above quantitation range
G	Refer to case narrative page for specific comments
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limit (QL)
N	Tentatively identified compounds
ND	Not Detected at the Reporting Limit
P	Present
Q	Accreditation is not available from Wisconsin
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
T	Analyte detected in sample trip blank
V	EPA requires field analysis/filtration. Lab analysis would be considered past hold time.
WI	This sample was ran at the Wisconsin Laboratory, WI DNR Certified #246179890

Emily Ducote 2206I03

From: Dan Galeher
Sent: Monday, June 20, 2022 2:19 PM
To: Emily Ducote; Fox Diedrich
Subject: FW: [EXTERNAL] RE: [EXTERNAL_EMAIL]-SLI Report Attached for Workorder: 2206741; Project Name: Olympic Blvd

Follow Up Flag: Follow up
Flag Status: Flagged

Can you or Fox add these on? New workorder.

SPLP is also method 1312

Dan Galeher
Vice President of Compliance Services

www.suburbanlabs.com
708-544-3260 Ext. 216

From: Kroll, Steve <SKroll@patrickco.com>
Sent: Monday, June 20, 2022 2:00 PM
To: Dan Galeher <Dan@suburbanlabs.com>
Subject: [EXTERNAL] RE: [EXTERNAL_EMAIL]-SLI Report Attached for Workorder: 2206741; Project Name: Olympic Blvd

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Dan,

Can I add SPLP Iron to samples: B34, B35, B36, B37, B40, B41, B42, B43, B44, B45, B46, B47, B48

and SPLP Manganese to samples: B34, 35, 36, 37, B42, B46

Thanks

Steven E. Kroll, P.G.
Project Manager

PATRICK
Smart People. Bright Ideas. Powerful Results
4970 Varsity Drive, Lisle, Illinois 60532
P 630.795.7245 | C 630.816.7368
skroll@patrickco.com | www.patrickco.com

From: Dan Galeher <Dan@suburbanlabs.com>
Sent: Monday, June 20, 2022 1:51 PM
To: Accounts Payable <accountspayable@patrickco.com>; Kroll, Steve <SKroll@patrickco.com>
Subject: [EXTERNAL_EMAIL]-SLI Report Attached for Workorder: 2206741; Project Name: Olympic Blvd

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave. Ste. 150 Geneva, IL 60134 Tel. 708.544.3260 login@suburbanlabs.com www.suburbanlabs.com

CHAIN OF CUSTODY RECORD

Company Name: Patrick Eng.

Company Address:

City: State: Zip:

Office: Mobile: Fax:

Email Address:

Project ID / Location:

Project Manager (Report to):

Sample Collector(s):

TURNAROUND TIME REQUESTED

☒ Normal ☐ RUSH*

* Must be pre-approved and surcharges apply. Checking this box indicates your approval of surcharges.

Date and Time Report Needed:

Specify Regulatory Program: ☐ None/Info Only

☐ LUST ☐ SRP ☐ SDWA

☐ 503 Sludge ☐ NPDES ☐ MWRDGC

☐ Disposal ☐ CCDD ☐ OTHER - Specify Below

ANALYSIS & METHOD REQUESTED
Enter an "X" in box below for request

PO #:

Report Type ☐ Normal ☐ Special*

* Additional charges apply for QC reports and raw data. Specify in comments section

Shipping Method:

LAB USE ONLY

Work Order # 2111039

Temperature of Received Samples: 1 °C

Received within 24 hours of collection? ☐ No ☐ Yes

	SAMPLE IDENTIFICATION (Use 1 line per container type)	COLLECTION DATE	COLLECTION TIME	MATRIX	GRAB/ COMP.	CONTAINERS Qty	CONTAINERS SIZE & TYPE	PRESERVATIVE	VOC	SVOC	23 Metals (total)	pH	Lab Comment	LAB #
1	B1	10/28/21		S	G	4	(1) glass jar (3) 40 mL vials (1)preserved	None but (1) vial Methanol	X	X	X	X		
2	B2													
3	B3													
4	B4													
5	B5													
6	B6													
7	B7													
8	B8													
9	B9													
10	B10													
11	B11													
12	B12													

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) **CONTAINER:** 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) **PRESERVATIVE:** H_2SO_4, HCl, HNO_3, Methanol (MeOH) NaOH, Sodium Bisulfate (NaB), NaThio

COMMENTS & SPECIAL INSTRUCTIONS:

1. Relinquished By	Date	2. Relinquished By	Date	3. Relinquished By	Date	4. Relinquished By	Date
	10/29/21						
Received By	Time	Received By	Time	Received By	Time	Received By	Time
☐ Ice	5:10pm	☐ Ice		☐ Ice		☐ Ice	

THIS FORM MUST BE FILLED OUT COMPLETELY BY THE SAMPLE COLLECTOR OR SUBMITTER AND ORIGINAL FORM MUST ACCOMPANY SAMPLES AT ALL TIMES.

Rev 2/17

SUBURBAN LABORATORIES, Inc.

1950 S. Batavia Ave. Ste. 150 Geneva, IL 60134 Tel. 708.544.3260 login@suburbanlabs.com www.suburbanlabs.com

CHAIN OF CUSTODY RECORD

Company Name: Patrick Eng.

Company Address:

City: State: Zip:

Office: Mobile: Fax:

Email Address:

Project ID / Location:

Project Manager (Report to):

Sample Collector(s):

TURNAROUND TIME REQUESTED

☐ Normal ☐ RUSH*

* Must be pre-approved and surcharges apply. Checking this box indicates your approval of surcharges.

Date and Time Report Needed:

Specify Regulatory Program: ☐ None/Info Only

☐ LUST ☐ SRP ☐ SDWA

☐ 503 Sludge ☐ NPDES ☐ MWRDGC

☐ Disposal ☐ CCDD ☐ OTHER - Specify Below

ANALYSIS & METHOD REQUESTED
Enter an "X" in box below for request

PO #:

Report Type ☐ Normal ☐ Special*

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Shipping Method:

LAB USE ONLY

Work Order # 2111039

Temperature of Received Samples: 1 °C

Received within 24 hours of collection? ☐ No ☐ Yes

	SAMPLE IDENTIFICATION (Use 1 line per container type)	COLLECTION DATE	COLLECTION TIME	MATRIX	GRAB/ COMP.	CONTAINERS Qty	CONTAINERS SIZE & TYPE	PRESERVATIVE	VOC	SVOC	23 Metals (total)	pH	Lab Comment	LAB #
1	B13	10/28/21		S	G	4	(1) glass jar (3) 40 mL vials - (1) preserved	None but (1) vial, methanol	X	X	X	X		
2	B14													
3	B15													
4	B16													
5	B17													
6	B18	10/29/21												
7	B19													
8	B20													
9	B21													
10	B22													
11	B23													
12	B24													

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) **CONTAINER:** 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) **PRESERVATIVE:** H_2SO_4, HCl, HNO_3, Methanol (MeOH) NaOH, Sodium Bisulfate (NaB), NaThio

COMMENTS & SPECIAL INSTRUCTIONS:

1. Relinquished By	Date	2. Relinquished By	Date	3. Relinquished By	Date	4. Relinquished By	Date
	10/29/21						
Received By	**Time**	**Received By**	**Time**	**Received By**	**Time**	**Received By**	**Time**
☐ Ice	5:10 pm	☐ Ice		☐ Ice		☐ Ice	

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CHAIN OF CUSTODY RECORD

Company Name: Patrick Eng.

Company Address:

City: State: Zip:

Office: Mobile: Fax:

Email Address:

Project ID / Location:

Project Manager (Report to):

Sample Collector(s):

TURNAROUND TIME REQUESTED

☐ Normal ☐ RUSH*

* Must be pre-approved and surcharges apply. Checking this box indicates your approval of surcharges.

Date and Time Report Needed:

Specify Regulatory Program: ☐ None/Info Only

☐ LUST ☐ SRP ☐ SDWA

☐ 503 Sludge ☐ NPDES ☐ MWRDGC

☐ Disposal ☐ CCDD ☐ OTHER - Specify Below

ANALYSIS & METHOD REQUESTED
Enter an "X" in box below for request

PO #:

Report Type ☐ Normal ☐ Special*

* Additional charges apply for QC reports and raw data. Specify in comments section

Shipping Method:

LAB USE ONLY

Work Order # 2111039

Temperature of Received Samples: / °C

Received within 24 hours of collection? ☐ No ☐ Yes

	SAMPLE IDENTIFICATION (Use 1 line per container type)	COLLECTION DATE	COLLECTION TIME	MATRIX	GRAB/ COMP.	CONTAINERS Qty	CONTAINERS SIZE & TYPE	PRESERVATIVE	VOC	SVOC	2,3,7 Metals	PM	Lab Comment	LAB #
1	B25	10/29/21		S	G	4	(1) glass jar (3) 40 mL vials -(1) preserved	None but (1) vial, Methanol	X	X	X	X		
2	B26													
3	B27													
4	B28													
5	B29													
6	B30													
7	B31													
8	B32													
9	B33	↓		↓	↓	↓	↓	↓	↓	↓	↓	↓		
10														
11														
12														

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) CONTAINER: 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) PRESERVATIVE: H_2SO_4, HCl, HNO_3, Methanol (MeOH) NaOH, Sodium Bisulfate (NaB), NaThio

COMMENTS & SPECIAL INSTRUCTIONS:

1. Relinquished By	Date	2. Relinquished By	Date	3. Relinquished By	Date	4. Relinquished By	Date
	10/29/21						
Received By	**Time**	**Received By**	**Time**	**Received By**	**Time**	**Received By**	**Time**
☐ Ice	5:10 pm	☐ Ice		☐ Ice		☐ Ice	

THIS FORM MUST BE FILLED OUT COMPLETELY BY THE SAMPLE COLLECTOR OR SUBMITTER AND ORIGINAL FORM MUST ACCOMPANY SAMPLES AT ALL TIMES.

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CHAIN OF CUSTODY RECORD

Page 1 of 2

Company Name: Patrick Engineering
Company Address:
City: Lisle State: IL Zip: 60532
Office: 630 816 7368 Mobile: Fax:
Email Address: skroll@patrickco.com
Project ID / Location: Olympic Blvd
Project Manager (Report to): Steve Kroll
Sample Collector(s): Steve Kroll

TURNAROUND TIME REQUESTED
[X] Normal [ ] RUSH*
* Must be pre-approved and surcharges apply. Checking this box indicates your approval of surcharges.
Date and Time Report Needed:

Specify Regulatory Program: [ ] None/Info Only
[ ] LUST [ ] SRP [ ] SDWA
[ ] 503 Sludge [ ] NPDES [ ] MWRDGC
[X] Disposal [ ] CCDD [ ] OTHER - Specify Below

ANALYSIS & METHOD REQUESTED
Enter an "X" in box below for request

Report Type: [X] Normal [ ] Special*
* Additional charges apply for QC reports and raw data. Specify in comments section
Shipping Method:

LAB USE ONLY
Work Order # 2206741
Temperature of Received Samples: 16 °C
Received within 24 hours of collection? [ ] No [ ] Yes

	SAMPLE IDENTIFICATION (Use 1 line per container type)	COLLECTION DATE	COLLECTION TIME	MATRIX	GRAB/ COMP.	CONTAINERS Qty	CONTAINERS SIZE & TYPE	PRESERVATIVE	VOCs	SVOCs	Total TAL Metals	pH	Lab Comment	LAB #
1	B-34 0-2'	6/8/22	1045	S	G	4	4oz/8oz	—	X	X	X	X		
2	B-35 0-2'		1055											
3	B-36 0-2'		1100											
4	B-37 0-2'		1105											
5	B-38 3-5'		1130											
6	B-39 2-4'		1155											
7	B-40 2-4'		1140											
8	B-41 3-5'		1210											
9	B-42 5-7'		1240											
10	B-47 3-5'		1245											
11	B-48 3-5'		1310											
12	B-43 5-7'		1320											

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) CONTAINER: 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) PRESERVATIVE: H_2SO_4, HCl, HNO_3, Methanol (MeOH) NaOH, Sodium Bisulfate (NaB), $Na_2S_2O_3$

COMMENTS & SPECIAL INSTRUCTIONS:
Hold remaing soil for possible SPLP/TCLP Metals

1. Relinquished By	Date	2. Relinquished By	Date	3. Relinquished By	Date	4. Relinquished By	Date
	6/8/22		16:51				
Received By	Time	Received By	Time	Received By	Time	Received By	Time
[X] Ice	1600	[ ] Ice	6/8/22	[ ] Ice		[ ] Ice	

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1950 S. Batavia Ave. Ste. 150 Geneva, IL 60134 Tel. 708.544.3260 login@suburbanlabs.com www.suburbanlabs.com

CHAIN OF CUSTODY RECORD

Company Name: Patrick Engineering

Company Address:

City: Lisle State: IL Zip: 60532

Office: Mobile: 630-816-7368 Fax:

Email Address: skoll@patrickco.com

Project ID / Location: Olympic Blvd

Project Manager (Report to): Steve Knoll

Sample Collector(s): Steve Knoll

TURNAROUND TIME REQUESTED

[X] Normal [ ] RUSH*

* Must be pre-approved and surcharges apply. Checking this box indicates your approval of surcharges.

Date and Time Report Needed:

Specify Regulatory Program: [ ] None/Info Only

[ ] LUST [ ] SRP [ ] SDWA

[ ] 503 Sludge [ ] NPDES [ ] MWRDGC

[X] Disposal [ ] CCDD [ ] OTHER - Specify Below

ANALYSIS & METHOD REQUESTED
Enter an "X" in box below for request

VOCs SVOCs Total TCLP Metals pH

Report Type: [X] Normal [ ] Special*

* Additional charges apply for QC reports and raw data. Specify in comments section

Shipping Method:

LAB USE ONLY

Work Order # 2206741

Temperature of Received Samples: 16 °C

Received within 24 hours of collection? [ ] No [ ] Yes

	SAMPLE IDENTIFICATION (Use 1 line per container type)	COLLECTION DATE	COLLECTION TIME	MATRIX	GRAB/ COMP.	CONTAINERS Qty	CONTAINERS SIZE & TYPE	PRESERVATIVE	Lab Comment	LAB #
1	B-46 5-7'	6/1/22	1400	S	G	4	40mL Vial	—		
2	B-45 3-5'	↓	1415	↓	↓	↓	↓	↓		
3	B-44 3-5'	↓	1430	↓	↓	↓	↓	↓		
4										
5										
6										
7										
8										
9										
10										
11										
12										

MATRIX: Drinking Water (DW), Soil (S), Waste Water (WW), Surface Water(SW), Ground Water (GW), Solid Waste (WA), Sludge (U), Wipe (P) **CONTAINER:** 2oz, 4oz, 8oz, 40ml Vial, 500ml, Liter (L), Tube, Glass (G), Plastic (P) **PRESERVATIVE:** H_2SO_4, HCl, HNO_3, Methanol (MeOH) NaOH, Sodium Bisulfate (NaB), NaThio

COMMENTS & SPECIAL INSTRUCTIONS:

Hold remainig soil for poss. SOLP/TCLP Metals

1. Relinquished By	Date	2. Relinquished By	Date	3. Relinquished By	Date	4. Relinquished By	Date
	6/1/22		6/8/22				
Received By ☐ Ice	Time 1600	Received By ☐ Ice	Time 16:51	Received By ☐ Ice	Time	Received By ☐ Ice	Time

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Rev 2/17

IDOT Sequence #: 21927 **ISGS: 3656**
IDOT Job #: P91-021-19 **IDOT District #: 1**

PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT

FINAL REPORT

DATE: January 29, 2019

IDOT DESIGN DATE: March 30, 2019

SURVEY TARGET DATE: March 28, 2019

DATE REQUEST RECEIVED: September 25, 2018

LOCATION: Olympic Boulevard, Houbolt Road to Frontage Road, Shorewood and Joliet, Will County, Plainfield and Channahon quadrangles (USGS 7.5-minute topographic map), T35N, R9E, Sections 21, 22, 23, 27, and 28.

