# **Appendix B-2**

**MSA Soil Borings** 

### ARCADIS Design & Consultancy

## n18

## Sample Log

| Well/Boring                      | MSA - CT             | 2829   | Proje  | ct Name and No.  | PP6                 | SIK 10      | )7        |               |            |
|----------------------------------|----------------------|--|--|--|---------------------|-------------|-----------|---------------|------------|
| Site<br>Location                 | Ju                   | sey Gry  | , NJ   |  | Drilling<br>Started | 1218        | Drilling  |               |            |
| Total Depth D                    | Drilled              | 20   | feet   | Hole Diameter  | 3 inches            | Sampling In | terval    | 5             | _feet `    |
| ength and D<br>of Sampling I     |                      | 5' × 3"  |  |  | Type of Samplin     | ng Device   | mac       | ro Core       |            |
| rilling Metho                    | od                   | <u>Direct</u>  | Push   | Trights;   | Drilling            | Fluid Used  |           | +             |            |
| rilling Contr                    | actor                | Cascad   | le   | Driller  | Casca               | de          | Helper    | ,             |            |
| repared<br>y                     | <u>N.</u>            | Comrie   |  | de de la constante de la const | Hammer<br>Weight    | _           |           | emmer<br>Drop | inches     |
| Sample<br>(feet below is<br>From | 100                  | Sample<br>Recovery<br>(feet)   | Time/Hydraulik<br>Pressure or<br>Blows per 6<br>inches | uniquinal supplies   | Sample              | Description | 87<br>81  |               | PID (ppm)  |
| 0                                | 5                    | 4.0  | 0.0 -2.0   | FILL:  | e Sand i vf         | -m little   | crawl f   | -m. trace     | 0.0        |
|                                  |                      | and reference to the control of the  | - APRAGO   | SILT, som  | e sorth,            | mist,       | grez Briz | k + roal fry  | 6 0.0      |
|                                  |                      |  | 2.0 -2.5   |  |                     |             |           | ii ewantana   | 0.0        |
|                                  | 2 E2 E- E            |  | 25-5.0   | SHINGL   | ES                  |             |           | = 100         | В          |
| _                                | _                    |  |  |  | 2 20                |             |           |               | 0          |
|                                  | -                    |  |  |  |                     |             |           |               | 0 ***      |
|                                  |                      | Lagragio de conscione de la co |  |  |                     |             |           |               | ð          |
|                                  |                      |  |  |  |                     |             | - T       |               | 0          |
|                                  |                      |  |  |  |                     |             |           |               | 0          |
| 5                                | 10                   | 4.5  | 5,0-5.5  | FICL:  |                     | i           |           | •             | 0          |
|                                  |                      |  | 55-45  | WOOD   |                     |             |           |               | 0          |
|                                  |                      |  | 6.5-6.8  | CONCRET  | E and BA            | RICK FR     | AGMENT    | opk nodelesy  | 0          |
|                                  |                      |  | 6.8-7.0  | GRAVEL   | , /-n, sa           | n San       | ,1-(,1    | soft mad      | 57         |
| diam'r.                          | No. On a case of the |  | 7.0-98   | SILT   | 1.HG conf           | sto-        | grand,    | -m, p. sah    | 1 respecto |
|                                  |                      |  | 9.8-100  | SAND ~   | Debas               | 1-c. w      | et, blac  | k : glass /   | agents 0.0 |