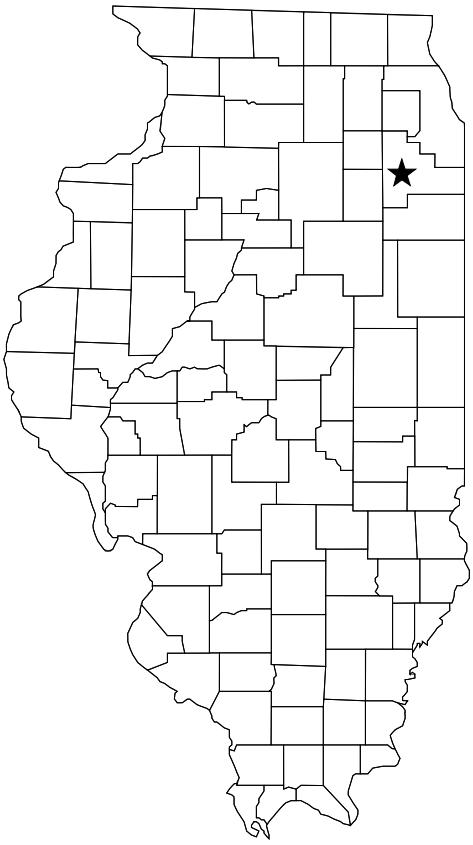


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GLOSSARY OF ACRONYMS

AAI	-	All Appropriate Inquiries
ACM	-	asbestos-containing material
AST	-	aboveground storage tank
ASTM	-	American Society for Testing and Materials
AULs	-	activity and use limitations (includes institutional controls, engineered barriers, and HAAs)
bgs	-	below ground surface
BOL	-	Bureau of Land (IEPA)
BTEX	-	benzene, toluene, ethylbenzene, and total xylenes
℄	-	Centerline
CERCLIS	-	Comprehensive Environmental Response, Compensation, and Liability Information System
CTA	-	Chicago Transit Authority
ERNS	-	Emergency Response Notification System
FEMA	-	Federal Emergency Management Agency
FIRM	-	Flood Insurance Rate map
FOIA	-	Freedom of Information Act
GIS	-	Geographic Information System
GRO	-	Groundwater Remediation Objective
HAA	-	Highway Authority Agreement
IDNR	-	Illinois Department of Natural Resources
IDOT	-	Illinois Department of Transportation
IEMA	-	Illinois Emergency Management Agency
IEPA	-	Illinois Environmental Protection Agency
IMD	-	Illinois Manufacturers Directory
ISGS	-	Illinois State Geological Survey
ISTC	-	Illinois Sustainable Technology Center (formerly Waste Management and Research Center)
ISWS	-	Illinois State Water Survey
LUST	-	leaking underground storage tank
ì g/kg	-	micrograms per kilogram (ppb)
ì g/l	-	micrograms per liter (ppb)
mg/kg	-	milligrams per kilogram (ppm)
mg/l	-	milligrams per liter (ppm)
M.M.	-	mile marker
M.P.	-	mile post
MSDS	-	material safety data sheet
MTBE	-	methyl tertiary butyl ether
NFR	-	No Further Remediation
NPL	-	National Priorities List
NRCS	-	Natural Resources Conservation Service
OER	-	Office of Emergency Response (IEPA)
OSFM	-	Office of the State Fire Marshal
PAA	-	Permit Access Agreement
PAH/PNA	-	polynuclear aromatic hydrocarbons
PCB	-	polychlorinated biphenyls
PESA	-	Preliminary Environmental Site Assessment
P.G.	-	Professional Geologist
ppb	-	parts per billion (equivalent to ì g/kg for solids, and ì g/l in liquids)
ppm	-	parts per million (equivalent to mg/kg in solids, and mg/l in liquids)
PRP	-	Potentially Responsible Party
RCRA	-	Resource Conservation and Recovery Act
REC	-	recognized environmental condition
ROW	-	right-of-way
SEMS	-	Superfund Enterprise Management System
SIC	-	Standard Industrial Classification
SPLP	-	synthetic precipitation leaching procedure
SRO	-	Soil Remediation Objective
SRP	-	Site Remediation Program
SSTS	-	Section Seven Tracking System (USEPA)
SVOCs	-	semi-volatile organic compounds
TACO	-	Tiered Approach to Corrective Action Objectives (IEPA)
TCLP	-	toxicity characteristic leaching procedure
TPH	-	total petroleum hydrocarbons
TRI	-	Toxics Release Inventory
TVOC	-	Total volatile organic compounds
USDA	-	United States Department of Agriculture
USEPA	-	United States Environmental Protection Agency
USGS	-	United States Geological Survey
UST	-	underground storage tank
VOC	-	volatile organic compounds

EXECUTIVE SUMMARY

This report presents the results of an environmental site assessment for the improvements to Olympic Boulevard from Houbolt Road to SE Frontage Road, Shorewood and Joliet, Will County. This report was prepared on behalf of the Illinois Department of Transportation (IDOT) by the Illinois State Geological Survey (ISGS).

The following sites were examined for this project. The tables below list sites along the project for which recognized environmental conditions (RECs)* were identified for each address or address range (Table 1); sites along the project for which only de minimis conditions were identified (Table 2); sites along the project for which no RECs or de minimis conditions were identified (Table 3); and sites adjoining but not on the project that were identified on environmental databases (Table 4). Further investigation of sites with RECs may be desired.

Table 1. The following sites along the project were determined to contain RECs:

Property name IDOT parcel #	ISGS site #	REC(s), including de minimis conditions	Regulatory database(s)	Land use
ROW NA	3656-1	Spill; natural gas pipelines; potential ACM	IEMA	Transportation
Rock Run NA	3656-9	Non-attainment of water quality	None	Stream
Vacant land NA	3656-12	Potential former chemical use	BOL	Vacant
Ecolab NA	3656-13	Evidence of chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Commercial building NA	3656-14	Potential UST(s); evidence of chemical use; potential ACM and lead paint	RCRA, BOL	Commercial
Joliet Township High School Transportation NA	3656-15	Potential UST(s); evidence of former chemical use; potential chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Municipal
Blue Ribbon Products NA	3656-16	AST; potential former chemical use; potential ACM and lead paint	BOL	Commercial

Water tower NA	3656-17	Potential UST(s); potential AST(s); potential chemical use; potential ACM and lead paint	BOL	Municipal
Unisource Distribution NA	3656-18	Evidence of chemical use; potential ACM and lead paint	RCRA, BOL	Commercial
Crown Lift Trucks NA	3656-19	Potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial
Vacant lot NA	3656-20	Potential former chemical use	BOL	Vacant
Medtronic NA	3656-21	AST; evidence of former chemical use; spill; transformer; potential ACM and lead paint	RCRA, BOL, IEMA	Commercial
Commercial building NA	3656-22	Potential former chemical use; potential ACM and lead paint	BOL	Commercial
Joliet Junior College NA	3656-24	ASTs; former UST with a documented release; potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint; potential herbicide and/or fertilizer presence	RCRA, LUST, UST, BOL, IEMA	Commercial
ROW NA	3656-26	Spill	IEMA	Transportation
Commercial building NA	3656-28	Potential former chemical use; potential ACM and lead paint	None	Commercial
Commercial building NA	3656-30	Potential UST(s); evidence of former chemical use; transformer; potential ACM and lead paint	RCRA, BOL	Commercial

Holiday Inn NA	3656-33	Potential former chemical use; transformer; potential ACM and lead paint	BOL	Commercial
Vacant land NA	3656-34	Potential former chemical use; likely past pesticide and/or herbicide use	BOL	Vacant
Burger King NA	3656-36	Potential UST(s); potential former chemical use; transformer; potential ACM and lead paint	UST, BOL	Commercial
BP gasoline station NA	3656-37	USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint	RCRA, UST, BOL	Commercial
7-Eleven NA	3656-38	USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint	RCRA, UST, BOL	Commercial
McDonald's NA	3656-39	Potential UST(s); transformers; potential ACM and lead paint	UST	Commercial
Vacant land NA	3656-41	Potential former chemical use; likely past pesticide and/or herbicide use	BOL	Vacant
Comfort Inn NA	3656-43	Potential former chemical use; transformers; potential ACM and lead paint	BOL	Commercial
Heroes West Sports Bar and Grill NA	3656-44	Potential former chemical use; transformer; potential ACM and lead paint	BOL	Commercial
ROW NA	3656-45	Former solid waste; fill; potential ACM	BOL	Transportation

Table 2. The following sites along the project were determined to contain de minimis

conditions only:

Property name IDOT parcel #	ISGS site #	De minimis condition(s)	Land use
Agricultural land NA	3656-2	Natural gas pipelines; likely pesticide and/or herbicide use	Agricultural
Residences NA	3656-3	Transformers; potential ACM and lead paint	Residential
Commercial building NA	3656-4	Transformer; natural gas pipelines; potential ACM and lead paint.	Commercial
Vacant land NA	3656-5	Potential past pesticide and/or herbicide presence	Vacant
Commercial building NA	3656-7	Potential ACM and lead paint	Commercial
Commercial building NA	3656-10	Potential ACM and lead paint	Commercial
Residence NA	3656-11	Potential ACM and lead paint	Residential
Agricultural land NA	3656-23	Likely pesticide and/or herbicide use	Agricultural
Vacant land NA	3656-25	Likely past pesticide and/or herbicide use	Vacant
Residences NA	3656-27	Potential ACM	Residential
Strand Associates NA	3656-29	Potential ACM and lead paint	Commercial
Commercial building NA	3656-31	Transformers; potential ACM and lead paint	Commercial
Commercial building NA	3656-32	Transformer; potential ACM and lead paint	Commercial
Vacant land NA	3656-35	Likely past pesticide and/or herbicide use	Vacant
Fairfield Inn NA	3656-40	Transformers; potential ACM and lead paint	Commercial
Cracker Barrel Restaurant NA	3656-42	Transformer; potential ACM and lead paint	Commercial

Table 3. The following sites along the project were determined not to contain RECs or de minimis conditions:

Property name IDOT parcel #	ISGS site #	Land use
Vacant land NA	3656-6	Vacant
Vacant land NA	3656-8	Vacant

Table 4. The following additional sites, adjoining but not on the project, were identified on environmental databases:

Property name	ISGS site #	Regulatory database(s)	Land use
Petco	3656-A	RCRA, BOL, IEMA	Commercial
Cloud Blue Technologies Inc	3656-B	RCRA, BOL	Commercial
Commercial building	3656-C	RCRA, BOL	Commercial
USF Holland	3656-D	RCRA, ERNS, UST, BOL, IEMA	Commercial
Knight Transportation	3656-E	UST	Commercial
Unisource	3656-F	BOL	Commercial
Commercial building	3656-G	BOL	Commercial
Vacant land	3656-H	BOL	Vacant
Vacant land	3656-I	BOL	Vacant
MXD group	3656-J	BOL, IEMA	Commercial
Menlo Worldwide Logistics	3656-K	BOL	Commercial
Mack Trucks Central Parts Distribution Center	3656-L	BOL	Commercial
Vacant land	3656-M	BOL	Vacant
Agricultural land	3656-N	BOL	Agricultural

* For all sites:

Where REC(s) are indicated as present, a condition was noted that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the site, as discussed in the text. Potential hazards were not verified by ISGS testing. Radon, biological

hazards (such as mold, medical waste, or septic waste), and non-agricultural pesticides and/or herbicides may also be of concern. No further investigation concerning the presence or use of these factors was conducted for this PESA.

Where RECs are not indicated as present, radon, biological hazards (such as mold, medical waste, or septic waste), and non-agricultural pesticides and/or herbicides may still be of concern. No further investigation concerning the presence or use of these factors was conducted for this PESA.

For the purposes of this report, the following are considered to be de minimis conditions:

- Normal use of lead-based paint on exteriors and interiors of buildings and structures.
- Use of asbestos-containing materials in building construction.
- Transformers in normal use, unless the transformers were observed to be leaking, appear on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use.
- Agricultural use of pesticides and herbicides. In addition, most land in Illinois was under agricultural use prior to its conversion to residential, industrial, or commercial development. Pesticides, both regulated and otherwise, may have been used throughout the project area at any time. Unless specifically discussed elsewhere in this report, no information regarding past pesticide use that would be subject to enforcement action was located for this project, and such use is considered a de minimis condition.

The following data gaps exist for all PESAs:

- For residences, only areas visible from public roads are inspected.
- Interiors of buildings are not inspected.
- Interiors of agricultural areas are not inspected during growing seasons.

Radon and biological hazards are not considered in this PESA unless specifically noted.

NA = No parcel number was supplied by IDOT for this site.

Although potential natural hazards and undermining, if present, are described in this report, they are not considered as RECs or de minimis conditions for the purposes of this report, and are therefore not listed in the tables above. Wetlands and flooding hazards are not evaluated as part of this report.

INTRODUCTION

This is the **Final Report** of a preliminary environmental assessment by the ISGS of natural and man-made hazards that may be encountered for the improvements to Olympic Boulevard from Houbolt Road to SE Frontage Road, Shorewood and Joliet, Will County (Attachment 1). Acquisition of additional ROW or easements, in-stream work, and excavation or subsurface utility relocation are expected. No railroad ROW involvement is anticipated for this project. No stationing information was provided by IDOT for this project. All measurements are approximate and taken from the centerlines of the roads. This report identifies and evaluates recognized environmental conditions (RECs) that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the proposed project.

This assessment has been prepared using historical and geological information including aerial photographs, U.S. Geological Survey topographic maps, plat maps, file information of the ISGS regulatory file information from federal, state, and other agencies, and various other sources of information. An on-site investigation has been completed. The specific methods used to conduct the assessment are contained in "A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects" (Erdmann et al., 2014).

This Preliminary Environmental Site Assessment (PESA) was performed in compliance with the IDOT-ISGS PESA Manual (Erdmann et al., 2014) and not with the All Appropriate Inquiries environmental assessment standard (40 CFR Part 312) that took effect on November 1, 2006, or with the ASTM standard E1527-05 or E1527-13.

GEOLOGY

Bedrock geology. The topmost bedrock unit in the project area has been mapped as undifferentiated rocks of Silurian age, which in this area consist primarily of limestones and dolomites.

Surficial geology. The total thickness of surficial deposits in the project area has been mapped as approximately 8-15 m (25-50 ft). The topmost unit has been mapped as approximately 6-15 m (20-50 ft) of the Wedron Group. The Wedron Group consists of glacially deposited silts and clays.

Soils. Along the project ROW, the NRCS has classified the Romeo silt loam, 0 to 2% slopes, Millsdale silty clay loam, 0 to 2% slopes, Will silty clay loam, 0 to 2% slopes, and Millington silt loam, 0 to 2% slopes, occasionally flooded, as containing 33% to 100% hydric components. None of the other soils in the project area have been classified by NRCS as containing more than 33% hydric components. The NRCS has classified the Romeo silt loam, 0 to 2% slopes, and Elizabeth silt loam, 12 to 20% slopes, as non-prime farmland.

HYDROGEOLOGY

Due to project type or IDOT internal procedure, the sections on surficial public water supplies, groundwater recharge, groundwater protection areas, potential for contamination of shallow

aquifers, and well log information are not included in this report.

Drainage direction. Surficial drainage in the project area is generally toward the west on the east side of Rock Run and towards the east on the west side of Rock Run (Site 3656-9) and its unnamed tributaries. However, since the project area is urbanized and storm drains and sewers are present, most surficial runoff will be controlled by the storm sewer system; such systems typically are designed to follow natural drainage patterns.

Neither the near-surface nor the shallow unconfined groundwater flow direction was specifically determined for this project, but they generally mimic local topography.

NATURAL FEATURES AND HAZARDS

No observed or known natural hazards were identified for this project.

PROJECT SITES

Sites will be described from west to east along the project area below. Attachment 1 contains a project location map. Attachment 2 contains maps of all sites discussed in this report. Attachments 3 and 4 contain a site-specific map and NFR letter for Site 3656-24. The versions of the OSFM's UST database, IEPA's LUST database, IEPA's Bureau of Land database, and USEPA's SEMS database utilized for this report were all dated January 28, 2019. OSFM files were received on January 25, 2019. IEPA files were received on December 19, 2018. No USEPA files were reviewed for this project. Fieldwork for this project was conducted on January 17, 2019.

This project intersects previous ISGS PESAs and PSIs as follows:

ISGS PESA #	Date submitted to IDOT	Intersects	PSI
342C	December 20, 2000	Along IL 59 and I-55	None
342V2	January 12, 2007	Along IL 59 and I-55	Andrews #2, work order #016
1469	August 29, 2003	Along IL 59 and I-55	None
1712	December 11, 2007	At I-55 and IL 59	None
1712A	March 30, 2009	At I-55 and IL 59	None
2233	December 2, 2010	At I-80 and Houbolt Road	None
2233V	February 27, 2014	At I-80 and Houbolt Road	Ecology and Environment #8, work orders #013 and #014; Terracon #1, work order #011

2233V2	April 5, 2018	At I-80 and Houbolt Road	None
3481	October 29, 2018	Over the entire project	None

Information from these earlier PESAs will be summarized in geographic order below. No sites in this project were covered in any of the PSIs listed above.

Data gaps applicable to the entire project area

The following data gaps applicable to the entire project area were noted for this project. Data gaps specific to individual sites are discussed in the site writeups below.

- Aerial photographs provided information only for those specific times covered by the photographs, as noted in the Information Sources section. No records were available for intervening years, and other land uses could have occurred in these years.

- Areas which were under residential use throughout all aerial photographs were not researched in city directories.

Site 3656-1 (3481-1 [partial]). ROW, I-55 and Cottage Street interchange, Shorewood and Joliet (I-55 between M.M. 250 and M.M. 252; Attachment 2, page 1). This site is occupied by the I-55 and Cottage Street interchange and the associated ROW. Twelve natural gas pipeline markers were observed in the middle of the I-55 and Cottage Street interchange. Based on other pipeline markers in the area and NPMS mapping, these markers represent six natural gas pipelines oriented northeast-southwest under I-55. No other pipeline markers were observed at this site. A painted bridge (S.N. 099-4642) carries I-55 northbound to Cottage Street northbound.

On the 1851 through 1893 plat maps, this site was under individual use with no buildings depicted. On the 1939 and later plat maps, a road was present. On the 1939 through 1952 aerial photographs, a two-lane highway was shown. On the 1961 through 2008 aerial photographs, I-55 was present but the Cottage Street interchange was located just north of the current location. On the 2009 aerial photographs, the current Cottage Street interchange was under construction. On the 2010 and later aerial photographs, the current site configuration was present. According to IDOT bridge website, the bridge was constructed in 2009.

Under the name “Rollins Leasing Corporation” and the address “Hwy I-55 Exit 253B S.B.”, this site appears on the IEMA non-LUST list (IEMA #930575). According to IEMA records, a spill of 75-115 liters (20-30 gallons) of diesel fuel from a saddle tank on a semi-truck occurred at the southbound exit onto Cottage Street in March 1993. The cause of the release was from debris from a blown tire puncturing the tank. No remedial efforts were specified. No further information was available in IEMA records regarding IEMA #930575. No evidence of spills were observed during the fieldwork for this project.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

Evidence from aerial photographs indicates that this bridge was constructed after 1985, when lead paint was no longer used to paint bridges, and therefore lead paint is unlikely to be present at this structure. The structure on this site is painted and may contain friable asbestos-containing materials as a compound of painting or patching compounds.

The following REC was identified at this site: Spill.

The following de minimis conditions were identified at this site: Natural gas pipelines; potential ACM.

Site 3656-2 (1712A-3 [partial], 2233-34 [partial], 2233V-50 [partial], 2233V2-60 [partial], 3481-256 [partial], 3481-262 [partial], 3481-298 [partial]). Agricultural land, 24100 block of W. River Crossing Drive, Shorewood and 21400-21500 blocks of SE Frontage Road, Joliet (northwest corner of River Crossing Drive and SW Frontage Road and northeast and southeast quadrants of SW Frontage Road and Mound Road; Attachment 2, page 1). This site is occupied by agricultural land. Six natural gas pipeline markers were observed along the north side of River Crossing Drive, approximately 230 m (760 ft) west of SW Frontage Road and six markers were observed on the west side of SW Frontage Road, approximately 120 m (400 ft) north of River Crossing Drive. Based on other pipeline markers in the area and NPMS mapping, these markers represent six natural gas pipelines oriented northeast-southwest through the southeast corner of this site. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 and later aerial photos, this site was under agricultural use.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Natural gas pipelines; likely pesticide and/or herbicide use based on agricultural land use.

Site 3656-3 (3481-261 [partial]). Residences, 20953-21061 Rock Run Drive, Joliet (east side of the south end of Rock Run Drive; Attachment 2, page 1). This site is occupied by seven single-family residences. Two pole-mounted transformers were observed in the Rock Run Drive ROW, one at each of the residences at 20939 and 21041 Rock Run Drive. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1952 aerial photos, this site was occupied by vacant wooded land. On the 1961 and later aerial photos, the current residences were present.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that these residences were constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

Site 3656-4 (342C-A, 342V2-F, 1469-TT, 1712-O, 2233-29, 2233V-47, 2233V2-59, 3481-290). Commercial building, 21100-21350 SW Frontage Road, Shorewood (southeast corner of River Crossing Drive and SW Frontage Road; Attachment 2, page 1). This site is occupied by a commercial building containing two logistics and distribution companies (see address table for listings). A pole-mounted transformer was observed at the southeast corner of this site. Six natural gas pipeline markers were observed along the south side of River Crossing Drive, at the northwest corner of this site. Based on other pipeline markers in the area and NPMS mapping, these markers represent six natural gas pipelines oriented northeast-southwest through the northwest corner of this site; two of the natural gas pipelines turn in an east-west direction between River Crossing Drive and the entrance to this site. Because of a fence around this site, a complete inspection of this site could not be performed. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 2005 aerial photos, the majority of this site was under agricultural use with a farmstead along SW Frontage Road, midway along its length. On the 2006 aerial photo, this site was under redevelopment and had a gravelly appearance. On the 2007 and later aerial photos, the current building was present. In the 1977 through 2012 city directories, no listings were found for this address. In the 2013 and later city directories, various warehousing companies were listed.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- Because of a fence around this site, a complete inspection of this site could not be performed.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Transformer; natural gas pipelines; potential ACM and lead paint.

Site 3656-5 (3481-264). Vacant land, 21500 block of SE Frontage Road, Joliet (east side of SE Frontage Road between Mound Road and River Crossing Drive; Attachment 2, page 1). This site is occupied by vacant wooded land. Attachment 2, page 1, uses a 2018 aerial photograph as the base map that depicts buildings at this site that are no longer present. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 through 1996 plat maps, this site was under individual use with a building depicted. The date of first development is unknown. On the 2000 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 2018 aerial photos, a farmstead was shown. This farmstead was not present during the fieldwork for this PESA. Because this site was formerly used as a farmstead, it is possible that pesticides and/or herbicides were stored on the premises.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- The date of first development is unknown.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Potential past pesticide and/or herbicide presence based on former farmstead use.

Site 3656-6 (2233-34 [partial], 2233V-50 [partial], 2233V2-61 [partial], 3481-265, 3481-297

[partial]). Vacant land, 21500 block of SE Frontage Road, Joliet (northeast corner of Mound Road and SE Frontage Road; Attachment 2, page 1). This site is occupied by vacant wooded land. Attachment 2, page 1, uses a 2018 aerial photograph as the base map that depicts buildings at this site that were no longer present. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 through 1996 plat maps, this site was under individual use with a building depicted. The date of first development is unknown. On the 2000 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 2018 aerial photos, four residences were shown.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- The date of first development is unknown.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs or de minimis conditions were identified at this site.

Site 3656-7 (2233-29, 2233V-47, 2233V2-58, 3481-293). Commercial building, 21450-21460 SW Frontage Road, Shorewood (northwest corner of Mound Road and SW Frontage Road; Attachment 2, page 1). This site is occupied by a commercial building containing a logistics and distribution company and a tire company (Nokian Tyres [sic]). According to an employee, Nokian Tyres uses this facility as a warehouse for their company; no automotive services are conducted at this location. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 2005 aerial photos, this site was under agricultural use. On the 2006 aerial photo, this site was under redevelopment and had a gravelly appearance. On the 2007 through 2015 aerial photos, this site was vacant, with a grassy appearance. On the 2016 and later aerial photos, the current building was present. In the 1977 and later city directories, no listings were found for this address.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-8 (3481-263, 3481-297 [partial]). Vacant land, 20900 block of Rock Run Drive, Joliet (south end of Rock Run Drive along the west side of Rock Run; Attachment 2, page 1). This site is occupied by vacant wooded land. Because of the size of this site, a complete inspection of this site was not performed. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 and later aerial photos, this site was occupied by vacant, wooded land.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- Because of the size of this site, a complete inspection of this site was not performed.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs or de minimis conditions were identified at this site.

Site 3656-9 (3481-8). Rock Run, 20900 block of Rock Run Drive, Joliet (south end of Rock Run Drive, Joliet; Attachment 2, page 1). This site is occupied by a river. This site did not appear on any of the regulatory lists checked for this project.

According to the 2018 IEPA Illinois Integrated Water Quality report, this portion of Rock Run has been assessed as “not supporting” in the category of aquatic life. Causes of non-attainment were listed as causes unknown. No sources were listed. This portion of the Rock Run has not been assessed in the categories of fish consumption, primary contact recreation, and aesthetic quality.

On the 1851 and later plat maps and the 1939 and later aerial photos, this creek was present.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers,

monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Non-attainment of water quality.

No de minimis conditions were identified at this site.

Site 3656-10 (2233-28, 2233V-46, 2233V2-57, 3481-295 [partial]). Commercial building, 22000 block of SW Frontage Road, Shorewood (southwest corner of Mound Road and SW Frontage Road; Attachment 2, page 1). This site is occupied by partially constructed commercial building. Attachment 2, page 1, uses an aerial photograph from 2018 as a base map and does not depict the current site configuration. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 2018 aerial photos, this site was under agricultural use. In the 1977 and later city directories, no listings were found for this address.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-11 (2233-34, 2233V-51, 2233V2-62, 3481-299). Residence, 21525 SE Frontage Road, Shorewood (southeast quadrant of Mound Road and SE Frontage Road; Attachment 2, page 1). This site is occupied by a single-family residence and a shed. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 through 1996 plat maps, this site was under individual use with a building depicted. The date of first development is unknown. On the 2000 and later plat maps, this site was under

individual use with no buildings depicted. On the 1939 and later aerial photos, the current residence was shown.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- The date of first development is unknown.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that this residence was constructed before 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint may be present in these buildings.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-12 (1712A-8 [partial], 1712A-G, 3481-302). Vacant land, 4100 block of Olympic Boulevard, Joliet (northwest and southeast quadrants of Olympic Boulevard and Crossroads Drive; Attachment 2, page 2). This site is occupied by vacant wooded land. Because of the size of this site, a complete inspection of this site was not performed.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 and later aerial photos, this site was occupied by vacant, wooded land.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- Because of the size of this site, a complete inspection of this site was not performed.
- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Potential former chemical use.

No de minimis conditions were identified at this site.

Site 3656-13 (3481-303). Ecolab, 4101 Olympic Boulevard, Joliet (north side of Olympic Boulevard at Crossroads Drive; Attachment 2, page 2). This site is occupied by a pest control company. A pad-mounted transformer was observed at the southeast corner of the building.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 through 2008 aerial photos, this site was vacant, with a grassy appearance. On the 2009 and later aerial photos, the current building was present. In the 1977 through 2010 city directories, no listings were found for this address. In the 2011 and later city directories, Ecolab and a food distributor were listed.

Under the name “Ecolab Inc” and the address “4101 Olympic Blvd”, this site appears on the active RCRA list (USEPA #ILR000194241). Under the name “Ecolab Inc” and the address “4101 Olympic Blvd”, this site appears on the BOL list (IEPA #1974450206). According to IEPA files, in February 2017, Ecolab registered with USEPA and IEPA as a generator of less than 100 kg/mo (220 lb/mo) of ignitable and corrosive wastes. No further information was available in IEPA files regarding IEPA #1974450206.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site: Evidence of chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-14 (1712-T, 3481-304). Commercial building, 4001 Olympic Boulevard, Joliet (northeast quadrant of Olympic Boulevard and Crossroads Drive; Attachment 2, page 2). This site is occupied by a pet supply company and a transportation company (see address table for listings). Both businesses shared the same address.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 through 2002 aerial photos, this site was vacant, with a grassy appearance. On the 2005 and later aerial photos, the current building was present. In the 1977 through 2004 city directories, no listings were found for this address. In the 2005 through 2009 city directories, various warehousing companies were listed. In the 2010 and later city directories, Petco was listed. A & R Transport was listed in the 2014 and later city directories.

Under the name “Petco DC 199 Annex” and the address “4001 Olympic Blvd”, this site appears on the active RCRA list (USEPA #ILR000178715). Under the name “Petco DC 199 Annex” and the address “4001 Olympic Blvd”, this site appears on the BOL list (IEPA #1974450158). According to IEPA files, in September 2013, December 2014, and November 2016, Petco registered with USEPA and IEPA as a generator of less than 100 kg/mo (220 lb/mo) of ignitable and corrosive wastes and wastes containing barium, chromium, lead, mercury, and methyl ethyl ketone. No further information was available in IEPA files regarding IEPA #1974450158.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

Trucking and transportation companies commonly conduct vehicle repair on the premises. Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- It is unknown if IEPA #1970455331 pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

- The status and locations of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); evidence of chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-15 (1712-U, 3481-305). Joliet Township High School Transportation, 3901 Olympic Boulevard, Joliet (northeast quadrant of Olympic Boulevard and Crossroads Drive; Attachment 2, page 2). This site is occupied by a transportation center for the Joliet Township schools. Along the north side of the building were several repair bays where repairs and maintenance work was conducted on school buses. A pad-mounted transformer was observed at the southeast corner of the building.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, the current building was present. In the 1977 through 2004 city directories, no listings were found for this address. In the 2005 and later city directories, Unimast was listed. The Joliet Township High School District was also listed in the 2013 and later city directories.

Under the name “Unimast” and the address “3901 Olympic Blvd”, this site appears on the inactive RCRA list (USEPA #ILR000104901). Under the name “Unimast” and the address “3901 Olympic Blvd”, this site appears on the BOL list (IEPA #1970455504). According to IEPA files, in March 2001, Unimast registered with USEPA and IEPA as a generator of less than 100 kg/mo (220 lb/mo) of ignitable wastes. No further information was available in IEPA files regarding IEPA #1970455504.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to

IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- It is unknown if IEPA #1970455331 pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

- The status and location of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); evidence of former chemical use; potential chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-16 (3481-306). Blue Ribbon Products, 1511 Olympic Boulevard, Joliet (west quadrant of Olympic Boulevard and Centennial Drive; Attachment 2, page 2). This site is occupied by a food distribution company. A diesel AST was observed near the northeast corner of this site.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 through 2016 aerial photos, this site was vacant, with a grassy appearance. On the 2017 and later aerial photos, the current building was present. In the 1977 and later city directories, no listings were found for this address.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city

directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: AST; potential former chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-17 (3481-307). Water tower, 1481 Olympic Boulevard, Joliet (west quadrant of Olympic Boulevard and Centennial Drive; Attachment 2, page 2). This site is occupied by a water tower and a pump house for the City of Joliet. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the On the 1999 and later aerial photos, the water tower and pump house were present. In the 1977 and later city directories, no listings were found for this address.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

Potential hazards associated with pump stations include transformers, batteries, fuel tanks, and

VOCs.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building. Water towers are commonly painted with lead paint, and this material may flake off the towers and enter soil beneath the tower. Therefore, lead paint may be present related to the water tower at this site.

The following RECs were identified at this site: Potential UST(s); potential AST(s); potential chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-18 (3481-308). Unisource Distribution, 1695-1701 Crossroad Drive, Joliet (southwest quadrant of Olympic Boulevard and Crossroads Drive; Attachment 2, page 2). This site is occupied by a commercial building containing a logistics and distribution company.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 aerial photo, this site was vacant, with a grassy appearance. On the 2002 and later aerial photos, the current building was present. In the 1977 through 2004 city directories, no listings were found for this address. In the 2005 and later city directories, Unisource Distribution was listed.

Under the name “Unisource Distribution Div” and the address “1701 Crossroads Dr”, this site appears on the inactive RCRA list (USEPA #ILR000144493). Under the name “Unisource Distribution Division” and the address “1701 Crossroads Dr”, this site appears on the BOL list (IEPA #1974450057). According to IEPA files, in November 2006, Unisource Distribution registered with USEPA and IEPA as a generator of 100 to 1,000 kg/mo (220 to 2,200 lb/mo) of ignitable and corrosive wastes. No further information was available in IEPA files regarding IEPA #1974450057.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area

that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if IEPA #1970455331 pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site: Evidence of chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-19 (3481-309). Crown Lift Trucks, 4100 Olympic Boulevard, Joliet (southeast corner of Olympic Boulevard and Crossroads Drive; Attachment 2, page 2). This site is occupied by a fork lift manufacturer. A pole-mounted transformer was observed at the northwest corner of this site.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 through 2006 aerial photos, this site was vacant, with a grassy appearance. On the 2007 and later aerial photos, the current building was present. In the 1977 through 2008 city directories, no listings were found for this address. In the 2009 and later city directories, Crown Lift Trucks was listed.