Shizles and cope - styles remaind

Well/Boring MSA-C7879 Project Name and No. PPG 107

Prepared

By Al Crossil

| <b>b</b> y  | <u> </u>              | Conrie             |  |   |           |
|-------------|-----------------------|--------------------|--|---|-----------|
| EC. 10.1111 | Depth<br>and surface) | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 |   |           |
| 10          |                       | (feet)             | Inches                                       | Sample Description                                | PID (ppm) |
| 10          | 15                    | <b>3</b> .9        | 10.0-177                                     | SILT, some Sand, vf - f, pooly send, nut, retire  | O : "     |
|             |                       |                    | 11.7-12.1                                    | Black (1945-1) CORR - 16 norses                   | 0.        |
|             |                       |                    |  | A 30 639  | 0.        |
|             |                       |                    | 12.0 - 13.5                                  | SILT, some Sand, vf-vc, little gravel, f-m, trace | 0         |
|             |                       |                    |  | debris - wood pieces fellber board (12')          | 0         |
|             |                       |                    | 13.5-13.5                                    | SILT, som Clay, little gravel, f-m, p. sortel,    | 0         |
|             |                       | ļ                  | 13,5-145                                     | SILT trace Road, fine, prosed, net, blad, de      | 0         |
|             |                       |                    | 145 -143                                     | SLAG  | 0         |
|             |                       |                    |  |   | 0         |
|             |                       |                    | 14.8-15.0                                    | SILT, som May, trace gravel, f-m, poorly          | 0         |
|             |                       | -                  |  | UND net, dok brown.                               | 0         |
| 15          | 20                    | 5.0                | 15.0-16.5                                    | CLAY, some Silt trace Sond, f-m, p. sorbel        | 0         |
|             |                       |                    |  | moit dek ben                                      | 0         |
|             | - ,                   |                    | 14.5-18.5                                    | Slay som Silte ma Sal Val 1 40                    | 10        |
|             |                       |                    |  | mash, greg-blue; mothled.                         | NO        |
|             |                       |                    | 185-195                                      | SAND, son Grand, 1-m, little sitt, p. sorbal,     | 0         |
|             |                       |                    |  | wet, brown.                                       | 0         |
|             |                       |                    | 19.5-160                                     | SAND, xf-c, little gravel, 1-m, posty so          | 40        |
| -           |                       |                    | * G  | mast, red-bran                                    | 0         |

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|----------------|----------------------|
|----------------|----------------------|

| Drilling Started 9:36 Completed 10:05  Type of Sampling Device Macro-Core  Drilling Fluid Used Noner  Hammer Hammer Weight Not Applicable Drop N/A inches  Sample Description PID (ppn |
|--|
| Type of Sampling Device    Drilling Fluid Used   |
| Hammer Hammer Weight Not Applicable Drop N/A Inches  Sample Description PID (ppn  DGA  Fill; sand c tof; trace 0.1   |
| Hammer Hammer Weight Not Applicable Drop N/A Inches  Sample Description PID (ppn  DGA  Fill; sand c tof; trace 0.1   |
| Hammer Weight Not Applicable Drop N/A Inches  Sample Description PID (ppn  DGA  7 Fill; sand c tof; trace 0.1  |
| Sample Description  PID (ppn  DGA  Fill; sand c tof; trace 0.1   |
| DGA 0.1<br>Fill; sand c tof; trace 0.1   |
| DGA 0.1<br>Fill; sand c tof; trace 0.1   |
| ' Fill; sand c tof; trace 0.1  |
|  |
| las and all : applied souled : all : all   |
| lar gratel; poorly socked; ary; 0.1  |
| ; trace wood Ribers; darkbrown; no 0.1   |
| 0.1  |
| 75' Fill; Shingles; dark gray; 0.1   |
| 5! Fill; fine to medium sand; 0.1  |
| angular gravel; trace brick; moist; 0.1  |
| m losse; grayish bown; poorly 0.1  |
| i crushed Stone at 41  |
| crushed concrete; light gray, 0.0  |
| 0.0  |
| of silly sand; from the trace 0.6  |
| oranel; poorly sorted; trace day 0.  |
| gray at 7.5' + nodules (7.51.61);  |
|  |

Well/Boring MSA-B2627 Project Name and No. Prepared By J Denzier Time/Hydraulic Pressure or PID (ppm) 10' 3.6 0.6 10-11' Fill; sand; vc tof; 15 0.0 some angular to sub-rounded grave! Mayhoud; pour y sorked; and 0.0 loose; dat gray; ho overs 6.0 0.6 11-13' Silly sad; US; trace rounded gravel; poory sorked; moist; dense; brownish gray; crushed some @ 14.75'. 13-15' sily and very fino; frace granules; puory sorted; muist; dense; trace stells; light brown gray; no odors (Native)