Under the name “Crown Lift Inc” and the address “4100 Olympic”, this site appears on the active RCRA list (USEPA #ILR000150243). Under the name “Crown Lift Inc” and the address “4100 Olympic”, this site appears on the BOL list (IEPA #1974450080). According to IEPA files, in October 2007, Crown Lift registered with USEPA and IEPA as a generator of 100 to 1,000 kg/mo (220 to 2,200 lb/mo) of ignitable wastes. No further information was available in IEPA files regarding IEPA #1974450080.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to

IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

Potential hazards associated with vehicle manufacturing facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- It is unknown if IEPA #1970455331 pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

- The status and location of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); evidence of chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-20 (3481-310). Vacant lot, 4100 block of Olympic Boulevard, Joliet (southeast quadrant of Olympic Boulevard and Crossroads Drive; Attachment 2, page 2). This site is occupied by a vacant grassy lot.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 and later aerial photos, this site was vacant, with a grassy appearance.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for,

this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Potential former chemical use.

No de minimis conditions were identified at this site.

Site 3656-21 (3481-311). Medtronic, 3901 Rock Creek Boulevard, Joliet (northeast quadrant Rock Creek Boulevard and Crossroads Drive; Attachment 2, page 2). This site is occupied by a medical device company. A back-up generator with a diesel AST and a pad-mounted transformer were observed near the northeast corner of the building.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 and later aerial photos, the current building was present. In the 1977 through 1998 city directories, no listings were found for this address. In the 2001 and later city directories, Kendall Healthcare was listed.

Under the name “Covidien Sales LP” and the address “3901 Rock Creek Blvd”, this site appears on the active RCRA list (USEPA #ILR000177857). Under the name “Covidien Sales LLC” and the address “3901 Rock Creek Blvd”, this site appears on the BOL list (IEPA #1974450155). According to IEPA files, in July 2013, Covidien Sales registered with USEPA and IEPA as a generator of 100 to 1,000 kg/mo (220 to 2,200 lb/mo) of ignitable, corrosive, and reactive wastes and wastes containing lead, mercury, silver, and methyl ethyl ketone. No further information was available in IEPA files regarding IEPA #1974450155.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

Under the name “Yellow Roadway” and the address “3901 Rock Creek Blvd.”, this site appears on the IEMA non-LUST list (IEMA #H 2005 0695). According to IEMA records, a spill of 190 liters (50 gallons) of diesel fuel from a saddle tank on a semi-truck occurred in May 2005. The cause of the release was unknown. No remedial efforts were specified. No further information was available in IEMA files regarding IEMA #H 2005 0695. No evidence of spills was observed during the site investigations.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if IEPA #1970455331 pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: AST; evidence of former chemical use; spill.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-22 (3481-327). Commercial building, 1515 Rock Creek Boulevard, Joliet (southwest quadrant of Olympic Boulevard and Crossroads Drive; Attachment 2, page 3). This site is occupied by a commercial building containing a logistics and distribution warehouse. No company names were observed at this site, and the name of the business that occupies the building is unknown.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 through 2013 aerial photos, this site was vacant, with a grassy appearance. On the 2015 and later aerial photos, all of the current building was present. In the 1977 and later city directories, no listings were found for this address.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information

was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- No company names were observed at this site, and the name of the business that occupies the building is unknown.

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site: Potential former chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-23 (3481-266). Agricultural land, 800-1200 blocks of Houbolt Road and 1500 block of Centennial Drive, Joliet (northwest and southwest quadrants of Olympic Boulevard and Houbolt Road; Attachment 2, page 3). This site is occupied by agricultural land. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 2018 aerial photos, this site was under agricultural use.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely pesticide and/or herbicide use

based on agricultural land use.

Site 3656-24 (1712-S, 1712A-9 [partial], 1712A-10 [partial], 1712A-H, 3481-267). Joliet Junior College, 1215 Houbolt Road, Joliet (northwest quadrant of Olympic Boulevard and Houbolt Road; Attachment 2, page 3). This site is occupied by a junior college. Site features included several buildings, a large parking area, a greenhouse, and a nursery. A diesel AST was observed along the west side of the "boller house" building shown on Attachment 3. A waste-oil AST was observed along the south side of building "C" on Attachment 3. A pole-mounted transformer was observed along the west side of Houbolt Road, just south of this site's south driveway. Because of the large size of the site and the distance of most of the site from the project area, a complete inspection of this site was not performed,

On the 1851 through 1980 plat maps, this site was under individual use with no buildings depicted. On the 1985 and later plat maps, Joliet Junior College occupied this site. On the 1939 through 1962 aerial photos, this site was under agricultural use. On the 1973 and later aerial photos, the college was present. In the 1977 and later city directories, Joliet Junior College was listed.

Under the name "Joliet Junior College" and the address "1215 Houbolt Ave", this site appears on the active RCRA list (USEPA #ILD984849174). Under the name "Joliet Junior College" and the address "1215 Houbolt Rd-b", this site appears on the BOL list (IEPA #1970455233). Under the name "Joliet Junior College" and the address "1215 Houbolt Rd.", this site appears on the LUST list (IEMA #971698). Under the name "Joliet Junior College" and the address "1215 Houbolt Rd", this site appears on the UST list (OSFM #2017536) with two registered USTs. According to OSFM files, a gasoline UST was removed in November 1993 and a used-oil UST was removed in September 1997. The location of the gasoline UST removed in 1993 was not discussed in OSFM or IEPA files and is unknown. The used-oil UST was located in an area that is currently under building C on Attachment 3. No further information was available in OSFM files regarding OSFM #2017536.

According to IEPA files, the used-oil UST was utilized to store oil generated by the automotive service facility that operated on campus. The UST was removed in 1997 under the direction of Capital Environmental Group. During the removed of the UST, a release was reported and IEMA #971698 was issued. The impacted soil was removed and soil samples were collected from the walls and floor of the pit and analyzed for BTEX and PNA compounds. Groundwater was not encountered during the remediation activities; therefore, groundwater depth and flow direction were not given. No BTEX or PNA compounds were detected above Tier 1 residential SROs. Based on this information, IEPA issued an NFR letter for IEMA #971698 on August 5, 1998 with no AULs (Attachment 4). No further information was available in IEPA files regarding IEMA #971698.

According to IEPA files, in December 1991, Joliet Junior College registered with USEPA and IEPA as a generator of an unspecified amount of corrosive and reactive wastes and wastes containing barium. No further information was available in IEPA files regarding IEPA #1970455233.

Under the name "Joliet HHW Collection" and the address "1215 Houboldt [sic] Ave B", this site appears on the active RCRA list (USEPA #IL0000661082). Under the name "Joliet HHW Collection" and the address "1215 Houbolt Rd A", this site appears on the BOL list (IEPA #1970450100). According to IEPA files, in July, August, and September 1994, Joliet Junior College registered with USEPA and IEPA as a generator of 100 to 1,000 kg/mo (220 to 2,200 lb/mo) of

ignitable, corrosive, reactive, and toxic wastes. No further information was available in IEPA files regarding IEPA #1970450100.

Under the name “Waste Management” and the address “SW Corner of Rt 52 & Houbolt”, this site appears on the inactive RCRA list (USEPA #ILR000051094). Under the name “Onyx Environmental Svc” and the address “1215 Houbolt Rd”, this site appears on the BOL list (IEPA #1970455431). According to IEPA files, in April 1998, Waste Management registered with USEPA and IEPA as a generator of greater than 1,000 kg/mo (2,200 lb/mo) of “hazardous household waste”. No further information was available in IEPA files regarding IEPA #1970455431.

Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s). Potential hazards associated with nurseries include herbicides and fertilizers.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- Because of the large size of the site and the distance of most of the site from the project area, a complete inspection of this site was not performed.
- The location of the former gasoline UST is unknown.
- The status and location of any undocumented UST(s) at this site are unknown.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in these buildings.

The following RECs were identified at this site: ASTs; former UST with a documented release; potential UST(s); evidence of chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint; potential herbicide and/or fertilizer presence based on nursery use.

Site 3656-25 (3481-269). Vacant land, 1300 block of Houbolt Road, Joliet (southwest corner of Olympic Boulevard and Houbolt Road; Attachment 2, page 3). This site is occupied by vacant grassy land. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, this site was vacant, with a grassy appearance.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3656-26 (3481-270). ROW, 1200 block of Houbolt Road, Joliet (intersection of Olympic Boulevard and Houbolt Road; Attachment 2, page 3). This site is occupied by the Olympic Boulevard and Houbolt Road intersection and its associated ROW.

On the 1862 and later plat map and on the 1939 and later aerial photographs, this site was under its current use.

Under the name “Schneider National” and the address “Intersection of Olympic & Humboldt”, this site appears on the IEMA non-LUST list (IEMA #H-2008-0677). According to IEMA records, a spill of 380 liters (100 gallons) of diesel fuel from a saddle tank on a semi-truck occurred in May 2008. The cause of the release was due to a traffic accident. No remedial efforts were specified. No further information was available in IEMA records regarding IEMA #H-2008-0677. No evidence of the spill was observed during the fieldwork for this project.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Spill.

No de minimis conditions were identified at this site.

Site 3656-27 (3481-271). Residences, 3527-3533 Craig Drive and 1001-1032 Louise Lane, Joliet (northeast corner of Cathy Drive and Houbolt Road; Attachment 2, page 4). This site is occupied by 12 single-family residences. This site did not appear on any of the regulatory lists

checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1988 aerial photos, this site was under agricultural use. On the 1993 and later aerial photos, all the current residences were present.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The buildings on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Evidence from aerial photographs indicates that these residences were constructed after 1978. Lead paint was banned for residential use in the United States in 1978, and therefore lead paint is unlikely to be present in these buildings.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Potential ACM.

Site 3656-28 (3481-272). Commercial building, 1100-1122 Houbolt Road, Joliet (southeast corner of Cathy Drive and Houbolt Road; Attachment 2, page 4). This site is occupied by a multi-unit commercial building. Occupants included businesses typical of shopping centers (see address table for listings). No potential hazards were identified in association with any of the occupants. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, the current building was present. In the 1977 through 2001 city directories, no listings were found for this address. In the 2002 and later city directories, various businesses typical of shopping centers were listed, including a dry cleaners listed at 1104 Houbolt Road in the 2002 city directory only. No potential hazards were identified in association with any of the other former occupants.

Potential hazards associated with dry cleaning businesses include VOCs.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor

tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site; Potential former chemical use.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-29 (3481-273). Strand Associates, 1170 Houbolt Road, Joliet (southeast quadrant of Cathy Drive and Houbolt Road; Attachment 2, page 4). This site is occupied by an engineering company. A retention pond was present near the northeast corner of this site. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 2002 aerial photos, this site was under agricultural use. On the 2005 aerial photo, the north half of the current building was present. On the 2007 and later aerial photos, all of the current building was present. In the 1977 through 2005 city directories, no listings were found for this address. In the 2006 and later city directories, Strand was listed.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Potential ACM and lead paint.

Site 3656-30 (1712-V, 1712A-I, 3481-274). Commercial building, 3501 Corporate Drive, Joliet (northeast quadrant of Olympic Boulevard and Houbolt Road; Attachment 2, page 4). This site is occupied by a vacant commercial building. A pad-mounted transformer was observed along the south side of the building, midway along its length.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, the current building was present. In the 1977 through 2004 city directories, no listings were found for this address. In the 2005 through 2009 city directories, Ecolab was listed. In the 2010 through 2014 city directories, various trucking companies were listed. In the 2015 and later

city directories, no listings were found for this address.

Under the name “Ecolab Inc” and the address “3501 Corporate Dr”, this site appears on the active RCRA list (USEPA #ILR000140665). Under the name “Ecolab Inc” and the address “3501 Corporate Dr”, this site appears on the BOL list (IEPA #1974450042). According to IEPA files, in March 2006, Ecolab registered with USEPA and IEPA as a generator of greater than 1,000 kg/mo (2,200 lb/mo) of ignitable and corrosive wastes.

In December 2008, a compliance inspection was conducted by the IEPA. According to the inspection notes, Ecolab manufactured commercial soaps, cleansers, detergents, and sanitizers; however, this facility was solely used for warehousing the companies products. Waste that was historically generated at this site was due to damaged product containers. No wastes were found on-site during the inspection and no violations were found. No further information was available in IEPA files regarding IEPA #1974450042.

Trucking and transportation companies commonly conduct vehicle repair on the premises. Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site.

- The status and locations of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); evidence of former chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-31 (3481-275). Commercial building, 1300-1314 Houbolt Road, Joliet (northeast corner of Olympic Boulevard and Houbolt Road; Attachment 2, page 4). This site is occupied by a multi-unit office building. Occupants included various medical and contractor offices (see address table for listings). No potential hazards were identified in associations with any of the current occupants. A pad-mounted transformer was observed along the west side of the building, midway along its length. A pad-mounted transformer was observed at the southeast corner of this site. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 through 2005 aerial photos, this site was vacant, with a grassy appearance. On the 2006 and later aerial photos, the current building was present. In the 1977 through 2007 city directories, no listings were found for this address. In the 2008 and later city directories, various medical and contractor offices were listed; no potential hazards were identified in associations with any of these occupants.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

Site 3656-32 (3481-276). Commercial building, 1350-1360 Houbolt Road, Joliet (southeast corner of Olympic Boulevard and Houbolt Road; Attachment 2, page 4). This site is occupied by a multi-unit commercial building. Occupants included businesses typical of shopping centers (see address table for listings). No potential hazards were identified in association with any of the occupants. A pad-mounted transformer was observed at the southeast corner of the building. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 through 2005 aerial photos, this site was vacant, with a grassy appearance. On the 2006 and later aerial photos, the current building was present. In the 1977 through 2008 city directories, no listings were found for this address. In the 2009 and later city directories, various retail and service businesses were listed; no potential hazards were identified in association with any of these occupants.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor

tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-33 (3481-320). Holiday Inn, 1421 Rock Creek Boulevard, Joliet (northwest quadrant of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by a hotel. A pad-mounted transformer was observed along the east side of the building. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 2002 through 2016 aerial photos, this site was vacant, with a grassy appearance. On the 2017 aerial photo, the current building was partially constructed. On the 2018 aerial photo, the current building was present. In the 1977 and later city directories, no listings were found for this address.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site: Potential former chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-34 (3481-321). Vacant land, 1400 block of Houbolt Road, Joliet (northwest quadrant of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by vacant grassy land. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, this site was vacant, with a grassy appearance.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Potential former chemical use.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3656-35 (3481-322). Vacant land, 1400 block of Houbolt Road, Joliet (northeast quadrant of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by vacant grassy land. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later

aerial photos, this site was vacant, with a grassy appearance.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

No RECs were identified at this site.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3656-36 (1712A-12 [partial], 1712A-G, 2233-49, 2233V-69, 2233V2-87, 3481-323). Burger King, 3625 Rock Creek Boulevard, Joliet (northwest corner of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by a fast-food restaurant. A pad-mounted transformer was observed along the northeast side of the building.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 and later aerial photos, the current building was present. In the 1977 through 1998 city directories, no listings were found for this address. In the 2001 and later city directories, Burger King was listed.

Under the name "Blu - Joliet", the address "Rock Creek Blvd. & Houbolt Rd." appears on the UST list (OSFM #2045526) with two registered USTs. According to OSFM files, two diesel USTs with capacities of 30,300 and 75,700 liters (8,000 and 20,000 gallons) are listed as “not installed“ at the address listed above. OSFM files did not include definitive location information and the UST locations could not be determined. Because of this, this listing will be attributed to all four corners (Sites 3656-36, 37, 38, and 39) of this intersection.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or

underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- OSFM files did not include definitive location information for OSFM #2045526 and the UST locations could not be determined.

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: Potential UST(s); potential former chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-37 (1712-9, 1712A-13 [partial], 1712A-J, 2233-50, 2233V-70, 2233V2-88, 3481-324). BP gasoline station, 1411 Riverboat Center Drive, Joliet (northeast corner of Rock Creek Boulevard and Houbolt Road, Attachment 2, page 5). This site is occupied by a gasoline station. Three USTs were observed in a single pit near the southeast corner of this site, approximately 15 m (40 ft) north of Rock Creek Boulevard and 80 m (260 ft) east of Houbolt Road. Two monitoring wells were observed at the northeast and southwest corners of the UST pit. Four dispensers were observed beneath a canopy located near the south end of this site. Three vent pipes were observed at the southeast corner of the building. A pad-mounted transformer was located at the northeast corner of the building.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, the current gasoline station was present. In the 1977 through 1998 city directories, no listings were found for this address. In the 2001 and later city directories, a gasoline station was listed.