17/9

## ARCADIS Design 8 Consultancy

| 100 m  | MSA-C                | 2627                         | Proje  | ct Name and No. PPG SIR 10 /                    |  |
|--|----------------------|------------------------------|--|---|--|
| Site<br>Location   | Ters                 | ey an                        | J. NJ  | Started 12/9/2000 Completed 12/9/2              | 020  |
| Total Depth De   | rilled               | 20                           | feet   | Hole Diameterinches Sampling Interval           | feet   |
| Length and Di<br>of Sampling D   |                      | 5131                         | l  | Type of Sampling Device Macro Core              | e *  |
| Drilling Metho   | d                    | Direct Po                    | ush  | Drilling Fluid Used                             |  |
| Drilling Contro  | 20100000 <u>20</u> 1 |                              | de   | Hammer Hammer                                   |  |
| Ву   | <u> </u>             | lenzur                       | 1 1) 60  | MYPC Weight Drop                                | inches   |
| Sample<br>(feet below is<br>From   |                      | Sample<br>Recovery<br>(feet) | Time/Hydraufic<br>Pressure or<br>Blows per 6<br>inches   | Sample Description                              | PID (ppm)  |
| 0  | 5                    | 4.5                          | a) 300   | 0'-0.25' DGA                                    |  |
|  | 21102                |                              |  | 0.25-1.0' FILL'S SAND fine to coarse            |  |
|  | 10.5.                | kee tro                      | -2-14  | little subangular gravel poorly sorted          |  |
|  |                      | 1.01                         | o in   | dry, loose dork brown, no odors                 |  |
|  | 5112                 | - 9361                       | L N.J  | 1.0'- 3.5 Shingles dark gray black              | A  |
|  |                      | 4 t.                         | S. C.C.  | 3.5'-J.O' FILL; SAND fine to medium,            | And the State of Stat |
|  | F2.2                 | (                            | w Vi   | trace subangular gravel, crushed concrete       | activity of the states   |
|  | · A                  | 101 M. N. 1                  | 10 - 5   | @ 4', crushed brick & trace crushed stone       |  |
|  |                      |                              |  | poorly sorked, medium loose, moist, gray-brown  |  |
|  |                      | K i on d                     | J. J.  | 5.0-7.5' SAND medium to very fine,              |  |
| 5  | 10                   |                              | 53716  | little sitt, brick @5, little subangular gravel |  |
|  |                      |                              |  | poorly sorted, moist, medium dense, gray brown  |  |
| lo-  |                      |                              | ń.   | ash and coul @ 7.5°                             |  |
|  | -                    |                              | and the second second second   | 7.5'-10' SILTY SAND renfine, well sorted        | 1  |
| gandon spario de la companio del companio de la companio del companio de la companio del la companio de la comp |                      |                              | Control State Co | moist, dense, red-brown, no odors               | ,  |

Well/Boring MSA-CREET

Sample Log (Cont.d)
Project Name and No. <u>pp6 107</u>

Prepared By

I Demzler IN Comic

| From     | To                    | Sample<br>Recovery    | Sample Description   | PID (prm)                             |
|----------|-----------------------|-----------------------|--|---------------------------------------|
| 10'      | 15                    |                       | 10-12.5 SANDY SILT; fine to very fixe, sorted,             |                                       |
|          | -                     | D.;                   | wet, dense, reel brown, no odors                           | Cat cost                              |
|          |                       | e d                   | 12.5'- 13.5' SILTY SAND, some Subnounded                   |                                       |
|          | -                     |                       | grand, poorly sorted, wet, dense; brown                    |                                       |
|          | -                     |                       | , no odors   |                                       |
|          |                       |                       | 13.5-14.0' Crushed stone, white, Quatz                     |                                       |
|          | 300 30 of             | UN Since              | 14.0-15.0 FILL; slag, trace ash and coal                   |                                       |
|          | 154                   | 1 1 1 ( 10C)          |  |                                       |
|          |                       | ratio on              | moist, loose, dork gray, no odors                          | 1                                     |
|          | X = 1 ) }             |                       | 15.0'-16.0' FILL; SLAG trace ash,                          | · · · · · · · · · · · · · · · · · · · |
| See .    | , (1)                 | લાન કે                | moist, loose dark gray, no odors                           |                                       |
| 15       | 20                    | es because            | 16.0'-18.0 SILTY CLAY, Well sorted                         |                                       |
|          | Form.                 | Kensul 2 12           | moist gray brown, no odor - Un Disturbed Matin             | ٠                                     |
|          | os of                 | ह ने ग्वाया           | materia /  |                                       |
|          | , VF.                 | arren et              | 18, -20.0 SILTY SAND, fine to medium                       |                                       |
|          | way you               | ale dal               | well sorted, maist, dense, light gray                      |                                       |
|          | , word x if           | 3 No. 11              | hown, no odors   |                                       |
|          | V                     |                       |  |                                       |
|          | balas                 | Dry D. M              |  |                                       |
| 1        | . 10                  | 33 en. 6              |  | ,                                     |
| C:Wsers\ | ifelii\Desktop\Docume | nts\ARCADIS\Field Tem | plates\Field Forms_\Sample Core Log - Sample Core Log_2017 |                                       |

|    | -                            |    |     |        |               |
|----|------------------------------|----|-----|--------|---------------|
| (3 | $\mathbf{\Lambda}\mathbf{D}$ |    | DIC | Design | a Consultancy |
|    |                              | U4 | L): |        | hard and      |