Under the name “Amoco” and the address “1411 River Boat Center Dr”, this site appears on the active RCRA and BOL lists (USEPA #ILR000034827; IEPA #1970455394). Under the name “Riverboat Gas & Food, Inc.” and the address “1411 Riverboat Center Drive”, this site appears on the UST list (OSFM #2034720) with three registered USTs. According to OSFM records, two gasoline and one diesel 37,854-liter (10,000-gallon) USTs were installed in 1996 (see above for locations of these USTs). No further information was available in OSFM records regarding OSFM #2034720.

According to IEPA files, in February 1997, Amoco registered with USEPA and IEPA as a generator

of 100 to 1,000 kg/mo (220 to 2,200 lb/mo) of ignitable wastes. No further information was available in IEPA files regarding IEPA #1970455394.

Under the name "Blu - Joliet", the address "Rock Creek Blvd. & Houbolt Rd." appears on the UST list (OSFM #2045526) with two registered USTs. According to OSFM files, two diesel USTs with capacities of 30,300 and 75,700 liters (8,000 and 20,000 gallons) are listed as "not installed" at the address listed above. OSFM files did not include definitive location information and the UST locations could not be determined. Because of this, this listing will be attributed to all four corners (Sites 3656-36, 37, 38, and 39) of this intersection.

In two boreholes completed at this site for ISGS #1712 in 2008, no VOCs were detected. See ISGS #1712 for details.

Historic gasoline stations commonly conducted vehicle repair on the premises. Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pipelines, drums, chemical containers, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- OSFM files did not include definitive location information for OSFM #2045526 and the UST locations could not be determined.

- The status and location of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: USTs; potential UST(s); evidence of chemical use; monitoring wells.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-38 (1712-10, 2233-48, 2233V-68, 2233V2-86, 3481-325). 7-Eleven, 3620 Rock Creek Boulevard, Joliet (southwest corner of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by a gasoline station and convenience store. Two USTs were observed in a single pit along the east side of this site, approximately 20 m (60 ft) west of Houbolt Road and 35 m (110 ft) south of Rock Creek Boulevard. Two monitoring wells were observed at the northeast and southwest corners of the UST pit. Two vent pipes were observed

directly east of the UST pit. Six dispensers were located beneath a canopy present along the east side of the building. A pad-mounted transformer was observed along the west side of the building.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, the current gasoline station was present. In the 1977 through 2010 city directories, no listings were found for this address. In the 2011 and later city directories, 7-11 was listed.

Under the name “7-Eleven 33031" and the address “6320 Rock Creek Blvd”, this site appears on the active RCRA and BOL lists (USEPA #ILR000102921; IEPA #1970455501). Under the name “7-Eleven #33031” and the address “3620 Rock Creek Boulevard”, this site appears on the UST list (OSFM #2039857) with two registered USTs. According to OSFM records, one 37,854-liter (10,000-gallon) gasoline UST and one 56,781-liter (15,000-gallon) gasoline UST were installed in 2000 (see above for UST locations). No further information was available in OSFM records regarding OSFM #2039857.

According to IEPA files, in January 2001, 7-Eleven registered with USEPA and IEPA as a generator of 100 to 1,000 kg/mo (220 to 2,200 lb/mo) of ignitable and corrosive wastes and wastes containing 2,4-dichlorophenoxyacetic acid. No further information was available in IEPA files regarding IEPA #1970455501.

Under the name "Blu - Joliet", the address "Rock Creek Blvd. & Houbolt Rd.” appears on the UST list (OSFM #2045526) with two registered USTs. According to OSFM files, two diesel USTs with capacities of 30,300 and 75,700 liters (8,000 and 20,000 gallons) are listed as “not installed“ at the address listed above. OSFM files did not include definitive location information and the UST locations could not be determined. Because of this, this listing will be attributed to all four corners (Sites 3656-36, 37, 38, and 39) of this intersection.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

In three boreholes completed at this site for ISGS #1712 in 2008, no VOCs were detected. See ISGS #1712 for details.

Historic gasoline stations commonly conducted vehicle repair on the premises. Potential hazards associated with vehicle repair facilities include waste oil, lubricants, and transmission fluids; spent solvents; waste paints and thinners; sludge from parts-cleaning tanks; oily sludge from floor sumps; used antifreeze; used lead-acid batteries; and undocumented UST(s).

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, pipelines, drums,

chemical containers, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gaps were identified at this site:

- OSFM files did not include definitive location information for OSFM #2045526 and the UST locations could not be determined.
- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.
- The status and location of any undocumented UST(s) at this site are unknown.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following RECs were identified at this site: USTs; potential UST(s); evidence of chemical use; monitoring wells.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-39 (2233-51, 2233V-71, 2233V2-89, 3481-326). McDonald's, 1421 Riverboat Center Drive, Joliet (southeast corner of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by a fast-food restaurant. One pad-mounted transformer was observed at the northeast corner of the building, and one pad-mounted transformer was observed at the southwest corner of this site.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 and later aerial photos, the current building was present. In the 1977 through 1998 city directories, no listings were found for this address. In the 2001 and later city directories, various restaurants were listed.

Under the name "Blu - Joliet", the address "Rock Creek Blvd. & Houbolt Rd." appears on the UST list (OSFM #2045526) with two registered USTs. According to OSFM files, two diesel USTs with capacities of 30,300 and 75,700 liters (8,000 and 20,000 gallons) are listed as "not installed" at the address listed above. OSFM files did not include definitive location information and the UST locations could not be determined. Because of this, this listing will be attributed to all four corners (Sites 3656-36, 37, 38, and 39) of this intersection.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- OSFM files did not include definitive location information for OSFM #2045526 and the UST locations could not be determined.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site: Potential UST(s).

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

Site 3656-40 (2233-52, 2233V-72, 2233V2-90, 3481-329). Fairfield Inn, 1501 Riverboat Center Drive, Joliet (southeast quadrant of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by a hotel. Three pad-mounted transformers were observed at the following locations: one at the south end of this site, one at the northeast corner of the building, and one at the northwest corner of this site. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 and later aerial photos, the current building was present. In the 1977 through 1998 city directories, no listings were found for this address. In the 2001 and later city directories, Fairfield Inn was listed.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

Site 3656-41 (2233-47 [partial], 2223V-67 [partial], 2233V2-85, 3481-330). Vacant land, 1500

block of Commerce Lane, Joliet (southwest quadrant of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by vacant grassy land.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1999 aerial photos, this site was under agricultural use. On the 2002 and later aerial photos, this site was vacant, with a grassy appearance.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

Because there are no buildings present and no evidence of fill or demolition debris was observed, asbestos-containing materials and lead paint are unlikely to be present at this site.

The following REC was identified at this site: Potential former chemical use.

The following de minimis condition was identified at this site: Likely past pesticide and/or herbicide use based on former agricultural land use.

Site 3656-42 (1712A-16 [partial], 2233-53, 2233V-73, 2233V2-91, 3481-331). Cracker Barrel Restaurant, 1511 Riverboat Center Drive, Joliet (southeast quadrant of Rock Creek Boulevard and Houbolt Road; Attachment 2, page 5). This site is occupied by a restaurant. A pad-mounted transformer was located near the northwest corner of this site. This site did not appear on any of the regulatory lists checked for this project.

On the 1851 and later plat maps, this site was under individual use with no buildings depicted. On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 and later aerial photos, the current building was present. In the 1977 through 1998 city directories, no listings were found for this address. In the 2001 and later city directories, Cracker Barrel was listed.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or

surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

No data gaps were identified at this site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

No RECs were identified at this site.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-43 (1712A-14 [partial], 1712A-G, 2233-47 [partial], 2233V-67 [partial], 2233V2-84, 3481-332). Comfort Inn, 1520 Commerce Lane, Joliet (southeast quadrant of Commerce Lane and Rock Creek Boulevard; Attachment 2, page 5). This site is occupied by a hotel. A pad-mounted transformer was observed along the west side of the building, and a pole-mounted transformer was observed along the southeast corner of this site.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 1998 aerial photos, this site was under agricultural use. On the 1999 and later aerial photos, the current building was present. In the 1977 through 1998 city directories, no listings were found for this address. In the 2001 and later city directories, various hotels were listed.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site: Potential former chemical use.

The following de minimis conditions were identified at this site: Transformers; potential ACM and lead paint.

Site 3656-44 (1712A-15 [partial], 1712A-G, 2233-46, 2233V-66, 2233V2-83, 3481-334). Heroes West Sports Bar and Grill, 1530 Commerce Lane, Joliet (northwest quadrant of Houbolt Road and I-80; Attachment 2, page 5). This site is occupied by a restaurant and bar. A pad-mounted transformer was observed along the north side of the building.

On the 1851 through 1990 plat maps, this site was under individual use with no buildings depicted. The 1994 and later plat map showed this site as part of Industrial Development International (aka Rock Run Business Park). On the 1939 through 2006 aerial photos, this site was under agricultural use. On the 2007 and later aerial photos, the current building was present. In the 1977 through 2007 city directories, no listings were found for this address. In the 2008 and later city directories, Heroes was listed.

Under the name “Industrial Dvlpmnts Intl Inc”, the address “1575 Houbolt Road” appears on the BOL list (IEPA #1970455331). No addresses in the 1500 block of Houbolt Road are listed in city directories, and 1575 Houbolt Road could not be located during site investigations. According to IEPA files, this BOL number was issued to the development company that redeveloped the area that this site is within, and this IEPA number may pertain to this site. Because there was no specific information in IEPA files as to the exact location or specific site this BOL number was issued for, this BOL number will be listed for each site within the redevelopment area. No further information was available in IEPA files regarding IEPA #1970455331.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- It is unknown if the BOL listing above pertains to this site, the whole Rock Run Business Park complex, or a specific unidentified site.

The building on this site may contain friable asbestos-containing materials as a component of floor tiles, wall and pipe insulation, roof materials, patching or painting compounds, ceiling materials, or

stove and furnace insulation. Lead paint was banned for residential use in the United States in 1978, but has not been banned for industrial and commercial use. Therefore lead paint may be present in this building.

The following REC was identified at this site: Potential former chemical use.

The following de minimis conditions were identified at this site: Transformer; potential ACM and lead paint.

Site 3656-45 (1714A-K, 2233-1 [partial], 2233V-1 [partial], 3481-1 [partial]). ROW, I-80 and Houbolt Road interchange, Joliet (I-80 between M.M. 126 and M.M. 128; Attachment 2, page 5). This site is occupied by the I-80 and Houbolt Road interchange and their associated ROW. I-80 is elevated above the surrounding grade on fill of unknown composition.

The following bridges are present within this site in the project area, listed below in structure number order. Location references and construction dates are taken from the IDOT bridge information website. Map references are to Attachment 2, page 5. The bridges below were painted.

IDOT structure number	Location	Construction date	Map location, Attachment 2, page 5
S.N. 099-0301	Carries I-80 eastbound over Houbolt Road	1993	45a
S.N. 099-0302	Carries I-80 westbound over Houbolt Road	1993	45b

On the 1851 through 1955 plat maps, this site was under individual use with no buildings depicted. On the 1964 through 1988 plat maps, I-80 was present but not the interchange with Houbolt Road. On the 1994 and later plat maps, the interchange was shown. On the 1939 through 1962 aerial photos, this site was under agricultural use. On the 1973 through 1988 aerial photos, I-80 was present and Houbolt Road crossed over it with no interchange ramps and a small mound present. On the 1994 and later aerial photos, the interchange ramps were present and the mound was no longer present.

Under the name “EH Swenson & Sons” and the address “14 Henderson Ave”, this site appears on the BOL list (IEPA #1978170001).

The following information has been modified from ISGS #2233V:

> According to IEPA files, in 1974, a 0.8-hectare (2-acre) landfill formerly occupied the area encompassing the approximate northwest and northeast quadrants of the interchange of I-80 and Houbolt Road. Files documented that this was a intermittently operated site which was approved to accept general solid waste.

No further information was present in updated IEPA files regarding IEPA #1978170001. No evidence of solid waste was observed during the fieldwork for this project.

No visual evidence of stressed vegetation, pits or depressions, mounding or soil piles, lagoons or

surface impoundments, stained soil or pavement, water discoloration, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, chemical containers, monitoring wells, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors was observed at this site during a site inspection by ISGS on January 17, 2019.

The following data gap was identified at this site:

- The composition of the fill at this site is unknown.

Evidence from aerial photographs indicates that the bridges were constructed after 1985, when lead paint was no longer used to paint bridges, and therefore lead paint is unlikely to be present at these structure. The structures on this site is painted and may contain friable asbestos-containing materials as a compound of painting or patching compounds.

The following RECs were identified at this site: Former solid waste; fill of unknown composition.

The following de minimis condition was identified at this site: potential ACM.

ADJOINING SITES

The ISGS conducted a search of federal, state, and other environmental databases for reported environmental concerns on sites adjoining the project. For certain resources, the search distances may have been expanded when deemed applicable in the judgment of the project manager. Refer to the Appendix for complete citations for these databases and the date of update of each database. Sites along the project are listed in the preceding section. Sites adjoining the project that do not appear on regulatory databases are not included. The following sites adjoining but not along, the project were identified.

Federal records:

SEMS: NPL, Active, and Archived
None.

RCRA sites subject to corrective action (CORRACTS)
None.

RCRA sites – non-CORRACTS TSD
None.

RCRA sites – other

Site 3656-A (3481-314). Petco, 3801 Rock Creek Boulevard, Joliet. USEPA #ILR000168872; IEPA #1974450137 and #1970455331; IEMA #H-2008-0711 and #H-2008-0710. Adjoining property to the east of Site 3656-21 and to the south of Site 3656-22 (Attachment 2, page 2).

Site 3656-B (2233V-J, 3481-B). Cloud Blue Technologies Inc., 3307 Corporate Drive, Joliet. USEPA #ILR000155846; IEPA #1974450101. Adjoining property to the east of Site 3656-30 (Attachment 2, page 4).

Site 3656-C (3481-C). Commercial building, 3300-3500 Corporate Drive, Joliet. USEPA #ILR000197079 and #ILR000143115; IEPA #1974450052 and #1974450218. Adjoining property to the south of Site 3656-30, to the east of Sites 3656-31 and 3656-32, and to the northeast of Site 3656-35 (Attachment 2, page 4).

Site 3656-D (1712A-22, 1712A-L, 2233-41, 2233V-60, 2233V2-79, 3481-363). USF Holland, 3801-4001 W. Mound Road, Joliet. USEPA #ILR000118315; ERNS #1081041; OSFM #2038854; IEPA #1970455549; IEMA #H-2013-0354, #H-2014-0479, and #H-2016-0743. Adjoining property to the southwest of Site 3656-45 (Attachment 2, page 5).

Brownfields

None.

Non-LUST releases and spills

Site 3656-D (1712A-22, 1712A-L, 2233-41, 2233V-60, 2233V2-79, 3481-363). USF Holland, 3801-4001 W. Mound Road, Joliet. USEPA #ILR000118315; ERNS #1081041; OSFM #2038854; IEPA #1970455549; IEMA #H-2013-0354, #H-2014-0479, and #H-2016-0743. Adjoining property to the southwest of Site 3656-45 (Attachment 2, page 5).

State records:

Leaking underground storage tanks (LUST)

None.

Registered underground storage tanks (UST)

Site 3656-D (1712A-22, 1712A-L, 2233-41, 2233V-60, 2233V2-79, 3481-363). USF Holland, 3801-4001 W. Mound Road, Joliet. USEPA #ILR000118315; ERNS #1081041; OSFM #2038854; IEPA #1970455549; IEMA #H-2013-0354, #H-2014-0479, and #H-2016-0743. Adjoining property to the southwest of Site 3656-45 (Attachment 2, page 5).

Site 3656-E (3481-E). Knight Transportation, 3301 Mound Road, Joliet. OSFM #2044173. Adjoining property to the east of Site 3656-45 (Attachment 2, page 5).

IEPA Site Remediation Program

None.

IEPA Bureau of Land Inventory

Site 3656-A (3481-314). Petco, 3801 Rock Creek Boulevard, Joliet. USEPA #ILR000168872; IEPA #1974450137 and #1970455331; IEMA #H-2008-0711 and #H-2008-0710. Adjoining property to the east of Site 3656-21 and to the south of Site 3656-22 (Attachment 2, page 2).

Site 3656-B (2233V-J, 3481-B). Cloud Blue Technologies Inc., 3307 Corporate Drive, Joliet. USEPA #ILR000155846; IEPA #1974450101. Adjoining property to the east of Site 3656-30 (Attachment 2, page 4).

Site 3656-C (3481-C). Commercial building, 3300-3500 Corporate Drive, Joliet. USEPA #ILR000197079 and #ILR000143115; IEPA #1974450052 and #1974450218. Adjoining property to the south of Site 3656-30, to the east of Sites 3656-31 and 3656-32, and to the

northeast of Site 3656-35 (Attachment 2, page 4).

Site 3656-D (1712A-22, 1712A-L, 2233-41, 2233V-60, 2233V2-79, 3481-363). USF Holland, 3801-4001 W. Mound Road, Joliet. USEPA #ILR000118315; ERNS #1081041; OSFM #2038854; IEPA #1970455549; IEMA #H-2013-0354, #H-2014-0479, and #H-2016-0743. Adjoining property to the southwest of Site 3656-45 (Attachment 2, page 5).

Site 3656-F (3481-312). Unisource, 1700 Crossroad Drive, Joliet. IEPA #1970455331. Adjoining property to the east of Site 3656-18, to the south of Site 3656-19, and to the southwest of Site 3656-20 (Attachment 2, page 2).

Site 3656-G (3481-313). Commercial building, 4001-4021 Rock Creek Boulevard, Joliet. IEPA #1970455331. Adjoining property to the south of Site 3656-20 and to the west of Site 3656-21 (Attachment 2, page 2).

Site 3656-H (3481-333). Vacant land, 1500 block of Rock Creek Boulevard, Joliet. IEPA #1970455331. Adjoining property to the south of Site 3656-22 (Attachment 2, page 2).

Site 3656-I (2233-38, 2233V-57, 2233V2-74, 3481-315). Vacant land, 4100 block of Rock Creek Boulevard, Joliet. IEPA #1970455331. Adjoining property to the south of Site 3656-12 and to the southwest of Site 3656-18 (Attachment 2, page 2).

Site 3656-J (2233-38, 2233V-57, 2233V2-75, 3481-316). MXD group, 4100 Rock Creek Boulevard, Joliet. IEPA #1970455331 and #1974450190; IEMA #H-2016-0845. Adjoining property to the south of Site 3656-18 (Attachment 2, page 2).

Site 3656-K (2233-40 [partial], 2233V-59 [partial], 2233V2-78 [partial], 3481-318). Menlo Worldwide Logistics, 4000 Rock Creek Boulevard, Joliet. IEPA #1970455331. Adjoining property to the south of Site 3656-21 (Attachment 2, page 2).

Site 3656-L (2233-42, 2233V-61, 2233V2-80, 3481-319). Mack Trucks Central Parts Distribution Center, 3900 Rock Creek Boulevard, Joliet. IEPA #1970455331. Adjoining property to the south of Site 3656-21 (Attachment 2, page 2).

Site 3656-M (3481-328). Vacant land, 1500 block of Rock Creek Boulevard, Joliet. IEPA #1970455331. Adjoining property to the south of Site 3656-33 and to the west of Sites 3656-38, 3656-41, 3656-43, and 3656-44 (Attachment 2, page 5).

Site 3656-N (2233-44, 2233V-63, 2233V2-82, 3481-336). Agricultural land, 3700 block of Rock Creek Boulevard, Joliet. IEPA #1970455331. Adjoining property to the south of Site 3656-44 and to the west of Site 3656-45 (Attachment 2, page 5).

Brownfields

None.

Non-LUST releases and spills

Site 3656-A (3481-314). Petco, 3801 Rock Creek Boulevard, Joliet. USEPA #ILR000168872; IEPA #1974450137 and #1970455331; IEMA #H-2008-0711 and #H-2008-0710. Adjoining property to the east of Site 3656-21 and to the south of Site 3656-

22 (Attachment 2, page 2).

Site 3656-D (1712A-22, 1712A-L, 2233-41, 2233V-60, 2233V2-79, 3481-363). USF Holland, 3801-4001 W. Mound Road, Joliet. USEPA #ILR000118315; ERNS #1081041; OSFM #2038854; IEPA #1970455549; IEMA #H-2013-0354, #H-2014-0479, and #H-2016-0743. Adjoining property to the southwest of Site 3656-45 (Attachment 2, page 5).

Site 3656-J (2233-38, 2233V-57, 2233V2-75, 3481-316). MXD group, 4100 Rock Creek Boulevard, Joliet. IEPA #1970455331 and #1974450190; IEMA #H-2016-0845. Adjoining property to the south of Site 3656-18 (Attachment 2, page 2).

Activity and Use Limitations (including Institutional controls, engineered barriers, and Highway Authority Agreements)

None.

Municipal records

None.

Tribal records

There are no tribally owned lands in the state of Illinois; therefore, the checking of tribal records is not applicable for this report.

CONCLUSIONS

(1) RECs were identified at the following sites along the project:

- Site 3656-1: ROW. Spill; natural gas pipelines; potential ACM.
- Site 3656-9: Rock Run. Non-attainment of water quality.
- Site 3656-12: Vacant land. Potential former chemical use.
- Site 3656-13: Ecolab. Evidence of chemical use; transformer; potential ACM and lead paint.
- Site 3656-14: Commercial building. Potential UST(s); evidence of chemical use; potential ACM and lead paint.
- Site 3656-15: Joliet Township High School Transportation. Potential UST(s); evidence of former chemical use; potential chemical use; transformer; potential ACM and lead paint.
- Site 3656-16: Blue Ribbon Products. AST; potential former chemical use; potential ACM and lead paint.
- Site 3656-17: Water tower. Potential UST(s); potential AST(s); potential chemical use; potential ACM and lead paint.
- Site 3656-18: Unisource Distribution. Evidence of chemical use; potential former chemical use; potential ACM and lead paint.
- Site 3656-19: Crown Lift Trucks. Potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint.
- Site 3656-20: Vacant lot. Potential former chemical use.
- Site 3656-21: Medtronic. AST; evidence of former chemical use; spill; transformer; potential ACM and lead paint.
- Site 3656-22: Commercial building. Potential former chemical use; potential ACM and lead paint.
- Site 3656-24: Joliet Junior College. ASTs; former UST with a documented release; potential UST(s); evidence of chemical use; transformer; potential ACM and lead paint; potential herbicide and/or fertilizer presence.
- Site 3656-26: ROW. Spill.
- Site 3656-28: Commercial building. Potential former chemical use; potential ACM and lead paint.
- Site 3656-30: Commercial building. Potential UST(s); evidence of former chemical use; transformer; potential ACM and lead paint.
- Site 3656-33: Holiday Inn. Potential former chemical use; transformer; potential ACM and lead paint.
- Site 3656-34: Vacant land. Potential former chemical use; likely past pesticide and/or herbicide use.
- Site 3656-36: Burger King. Potential UST(s); potential former chemical use; transformer; potential ACM and lead paint.
- Site 3656-37: BP gasoline station. USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint.
- Site 3656-38: 7-Eleven. USTs; potential UST(s); evidence of chemical use; monitoring wells; transformer; potential ACM and lead paint.
- Site 3656-39: McDonald's. Potential UST(s); transformers; potential ACM and lead paint.
- Site 3656-41: Vacant land. Potential former chemical use; likely past pesticide and/or herbicide use.
- Site 3656-43: Comfort Inn. Potential former chemical use; transformers; potential ACM and lead paint.
- Site 3656-44: Heroes West Sports Bar and Grill. Potential former chemical use;

transformer; potential ACM and lead paint.
- Site 3656-45: ROW. Former solid waste; fill; potential ACM.

(2) De minimis conditions were identified at the following sites along the project:

- Site 3656-2: Agricultural land. Natural gas pipelines; likely pesticide and/or herbicide use.
- Site 3656-3: Residences. Transformers; potential ACM and lead paint.
- Site 3656-4: Commercial building. Transformer; natural gas pipelines; potential ACM and lead paint.
- Site 3656-5: Vacant land. Potential past pesticide and/or herbicide presence.
- Site 3656-7: Commercial building. Potential ACM and lead paint.
- Site 3656-10: Commercial building. Potential ACM and lead paint.
- Site 3656-11: Residence. Potential ACM and lead paint.
- Site 3656-23: Agricultural land. Likely pesticide and/or herbicide use.
- Site 3656-25: Vacant land. Likely past pesticide and/or herbicide use.
- Site 3656-27: Residences. Potential ACM.
- Site 3656-29: Strand Associates. Potential ACM and lead paint.
- Site 3656-31: Commercial building. Transformers; potential ACM and lead paint.
- Site 3656-32: Commercial building. Transformer; potential ACM and lead paint.
- Site 3656-35: Vacant land. Likely past pesticide and/or herbicide use.
- Site 3656-40: Fairfield Inn. Transformers; potential ACM and lead paint.
- Site 3656-42: Cracker Barrel Restaurant. Transformer; potential ACM and lead paint.

(3) No RECs or de minimis conditions were identified at the following sites along the project:

- Site 3656-6: Vacant land.
- Site 3656-8: Vacant land.

(4) The following properties were identified that appear on environmental databases and that are adjoining, but not along, the project:

- Site 3656-A. Petco. RCRA, BOL, IEMA.
- Site 3656-B. Cloud Blue Technologies Inc. RCRA, BOL.
- Site 3656-C. Commercial building. RCRA, BOL.
- Site 3656-D. USF Holland. RCRA, ERNS, UST, BOL, IEMA.
- Site 3656-E. Knight Transportation. UST.
- Site 3656-F. Unisource. BOL.
- Site 3656-G. Commercial building. BOL.
- Site 3656-H. Vacant land. BOL.
- Site 3656-I. Vacant land. BOL.
- Site 3656-J. MXD group. BOL, IEMA.
- Site 3656-K. Menlo Worldwide Logistics. BOL.
- Site 3656-L. Mack Trucks Central Parts Distribution Center. BOL.
- Site 3656-M. Vacant land. BOL.
- Site 3656-N. Agricultural land. BOL.

(5) For the purposes of this report, the following are considered to be de minimis conditions:

- Normal use of lead-based paint on exteriors and interiors of buildings and structures.

- Use of asbestos-containing materials in building construction.
- Transformers in normal use, unless the transformers were observed to be leaking, appear on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use.
- Agricultural use of pesticides and herbicides. In addition, most land in Illinois was under agricultural use prior to its conversion to residential, industrial, or commercial development. Pesticides, both regulated and otherwise, may have been used throughout the project area at any time. Unless specifically discussed elsewhere in this report, no information regarding past pesticide use that would be subject to enforcement action was located for this project, and such use is considered a de minimis condition.

ENDORSEMENTS

Project Manager: _____ **Date:** 01/29/19

Craig Decker

Approved: _____ **Date:** 01/29/19

Anne Ellison, P.G., State of Illinois
License #196-000546



ADDRESS LISTINGS

The following addresses along the project were evaluated for this project. Addresses of sites, if any, adjoining but not along the project are not listed here; see text for discussion of these sites.

Property name and address	ISGS site #	Parcel #
ROW I-55 and Cottage Street interchange, Shorewood and Joliet	3656-1	NA
Agricultural land 24100 block of W. River Crossing Drive, Shorewood and 21400-21500 blocks of SE Frontage Road, Joliet	3656-2	NA
Residence 20953 Rock Run Drive, Joliet	3656-3	NA
Residence 21001 Rock Run Drive, Joliet	3656-3	NA
Residence 21015 Rock Run Drive, Joliet	3656-3	NA
Residence 21029 Rock Run Drive, Joliet	3656-3	NA
Residence 21041 Rock Run Drive, Joliet	3656-3	NA
Residence 21051 Rock Run Drive, Joliet	3656-3	NA
Residence 21061 Rock Run Drive, Joliet	3656-3	NA
XPO Logistics 21100 SW Frontage Road, Shorewood	3656-4	NA
CSS Industries 21100 SW Frontage Road, Shorewood	3656-4	NA
Vacant land 21500 block of SE Frontage Road, Joliet	3656-5	NA
Vacant land 21500 block of SE Frontage Road, Joliet	3656-6	NA
Nokian Tyres 21450 SW Frontage Road, Shorewood	3656-7	NA
Xpediant Logistics 21460 SW Frontage Road, Shorewood	3656-7	NA

Vacant land 20900 block of Rock Run Drive, Joliet	3656-8	NA
Rock Run 20900 block of Rock Run Drive, Joliet	3656-9	NA
Commercial building 22000 block of SW Frontage Road, Shorewood	3656-10	NA
Residence 21525 SE Frontage Road, Shorewood	3656-11	NA
Vacant land 4100 block of Olympic Boulevard, Joliet	3656-12	NA
Ecolab 4101 Olympic Boulevard, Joliet	3656-13	NA
Petco 4001 Olympic Boulevard, Joliet	3656-14	NA
A and R Transport 4001 Olympic Boulevard, Joliet	3656-14	NA
Joliet Township High School Transportation 3901 Olympic Boulevard, Joliet	3656-15	NA
Blue Ribbon Products 1511 Olympic Boulevard, Joliet	3656-16	NA
Water tower 1481 Olympic Boulevard, Joliet	3656-17	NA
Unisource Distribution 1695-1701 Crossroad Drive, Joliet	3656-18	NA
Crown Lift Trucks 4100 Olympic Boulevard, Joliet	3656-19	NA
Vacant lot 4100 block of Olympic Boulevard, Joliet	3656-20	NA
Medtronic 3901 Rock Creek Boulevard, Joliet	3656-21	NA
Commercial building 1515 Olympic Boulevard, Joliet	3656-22	NA
Agricultural land 800-1200 blocks of Houbolt Road and 1500 block of Centennial Drive, Joliet	3656-23	NA

Joliet Junior College 1215 Houbolt Road, Joliet.	3656-24	NA
Vacant land 1300 block of Houbolt Road, Joliet.	3656-25	NA
ROW 1200 block of Houbolt Road, Joliet.	3656-26	NA
Residence 3527 Craig Drive, Joliet	3656-27	NA
Residence 3533 Craig Drive, Joliet	3656-27	NA
Residence 1001 Louise Lane, Joliet	3656-27	NA
Residence 1007 Louise Lane, Joliet	3656-27	NA
Residence 1008 Louise Lane, Joliet	3656-27	NA
Residence 1013 Louise Lane, Joliet	3656-27	NA
Residence 1014 Louise Lane, Joliet	3656-27	NA
Residence 1019 Louise Lane, Joliet	3656-27	NA
Residence 1020 Louise Lane, Joliet	3656-27	NA
Residence 1025 Louise Lane, Joliet	3656-27	NA
Residence 1026 Louise Lane, Joliet	3656-27	NA
Residence 1032 Louise Lane, Joliet	3656-27	NA
Digestive Health Associates 1100 Houbolt Road, Joliet	3656-28	NA
Vacant unit 1102 Houbolt Road, Joliet	3656-28	NA
China Kitchen 1104 Houbolt Road, Joliet	3656-28	NA

Vacant unit 1106 Houbolt Road, Joliet	3656-28	NA
Jimmy Johns 1108 Houbolt Road, Joliet	3656-28	NA
Vacant unit 1110 Houbolt Road, Joliet	3656-28	NA
Vacant unit 1112 Houbolt Road, Joliet	3656-28	NA
Vacant unit 1114 Houbolt Road, Joliet	3656-28	NA
Gaming Goat 1116 Houbolt Road, Joliet	3656-28	NA
Vacant unit 1118 Houbolt Road, Joliet	3656-28	NA
Vacant unit 1120 Houbolt Road, Joliet	3656-28	NA
Vacant unit 1122 Houbolt Road, Joliet	3656-28	NA
Strand Associates 1170 Houbolt Road, Joliet	3656-29	NA
Commercial building 3501 Corporate Drive, Joliet	3656-30	NA
Vacant unit 1300 Houbolt Road, Joliet	3656-31	NA
Vacant unit 1302 Houbolt Road, Joliet	3656-31	NA
ATI Physical Therapy 1304 Houbolt Road, Joliet	3656-31	NA
Vacant unit 1306 Houbolt Road, Joliet	3656-31	NA
National Electrician Contractors 1308 Houbolt Road, Joliet	3656-31	NA
Vacant unit 1310 Houbolt Road, Joliet	3656-31	NA
Vital Care 1312 Houbolt Road, Joliet	3656-31	NA