Sample Log

pp6 sile 107

| Wall/Daylo                     | mc4 o                        | i<br>Garage        | ×  | ect Name and No. |                     | - Consolidar   | ou country one        | *************************************** |       |
|--------------------------------|------------------------------|--------------------|--|------------------|---------------------|----------------|-----------------------|---|-------|
| Site<br>Location               | MSA-B<br>Juscy               | 64, W.             |  |                  | Drilling<br>Started | 8:00           | Drilling<br>Completed | 8:35                                    |       |
| Total Depth                    | Drilled                      | 20                 | _feet  | Hole Diameter    | 43 inches           | Sampling Inter | val5                  | feet                                    |       |
| Length and of Sampling         |                              | 5', 3              | 3 "  | 15               | Type of Samplin     | g Device       | Mac                   | ro-Core                                 |       |
| Drilling Met                   | hod                          |                    | ish<br>scade                                 | -                |                     | Fluid Used     | N                     | lone                                    |       |
| Drilling Con<br>Prepared<br>By | otractor<br>T Punt           | Alexand            | Drilling Inc.                                | _ Driller        | Hammer<br>Weight    | Hel            | Hammer Drop           | N/A Inche                               |       |
| Samp                           | ole Depth<br>r land surface) | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 | c                |                     |                |                       | PID (                                   | (ppm) |
| From                           | То                           | (feet)             | inches                                       |                  |                     | Description /  | -,                    | Tall OB                                 | 0     |
| 0'                             | 5'                           | 5.01               | 7 .  |                  |                     |                | cc angular            | Trus 1                                  |       |
|                                |                              | 3                  |  | angular of       | growel, poor        | y sorted,      | loon, dy              | 0.                                      |       |
|                                | -                            |                    | <b>+</b>                                     | dors de          | rk gray bla         | rck            |                       |   |       |
|                                |                              | z į ir             | /-   |                  | Shingl-ex           |                | rece for grow         | el 4.                                   |       |
|                                |                              |                    | ,  | black            | 0                   |                |                       |   | .5    |
|                                |                              | -                  |  | 3.2-5.6          | PII;                | Fine to me     | dien sand, l          | Hk 0                                    |       |
|                                |                              | 4 1. ·             | /  | couled           | Hone, derse         | , moist ,      | crubed ru             | 1 brick U                               | . 2   |
|                                |                              | •                  |  |                  |                     |                | fors in wind          | Ray 0                                   | 2.2   |
| 7                              |                              | . b                |  |                  |                     |                |                       | 0                                       | -0:   |
| , ,                            |                              |                    | 5.09   |                  | 4                   |                |                       | 0                                       | .0    |
| 51                             | 101                          | 3.71               |  | 5-6.75           | FILL : SH           | ND fineto      | region, tra           | ce 0                                    | 0-    |
|                                |                              |                    | 100  |                  |                     |                | rkl moist             | 1.20                                    | . Ö   |
| <del>- ( ) - ( (</del>         |                              |                    |  | dur an           | wish brown          |                | 49 76                 | 0                                       | .0    |
| 1                              | )                            | 75 7 T V           |  | 6.75-1           | Crush               | Concin         | elel cru              | shed 1                                  | y.0   |
|                                |                              |                    |  | slag             |                     | -              |                       | Par                                     | 0.0   |
|                                |                              |                    | ET   | <del> 0</del>    |                     |                |                       |   |       |

|                               |         |                    |  | Sample Log |                  | (A)         | Sik 107                      |    |
|-------------------------------|---------|--------------------|--|------------|------------------|-------------|------------------------------|----|
| Well/Boring<br>Prepared<br>By | MSA - B |                    |  | Diniler/N  |                  | idaled Laun | <del>lry Site 30965148</del> |    |
| Sample<br>(feet below la      |         | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 |            | O In Description |             | PID (ppm                     | 1) |