Priority Staffing 1314 Houbolt Road, Joliet	3656-31	NA
Dunkin Donuts 1350 Houbolt Road, Joliet	3656-32	NA
Affliated Dialysis 1352 Houbolt Road, Joliet	3656-32	NA
Subway 1354 Houbolt Road, Joliet	3656-32	NA
Kuchie's Liquors 1356 Houbolt Road, Joliet	3656-32	NA
Vacant unit 1358 Houbolt Road, Joliet	3656-32	NA
Physicians Immediate Care 1360 Houbolt Road, Joliet	3656-32	NA
Holiday Inn 1421 Rock Creek Boulevard, Joliet	3656-33	NA
Vacant land 1400 block of Houbolt Road, Joliet	3656-34	NA
Vacant land 1400 block of Houbolt Road, Joliet	3656-35	NA
Burger King 3625 Rock Creek Boulevard, Joliet	3656-36	NA
BP gasoline station 1411 Riverboat Center Drive, Joliet	3656-37	NA
7-Eleven 3620 Rock Creek Boulevard, Joliet	3656-38	NA
McDonald's 1421 Riverboat Center Drive, Joliet	3656-39	NA
Fairfield Inn 1501 Riverboat Center Drive, Joliet	3656-40	NA
Vacant land 1500 block of Commerce Lane, Joliet	3656-41	NA
Cracker Barrel Restaurant 1511 Riverboat Center Drive, Joliet	3656-42	NA
Comfort Inn 1520 Commerce Lane, Joliet	3656-43	NA

Heroes West Sports Bar and Grill 1530 Commerce Lane, Joliet	3656-44	NA
ROW I-80 and Houbolt Road interchange, Joliet	3656-45	NA

INFORMATION SOURCES

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APPENDIX

ISGS PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT CHECKLIST

IDOT: P91-021-19 ISGS: 3656
City: Shorewood, Joliet
County: Will
Location Coordinates: T35N, R9E, Sections 21, 22, 23, 27, and 28

ISGS Lead: Craig Decker

Task	Status*	Date	By
Original Material Copied	MF	9/25/18	ALE
IDOT Project Location Database – (All other projects/IDOT sites in the vicinity of the project)			
▸ Other Preliminary Environmental Site Assessments	MF	1/3/19	CRD
▸ Preliminary Site Investigations/Phase II Reports	MF	1/3/19	CRD
▸ Maintenance Facilities	NF	1/3/19	CRD
▸ Permit-Access Agreements	NF	1/3/19	CRD
▸ Draft Highway Authority Agreements/Highway Authority Agreements	NF	1/3/19	CRD
▸ Miscellaneous Sites	NF	1/3/19	CRD
Local Collections			
▸ County	MF	1/3/19	CRD
▸ City	NF	1/3/19	CRD
Geologic Information			
▸ ISGS Stack-Unit Map (GIS)	MF	1/3/19	CRD
▸ ISGS Glacial Drift in Illinois (GIS)	MF	1/3/19	CRD
▸ ISGS Bedrock Geology of Illinois (GIS)	MF	1/3/19	CRD
▸ USDA NRCS Soil Survey Maps	MF	1/3/19	CRD
▸ USDA NRCS Hydric Soils	MF	1/3/19	CRD
▸ USDA NRCS Prime Farmland Soils	MF	1/3/19	CRD
Hydrogeologic Information (non-CE projects only)			
▸ IEPA Restricted Status List	NA	1/3/19	CRD
▸ IEPA SWAP-IL Public Water Supplies	NA	1/3/19	CRD
▸ ISGS Wells (GIS)	NA	1/3/19	CRD
▸ ISWS Public Water Supply Surface Water Intakes in Illinois (GIS)	NA	1/3/19	CRD
▸ Potential for Aquifer Contamination Map	NA	1/3/19	CRD
▸ Sole Source Aquifer Protection Program	NA	1/3/19	CRD
Hydrogeologic Information (all projects)			
▸ IEPA SWAP Wellhead Protection	NF	1/3/19	CRD
▸ IEPA SWAP Fact Sheets /IEPA Well Site Survey Reports	NF	1/3/19	CRD
▸ Sole Source Aquifer Protection Program	NF	1/3/19	CRD
Historical Records			
▸ Aerial Photographs	MF	1/3/19	CRD
▸ USGS Topographic Maps	MF	1/3/19	CRD
▸ Plat Maps	MF	1/3/19	CRD
▸ Sanborn Fire Insurance Maps: Chadwyck-Healey Inc.	NF	1/3/19	CRD
▸ Sanborn Fire Insurance Maps: University Publications of America	NF	1/3/19	CRD
▸ Sanborn Fire Insurance Maps: Rascher Publishing Company	NA	1/3/19	CRD
▸ City Directories	MF	1/18/19	CRD
▸ Industrial Directories (optional)	NA	1/3/19	CRD
▸ IEPA-ISGS Summary of Former Manufactured Gas Plant Sites (GIS)	NF	1/3/19	CRD
▸ ISGS Draft SEMS Site Coverage (GIS)	NF	1/3/19	CRD
▸ ISGS Draft LUST Site Coverage (GIS)	MF	1/3/19	CRD
▸ ISGS Draft Landfill Site Coverage (GIS)	NF	1/3/19	CRD

Task	Status*	Date	By
Federal Records			
▸ SEMS (NPL, Active, Archived)	NF	1/28/19	CRD
▸ Mercury Site Lists	NF	1/28/19	CRD
▸ RCRA CORRACTS	NF	1/28/19	CRD
▸ RCRA Non-CORRACTS TSD Facilities	NF	1/28/19	CRD
▸ RCRA (Other)	MF	1/28/19	CRD
▸ ERNS	MF	1/28/19	CRD
▸ Brownfields Pilot Sites	NF	1/28/19	CRD
▸ Toxics Release Inventory	NF	1/28/19	CRD
▸ SSTS	NF	1/28/19	CRD
▸ PCB Transformer Registration Database/PCB Activity Quarterly Reports	NF	1/3/19	CRD
USEPA Information Request			
▸ Sent	no	1/3/19	CRD
▸ Received	no	1/3/19	CRD
State Records			
▸ IEPA Brownfields	NF	1/28/19	CRD
▸ IEPA Bureau of Land Inventory	MF	1/28/19	CRD
▸ IEPA Illinois Water Quality Reports	NF	1/28/19	CRD
▸ IEPA LUST	MF	1/28/19	CRD
▸ IEPA Site Remediation Program	NF	1/28/19	CRD
▸ OSFM UST	MF	1/28/19	CRD
▸ IEMA non-LUST Incidents/IEPA OER lists	MF	1/28/19	CRD
▸ Activity and Use Limitations (AULs)	MF	1/28/19	CRD
▸ Groundwater Ordinances	NF	1/28/19	CRD
▸ Cook County Bridge List	NA	1/3/19	CRD
▸ IDOT Bridge List	MF	1/3/19	CRD
▸ Landfills (GIS)	NF	1/3/19	CRD
▸ State Underground Injection Control Inventory	NF	1/3/19	CRD
IEPA BOL Information Request			
▸ Sent	yes	12/17/18	CRD
▸ Received	yes	12/19/18	ALE/ DJA
OSFM Information Request			
▸ Sent	yes	1/8/19	CRD
▸ Received	yes	1/25/19	CRD
Local Records			
▸ Municipal Records (optional)	NF	1/3/19	CRD
▸ Chicago Department of Public Health	NA	1/3/19	CRD
Mining Maps and Publications			
▸ ISGS Quadrangle/County On-Line Coal Maps and Directories	MF	1/3/19	CRD
▸ ISGS Non-Coal Underground Mines	NF	1/3/19	CRD
▸ Lead Mining	NA	1/3/19	CRD
Oil and Gas Information			
▸ ISGS Oil and Gas Fields/Oil Wells (ILOIL GIS)	NF	1/3/19	CRD
▸ USDOT OPS Pipeline Integrity Management Mapping Application	MF	1/3/19	CRD
Natural Hazards			
▸ USGS Seismic Risk Map	MF	1/3/19	CRD
▸ ISGS Landslide Inventory (GIS)	MF	1/3/19	CRD
▸ Karst Terrains and Carbonate Rocks of Illinois Maps	MF	1/3/19	CRD

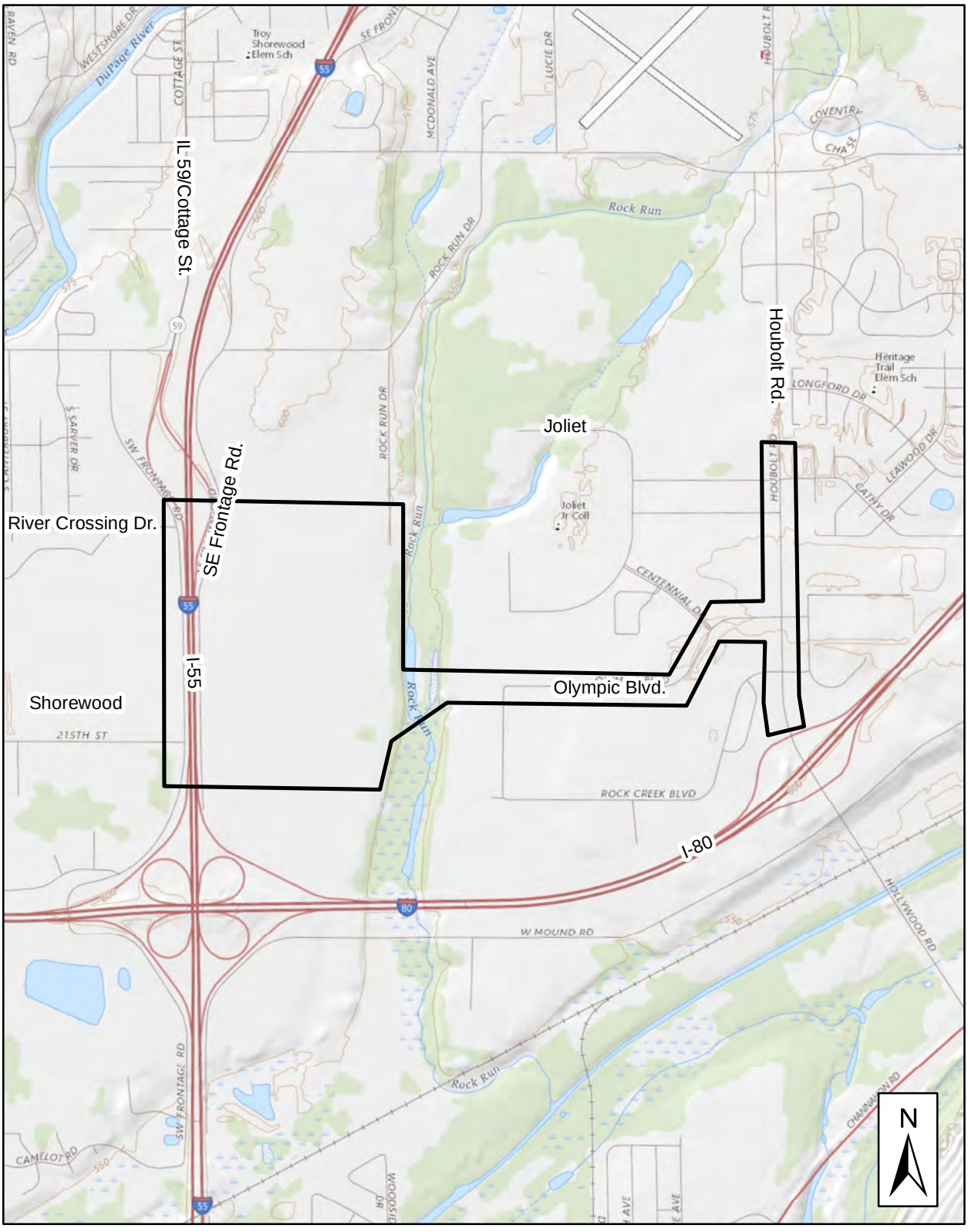
* MF = Material found within search radius; NF = Nothing found within search radius; NA = Not applicable

Date of Records Review Completion: January 28, 2019

LIST OF ATTACHMENTS

1. Project location map.
2. Site location maps.
3. Site 3656-24. Joliet Junior College campus map.
4. Site 3656-24. NFR letter, IEMA #971698 (7 pages).

Attachment 1. Project location map, ISGS #3656.
Project area indicated by heavy black lines.



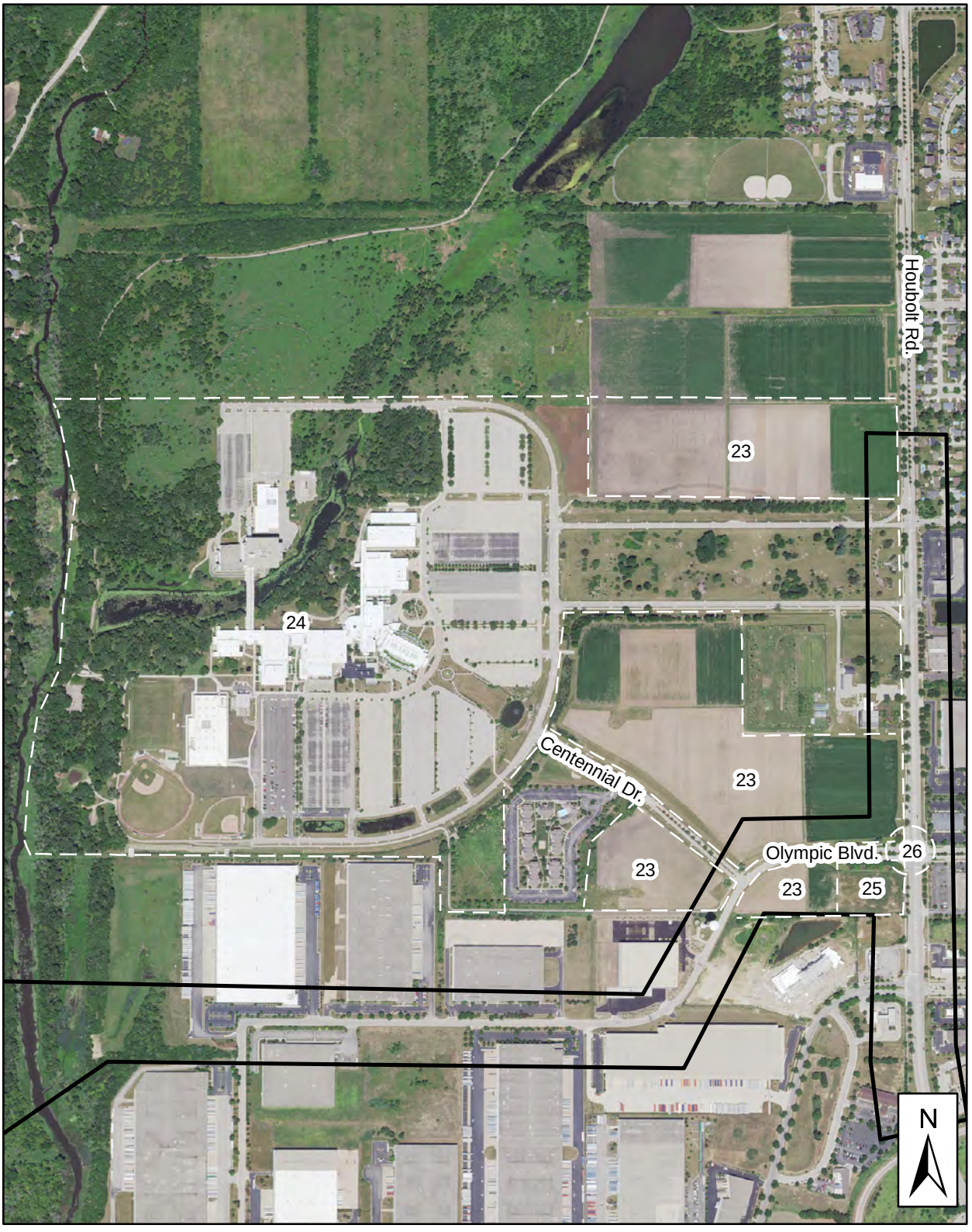
Attachment 2, page 1. Site location map, Sites 3656-1 through 3656-11.
All site boundaries are approximate and should not be used as actual parcel boundaries.



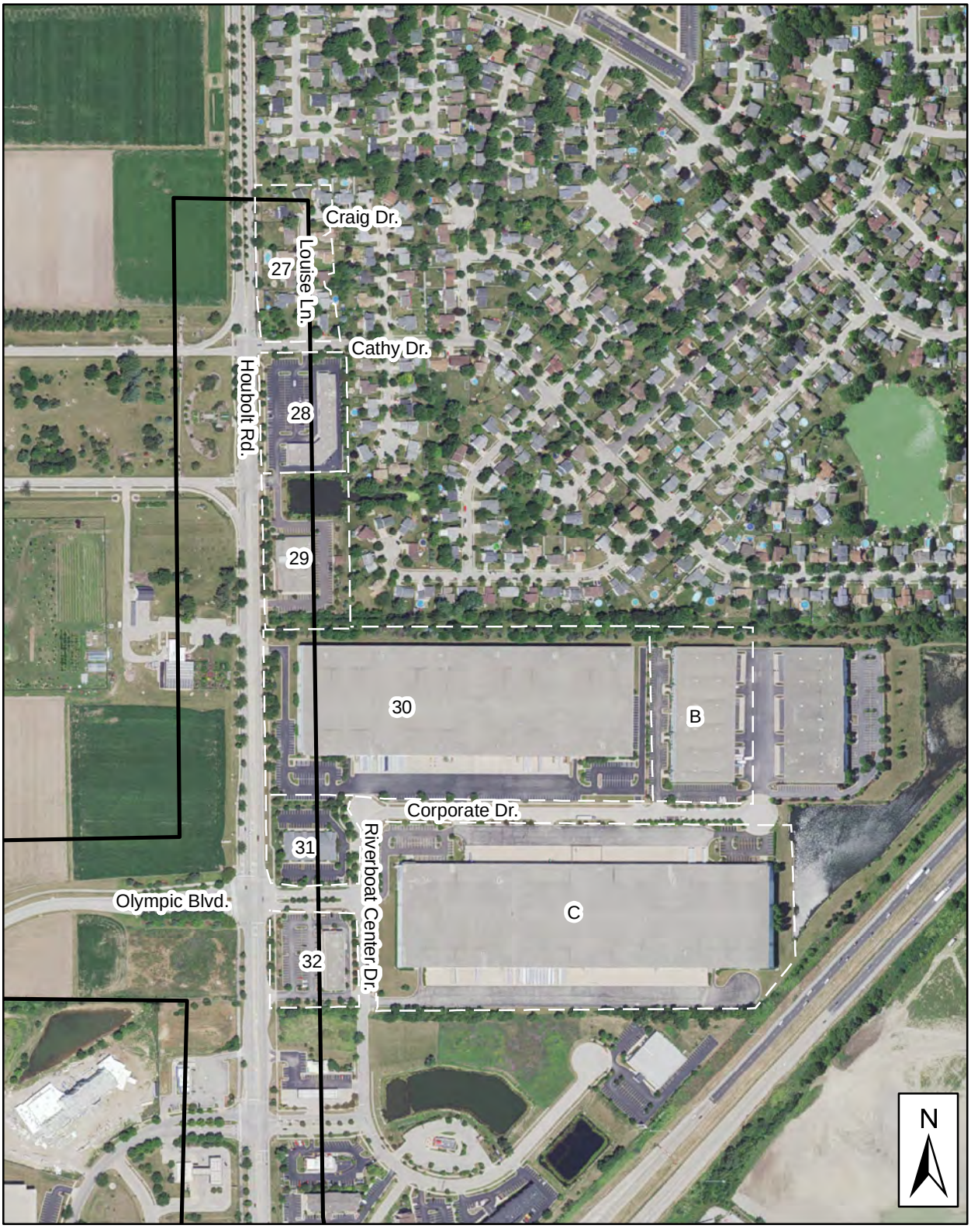
Attachment 2, page 2. Site location map, Sites 3656-12 through 3656-22.
All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 3. Site location map, Sites 3656-23 through 3656-26.
All site boundaries are approximate and should not be used as actual parcel boundaries.



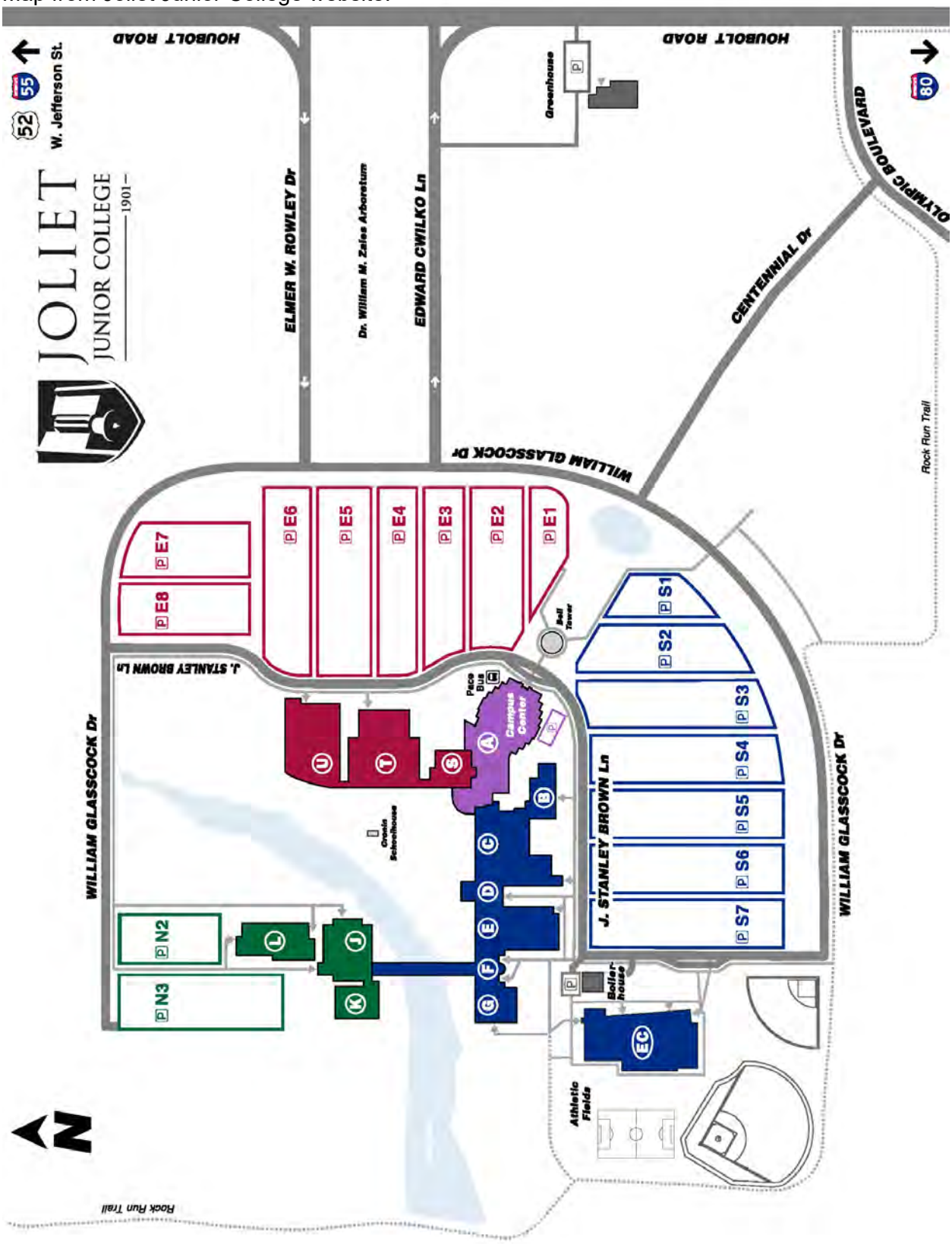
Attachment 2, page 4. Site location map, Sites 3656-27 through 3656-32.
All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 2, page 5. Site location map, Sites 3656-33 through 3656-45.
All site boundaries are approximate and should not be used as actual parcel boundaries.



Attachment 3. Site 3656-24. Joliet Junior College campus map.
Map from Joliet Junior College website.



Attachment 4. Site 3656-24. NFR letter, IEMA #971698. Page 1 of 7.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 Mary A. Gade, Director
217/782-6762

CERTIFIED MAIL
P344309446

AUG 05 1998

Joliet Junior College
Attn: Mr. Richard T. Rivera
1215 Houbolt Road
Joliet, Illinois 60431

Re: LPC #1970455233 -- Will County
Joliet/Joliet Junior College (aka - Auto Service Facility - Bldg. C)
1215 Houbolt Road
LUST Incident No. 971698
LUST Technical File

Dear Mr. Rivera:

The Illinois Environmental Protection Agency ("Illinois EPA") has reviewed the Corrective Action Completion Report submitted for the above-referenced incident. This information was dated May 30, 1998; was received by the Agency June 19, 1998; and was prepared by Capital Environmental Group, Inc.

The Corrective Action Completion Report and the Professional Engineer Certification submitted pursuant to 35 Illinois Administrative Code Section 732.300(b)(1) and Section 732.409(b) indicate that the remediation objectives set forth in 35 Illinois Administrative Code Section 732.408 have been met.

Based upon the certification by Richard E. Schmidt, P.E., a Registered Professional Engineer of Illinois, and the certification by Joliet Junior College, the owner and operator of the underground storage tank(s), and pursuant to Section 57.10 of the Environment Protection Act ("Act") (415 ILCS 5/57.10), your request for a no further remediation determination is granted under the conditions and terms specified in this letter.

Issuance of this No Further Remediation Letter ("Letter"), based on the certification of the Registered Professional Engineer, signifies that: (1) all statutory and regulatory corrective action requirements applicable to the occurrence have been complied with; (2) all corrective action concerning the occurrence has been completed; and (3) no further remediation concerning the occurrence is necessary for the protection of human health, safety and the environment. Pursuant to Section 57.10(d) of the Act, this Letter shall apply in favor of the following persons:

SCREENED
MM

1. Joliet Junior College;
2. The owner and operator of the UST(s);
3. Any parent corporation or subsidiary of the owner or operator of the UST(s);
4. Any co-owner or co-operator, either by joint-tenancy, right of survivorship, or any other party sharing a legal relationship with the owner or operator to whom the letter is issued;
5. Any holder of a beneficial interest of a land trust or inter vivos trust, whether revocable or irrevocable;
6. Any mortgagee or trustee of a deed of trust of the owner of the site or any assignee, transferee, or any successor-in-interest of the owner of the site;
7. Any successor-in-interest of such owner or operator;
8. Any transferee of such owner or operator whether the transfer was by sale, bankruptcy proceeding, partition, dissolution of marriage, settlement or adjudication of any civil action, charitable gift, or bequest; or
9. Any heir or devisee of such owner or operator.

This Letter, including all attachments, must be filed within 45 days of its receipt as a single instrument with the Office of the Recorder or Registrar of Titles in the County where the above-referenced site is located. This Letter shall not be effective until officially recorded by the Office of the Recorder or Registrar of Titles of the applicable County in accordance with Illinois law so that it forms a permanent part of the chain of title for the above-referenced property. Within 30 days of this Letter being recorded by the Office of the Recorder or Registrar of Titles of the applicable county, a certified copy of this Letter, as recorded, shall be obtained and submitted to the Illinois EPA. For recording purposes, it is recommended that the Leaking Underground Storage Tank Environmental Notice attached to this Letter be the first page of the instrument filed.

CONDITIONS AND TERMS OF APPROVAL

LEVEL OF REMEDIATION AND LAND USE LIMITATIONS

1. The remediation objectives for the above-referenced site described in the Leaking Underground Storage Tank Environmental Notice of this Letter were established in accordance with the requirements of the Tiered Approach to Corrective Action Objectives (TACO, 35 Illinois Administrative Code Part 742) rules.

2. As a result of the release from the underground storage tank(s) associated with the above-referenced incident, the site described in the attached Leaking Underground Storage Tank Environmental Notice of this Letter shall not be used in a manner inconsistent with the following land use limitation: There are no land use limitations.

3. The land use limitation specified in this Letter may be revised if:

   a) Further investigation or remedial action has been conducted that documents the attainment of objectives appropriate for the new land use; and

   b) A new Letter is obtained and recorded in accordance with Title XVII of the Act and regulations adopted thereunder.

PREVENTIVE, ENGINEERING, AND INSTITUTIONAL CONTROLS

4. Preventive: None.

   Engineering: None.

   Institutional: This Letter shall be recorded as a permanent part of the chain of title for the site described in the attached Leaking Underground Storage Tank Environmental Notice.

5. Failure to establish, operate, and maintain controls in full compliance with the Environmental Protection Act, applicable regulations, and the approved corrective action plan may result in voidance of this Letter.

OTHER TERMS

6. Any contaminated soil or groundwater that is removed, excavated, or disturbed from the above-referenced site must be handled in accordance with all applicable laws and regulations.

7. Further information regarding this site can be obtained through a written request under the Freedom of Information Act (5 ILCS 140) to:

Illinois Environmental Protection Agency
Attention: Freedom of Information Act Officer
Bureau of Land - #24
1021 North Grand Avenue East
Post Office Box 19276
Springfield, IL 62794-9276

8. Pursuant to Section 57.10(e) of the Act (415 ILCS 5/57.10(e)), should the Illinois EPA seek to void this Letter, the Illinois EPA shall provide notice to the current title holder and to the owner or operator at the last known address. The notice shall specify the cause for the voidance, explain the provisions for appeal, and describe the facts in support of this cause. Specific acts or omissions that may result in the voidance of this Letter include, but shall not be limited to:

   a) Any violation of institutional controls or industrial/commercial land use restrictions;

   b) The failure to operate and maintain preventive or engineering controls or to comply with any applicable groundwater monitoring plan;

   c) The disturbance or removal of contamination that has been left in-place in accordance with the Corrective Action Plan or Completion Report;

   d) The failure to comply with the recording requirements for the Letter;

   e) Obtaining the Letter by fraud or misrepresentation; or

   f) Subsequent discovery of contaminants, not identified as part of the investigative or remedial activities upon which the issuance of the Letter was based, that pose a threat to human health or the environment.

Within 35 days after the date of mailing of this final decision, the owner or operator may petition for a hearing before the Illinois Pollution Control Board (Board) to contest the decision of the Illinois EPA. (For information regarding the filing of an appeal, please contact the Board at 312/814-3620.) However, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the owner or operator and the Illinois EPA within the 35-day initial appeal period. (For information regarding the filing of an extension, please contact the Illinois EPA's Division of Legal Counsel at 217/782-5544.)

Submit the certified copy of this letter, as recorded, to:

Illinois Environmental Protection Agency
Bureau of Land - #24
LUST Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

If you have any questions or need further assistance, please contact Russell Irwin at 217/524-6713.

Sincerely,

Clifford L Wheeler

Clifford L. Wheeler
Unit Manager
Leaking Underground Storage Tank Section
Division of Remediation Management
Bureau of Land

CLW:RI:ct\9814911.WPD

Attachments: Leaking Underground Storage Tank Environmental Notice

bcc: Cliff Wheeler
Division File
Russ Irwin

PREPARED BY:

Name: Joliet Junior College
Auto Service Facility, Building C

Address: 1215 Houbolt Road
Joliet, Illinois 60431

RETURN TO:

Name: Joliet Junior College
Attn: Mr. Richard T. Rivera

Address: 1215 Houbolt Road
Joliet, Illinois 60431

THE ABOVE SPACE FOR RECORDER'S OFFICE

THIS ENVIRONMENTAL NO FURTHER REMEDIATION LETTER MUST BE SUBMITTED BY THE OWNER/OPERATOR, WITHIN 45 DAYS OF ITS RECEIPT, TO THE RECORDER OF DEEDS OF WILL COUNTY IN WHICH THE SITE (AS DESCRIBED BELOW) IS LOCATED.

Illinois EPA Number: 1970455233
LUST Incident No.: 971698
Joliet Junior College, the owner and operator, whose address is 1215 Houbolt Road, Joliet, Illinois, has performed investigative and/or remedial activities for the site that can be identified by the following legal description:

1. Legal description or Reference to a Plat Showing the Boundaries:

All that part of the East Half of Section 22, Township 35 North, Range 9 East of the Third Principal Meridian, described as follows:

Beginning at a point in the North Line of the Southeast Quarter of said Section 22 which is 700.0 feet East of the Northwest Corner thereof; thence North at right angles to the Quarter Section Line 25.0 feet; thence East at right angles to the last described line 430.0 feet; thence North at right angles to the last described line 500.0 feet; thence East at right angles to the last described line 1370.0 feet; thence South at right angles to the last described line 428.0 feet; thence West at right angles to the last described line 272.0 feet; thence South at right angles to the last described line 1062.0 feet; thence West at right angles to the last described line 1528.0 feet and thence North at right angles to the last described line 965.0 feet to the place of beginning, containing 50.003 acres, more or less, in Will County, Illinois.

Leaking Underground Storage Tank Environmental Notice

2. Common Address: 1215 Houbolt Road, Joliet, Illinois

3. Real Estate Tax Index/Parcel Index Number: 11-04-05-100-006-0000

4. Site Owner: Joliet Junior College

5. Land Use Limitation: There are no land use limitations.

6. See the attached No Further Remediation Letter for other terms.

RI:et\9814912.WPD