| Sample<br>(feet below la |      | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 | Sample Description   | PID (ppm) |
|--------------------------|------|--------------------|--|--|-----------|
| From                     | To   | (foot)             | inches                                       | 8.0-9.5 Silty Sand, fire-fire, micaceous                                     | 0.0       |
| 5                        | 10   | 3.71               |  | 8.0-1.3 5,14x 19.70 11.22 44.0 77.00   | 6,0       |
|                          |      |                    |  |  | 0.0       |
|                          |      |                    |  | 95-100 FILL; Coal and Ash, loose, dry, four with                             |           |
| 10′                      | 15-1 | 3.5'               | *#0750                                       | In II Fill of a Course to Medium in a  | 0.0       |
| <u>[U</u>                | ,-   | 7.3                |  | som fine rebbles, pourly sorted; wase,                                       | 0.0       |
| ſ                        |      |                    | 15.7   | dy; have back; have ash; no odors.   | 0.0       |
|                          |      | 4                  | :  | austed shone   | 0.0       |
|                          |      |                    |  | 11-12 Fill; sily sana; VS 10 f;  | 0.0       |
|                          |      |                    |  | prestic; medium dunce; moist; dark   | 00        |
|                          |      | -                  | in the                                       | grayish bown; no odors; 12 15 All sond                                       | 0.0       |
| 15'                      | 20'  | 51                 | and the second                               | 12-14 - Fill; sond; ctof; ausked   | 0.0       |
| •                        |      |                    |  | stagical moughout; mist; (ase;   | 0.0       |
|                          |      |                    |  | art gay, no adois  | 0.0       |
|                          | 5    | 1                  |  | 14-15 - Sond; From; trace granute<br>pourly surred; moist; moune i orilistin | 3'0.0     |
| 6                        | 20   |                    | -  | (UA) Un disturbed Native making  | O.C       |
|                          |      |                    |  | 15-10 - Fill; slag; poors sorred;  | 0,1       |
|                          |      | Park A             |  | oose; most; dak gray to black; m   | 0.0       |
|                          | -    | <u> </u>           |  | oders  | 0.0       |
|                          |      |                    |  | 16-70 - unaistanced nothir material  | 0.        |

## ARCADIS | Design & Consultancy |

| Well/Boring                   | 11111-18                                 | C26                 | Proje  | ct Name and No. PPC SIK 107  |           |
|-------------------------------|--|---------------------|--|--|-----------|
| Site<br>Location              | Terse                                    | y City,             | NT   | Drilling Started 0820 Drilling Completed 0910                              | 7         |
| Total Depth D                 | rilled                                   | 20                  | feet   | Hole Diameter 3 Inches Sampling Interval 5                                 | eet       |
| Length and D<br>of Sampling [ |  |                     |  | Type of Sampling Device Diff CA POST MACCO                                 | COR       |
| Drilling Metho                | od                                       | Diech               | Push   | Drilling Fluid Used  |           |
| Drilling Contr                | actor                                    | Cascad              | l  | Driller Helper   |           |
| Prepared<br>By                |  | pember              |  | Hammer Hammer Weight Drop  | inches    |
| Sample<br>(feet below k       | and surface)                             | Sample<br>Recovery  | Time/Hydraulic<br>Pressure or<br>Blows per 6 |  | PID (ppm) |
| From                          | To                                       | 3 ft                | inches                                       | * Refusal Met at 3ft-Location Adjusted                                     | NA        |
| -0                            | 5  | 3,8 5+              |  | 0 - 0.25' DGA  | 0.0       |
|                               | J  |                     |  | 0.25-20' Sand Chof; little subangular gravel;                              | 6.0       |
|                               |  | e e militare        |  | poorly sortea; ary; look; dark brown; no oders                             | 6.0       |
| 1                             | #*** : : : : : : : : : : : : : : : : : : |                     |  | 2.0 - 4.5' Shingles; aark gray, no odors; dense                            | 0.6       |
|                               |  |                     |  | 4.5-5.0' Sand f to m; trace originar grad!                                 | 0.0       |
| 1                             |  | 4/                  |  | poorly sorka; moist; medium dense; gray-bown 4 moduler @ 451- 45"- 14" ~55 |           |
| 5                             | 10                                       | 2,94                |  | 5-6.5' sand f tom; wace gravel; poorly                                     | 0-0       |
| j.                            |  |                     | 22 80 <del>100</del> 2                       | sorked; poorly sorted; medium dense, without                               | 0.0       |
|                               | ora ere                                  |                     |  | SHAC @ 6, NO OCOCS; gray-brown   | 0 - 0     |
|                               | - 10 m                                   |                     |  | 6.5-7' concrete(crushea)   | 0.0       |
|                               |  |                     | sanga na sandhis                             | 7-101 sily sand; uf; will sorted; muist,                                   | 0.0-      |
|                               |  | derman and stephane |  | dense; rea-brown; no odors;  | -         |
| 10                            | 15                                       | 2180                |  | W-11 sand { silt ; some angular gravel;                                    | 0.0       |
| -                             |  | (b)                 |  | crushed stone; nel; louse; dark gray; ni odes                              | 0.0       |

oul of

|                           |  | -41  |                                      | TU/GERF DO 1                                   |                     |
|---------------------------|--|--|--------------------------------------|--|---------------------|
| Sample<br>(feet below i   |  | Sample<br>Recovery<br>(feet)   | Pressure or<br>Blows per &<br>inches | Sample Description                             | PID (ppm)           |
| 10                        | 15   | 2.854  |                                      | 11-13' silly sand; gravel (orgular); poory     | 0.0                 |
|                           |  |  | rection                              | sorted; wit; malne; black; ho odors;           | 0.0                 |
| \$ 901                    |  | e 2 M 1  |                                      | tace fibers                                    | 0.6                 |
|                           |  |  |                                      | 13'-15' Sand; vc to m; trace silt; wet; 1005e; | at a rout to th     |
| 15                        | 70   | 050  |                                      | poory socka, ack gray; chuma sure (0 151       | ( OH)               |
| []                        | 20   | 2.5 { }  | 7                                    | 15-16' sand and grave; trace sitt; pury        | 0.0                 |
| 6./8                      |  |  |                                      | sorted, ut, loose, dar gray                    | 0.0                 |
|                           |  |  | in the                               | 16-18 Silts day/clay-sitt, trace gree;         | 0. 6                |
|                           | 4  | 2  | War way                              | wet; dense; light gray - brown; no oder;       | 0.6                 |
|                           |  | 7 57   | a                                    | native material                                | 0.0                 |
|                           |  |  |                                      | 18-201 silt; trace f sand; well sorted;        |                     |
|                           |  |  |                                      | mist; dense; light gray -brown; no             |                     |
|                           |  | -  |                                      | oders  | -1                  |
| and the second section of | ) 16.  |  |                                      |  |                     |
|                           | the contract of the contract o | a the second control of the second of the se |                                      |  | Maria de la carda e |
|                           |  |  |                                      |  | Albert without and  |
|                           |  |  |                                      |  | a construction      |
|                           | Jan 40 700 1 70  | and the second second  | and the second second                |  | NO                  |
|                           |  | er i de ga en e destagación de esta  |                                      |  | -                   |
| 000                       |  | A  | A Part                               |  | . 18                |

| (2 | VD | $C \Lambda I$ | 710 | Design & Consultancy<br>for natural and<br>bulk searts |
|----|----|---------------|-----|--|
|    |    |               | ノロン | bulk pesets  |

| Boring<br>ion       | MSA-BZ                    |                    | Projective New Jers                  | ct Name and No.  Drilling Completed ++ 5  Started 0.35 Completed | beis             |
|---------------------|---------------------------|--------------------|--------------------------------------|--|------------------|
| on<br>Depth D       |                           | 20                 |                                      | Dept 5   | io:<br>feet: = : |
| h and D<br>mpling ( | Device                    | 5', 3              | <b>"</b>                             | Type of Sampling Device Macro-Core                               |                  |
| ng <b>Meth</b>      | od                        | Direct             |                                      | Drilling Fluid Used None   | -                |
| ng Cont             | ractor                    | Cas                | cade                                 | Driller Cascade Helper   |                  |
| ared                | 1 Denzi                   | W                  |                                      | Hammer Weight Not Applicable Drop N/A                            | inches           |
| eat below           | le Depth<br>land surface) | Sample<br>Recovery | Pressure or<br>Blows per 6<br>inches |  | PID (ppm)        |
| From                | 5                         | (feet)             | IIICHOS                              | D-0.75' D6A , we 1822  | 0.0              |
|                     |                           | ,,                 |                                      | 0.75 - 1.16' Sand from, trace fine growel.                       | 0.0              |
|                     |                           |                    |                                      | rocks; poorly socked; any dark busin;                            | 0.0              |
|                     |                           |                    |                                      | no odor; shingles modes 3.23.75, ul, "12"                        | 0.0              |
| . (404)             |                           |                    |                                      | 2.75-5' Sand from, trace angular                                 | 0.0              |
|                     |                           |                    |                                      | gravel; brick @ 3.251; wood @ 4.5 . no cour                      | 4                |
|                     | 10                        | 3.9                |                                      | 5-91 Sand from; brick at 6.51;                                   | 0.0              |
|                     |                           |                    |                                      | frace angular gravel; poorly sorted; no                          | 0.0              |
|                     |                           |                    |                                      | odurs; moist; modense; red-brown                                 | 0.6              |
|                     | _                         |                    |                                      | 1-10' Silly sand of; well sorted;                                | 0-0              |
|                     |                           |                    |                                      | moist; loose; shells; dense; no                                  | 0.0              |
|                     |                           |                    |                                      | odors; light gray - brown -                                      | •                |
|                     |                           |                    | gradus aroma in a second             | 10-14' Silly sand; trace day; well                               | -                |
| )                   | 15                        | 26                 | 4.7 Page - 1 - 2                     | - socked; moist; dense; light gray-brown                         | 00               |
|                     | +                         |                    |                                      | frace granules; no odest   | 0.0              |

PPG Sile 107 Rentokii Consolidated Laundry Site 30055148 Project Name and No.

| (25500000000000000000000000000000000000 | ole Depth<br>(land surface) | Sample<br>Recovery          | Time/Hydraulic<br>Pressure or<br>Blows per 6   | 17 TO 01 0 2   | control (C)                     |
|---|-----------------------------|-----------------------------|--|--|---------------------------------|
| From                                    | То                          | (feet)                      | Inches   | Sample Description   | PID (ppm)                       |
| 10                                      | 5'                          | 3.0                         |  | 14-15' Silly sand; little anguar gravel;   | 0.0                             |
| ******                                  |                             |                             | ∯<br>3 1 w   | poory solea; moist dense;  | 0.0                             |
| 2 2 2                                   |                             |                             | Hell   |  | 0.0                             |
| (4) FOX                                 | * * *                       | 13                          | 201  | Nanvel UND @ 10'   |                                 |
| 15                                      | 20'                         | 5.0                         |  | 15-17.25' silt frace sand; frace   | 0.6                             |
|   | -                           |                             | - Anthodopaca Apado  | grandes; poorly sorted; wet;   | 0.0                             |
| 1                                       |                             |                             | 9  | durse; trace gravel; gray-brown;   | 0.0                             |
| +-                                      |                             | and the second second       | 2  | no odors.  | 0.0                             |
|   |                             |                             |  | 11.25'-20' sit; trace of sand;   | 0.0                             |
|   |                             |                             |  | very dense; will socked; noist;  |                                 |
|   |                             | Market                      | À  | no oders; gray-green to light borown;  |                                 |
|   |                             |                             | and the second s | crushed spone @ 191  |                                 |
|   | Carried Marie Control       | inquire                     | A CONTRACTOR OF THE PARTY OF TH | and the second s |                                 |
|   |                             | -                           |  | de la companya de la   | Andrew Street Person            |
|   |                             | and the same of the same of | 22   |  | A place in a long of management |
|   |                             |                             |  |  | Acres on the state of           |
|   |                             | 3                           |  |  |                                 |
| 4                                       |                             |                             |  |  |                                 |
|   | 1 1 3                       |                             |  |  |                                 |
| 1 de 1                                  |                             |                             | الوائر الإ   |  |                                 |

## PARCADIS Besign & Consultancy of the Arms and the Arms an

| Well/Boring                     | WSA-C                    | 2425               | Projec                                       | t Name and No. PP6 SIK 107   |        |
|---------------------------------|--------------------------|--------------------|--|--|--------|
| Site<br>Location                | Tuser                    | 1 City,            | NT   | Drilling 1340 Drilling Completed 1425  |        |
| Total Depth I                   | Orilled                  |                    | feet   | Hole Diameter 3 inches Sampling Interval 5 feet                                    |        |
| Length and I<br>of Sampling     |                          | 5',                | 3''  | Type of Sampling Device MR (VO COCL  |        |
| Drilling Meth                   | od                       | Diaci (            |  | Drilling Fluid Used  |        |
| Drilling Cont<br>Prepared<br>By | -                        | Cascac<br>Ynzler   |  | Driller Cascade Helper Hammer Weight NA Drop NA Inche                              | •      |
| Sampl<br>(feet below            | e Depth<br>land surface) | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 | )  | (ppm)_ |
| From                            | To                       | 4.7                | inches                                       | D-05' D6A  | .0     |
| G                               | 3                        |                    |  | 0.5-1.5' Sand ctof; trace Silt; trace 0  | . 0    |
|                                 |                          | Me I               |  |  | ).0    |
|                                 |                          |                    |  | dak brown; no odors  | 5.0    |
|                                 |                          |                    |  |  | ). 0   |
|                                 |                          |                    | 7  | plack 3 2 Sass 15 Volume 1/2 k   |        |
| 5                               | 10                       | 4.5                |  | 35-5' ( cond: crushed show a   | o.6    |
|                                 | ()                       |                    |  | 451; little angular gravel; trace brick  | 0.0    |
|                                 |                          |                    |  | (GII); poorly socked; dry, no odors  | 6,0    |
|                                 |                          |                    | 7  |  | 0.6    |
|                                 |                          |                    |  | 5.5-6.5' Sand from; trace on little  | 00     |
|                                 |                          |                    |  | angular gravel; ary; medium loose;   |        |
| 10                              | 15                       | 2.7                |  | poorly socked; gray-brown; brick @   | 0.0    |
|                                 | on on P                  | 3 2                |  | 6.5-7.51   | 0.0    |
|                                 |                          | ,                  |  | 7.5-101 Silt; trace sand vf; trace subiounded gravel; moist; malense; trace brick; | 0.0    |



| cation                                    | (cont  | 2425<br>wed)       |  | Drilling Drilling Started Completed  |           |
|---|--------|--------------------|--|--|-----------|
| tal Depth Di<br>ngth and Di<br>Sampling D | ameter |                    | foot   | Type of Sampling Device  | _feet     |
| illing Metho                              | d      | -                  |  | Drilling Fluid <b>Used</b>   |           |
| illing Contro<br>epared                   |        | Qnzer              | -  | Driller Helper Hammer Hammer Weight Drop   | inches    |
| Sample<br>(feet below is<br>From          |        | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 |  | PID (ppm) |
| 10  | 15     | (feet)             | inches                                       | Sample Description  [0-13' Fill (slag   g (auxl); poorly   | 0.0       |
| Canhou                                    | x)     |                    |  | Societ; wet; loose; dan gray   | 0.0       |
|   |        |                    |  | 18-15' SILLY sand us hof; little   |           |
|   |        |                    |  | agular gravel; poorly sorred, roots 1  |           |
|   |        |                    |  | fibrow maderial @ 145; ash and coal  |           |
|   |        |                    |  | Q 15'; dark gray; slight odor  |           |
| 15  | 70     | 4.5                |  | 15-16' gravel and granules; moist/   |           |
|   |        |                    |  | Wit; loss; no odos;  | 0.0       |
|   |        |                    |  | 16-19' UND/ name material; silty   | 0.0       |
|   |        |                    |  | clay; trace sand; trace pebbles  | 0. 0      |
|   |        |                    |  | (rounded); poorly sorted, wet;   | 0.0       |
|   |        |                    |  | very dense; dark gray  | 0.0       |
|   |        |                    |  | 19-70' silt; well socked; moist;   |           |
|   |        |                    | 7  | very dense; light gray   |           |
|   |        |                    |  | The state of the s |           |

# PARCADIS Consultancy

| Weil/Boring      | MCA                      | 2027               |                       | 10000                                 | pie Log          | ib 107            |                            |  |
|------------------|--------------------------|--------------------|-----------------------|---------------------------------------|------------------|-------------------|----------------------------|--|
| Site<br>Location |                          | .BC30<br>WGH,      | _ Proje               | ect Name and No                       | Drilling         | 14 107<br>0950    | Drilling<br>Completed 1036 | - 18 9 × 184   |
| Total Depth      |                          | 20                 | <i>N</i>              |                                       | Started Inches   |                   |                            | eet  |
| Length and       | Diameter                 |                    | _feet                 | Hole Diameter _                       | inches           | Sampling Interval | Maria Caca                 |  |
| of Sampling      | Device                   | 3,3                | 3"                    |                                       | Type of Sampling | g Device          | Macro Core                 |  |
| Drilling Meti    | nod                      | Drect              | Push                  | · · · · · · · · · · · · · · · · · · · | Drilling         | Fluid Used        |                            |  |
| Drilling Cont    | tractor                  | Cara               | de                    | Driller_                              | Cascoa           | L Helper          |                            |  |
| Prepared<br>By   |                          | Denz               | ler                   |                                       | Hammer<br>Weight | _                 | Hammer Drop                | inches   |
|                  | e Depth<br>land surface) | Sample             | Time/Hydraulic        |                                       |                  |                   | <b>~</b>                   |  |
| From             | To                       | Recovery<br>(feet) | Blows per 6<br>inches |                                       | Sample I         | Description       |                            | PID (ppm)  |
| 0                | 5                        | 4.4                |                       | 0.0-0.0                               | Z' DGA           |                   |                            | 0.6  |
|                  |                          |                    |                       | 0.5 - 1.0                             | 2' Sand          | Clac; so          | me angular                 | 0.6  |
|                  |                          |                    | 730                   |                                       |                  | se; dark          |                            | 0.0  |
| 1                |                          |                    |                       | 1.0-2.7                               | 5' Shir          | gles; dark        | layer; trace               | 0.0  |
|                  | arytan<br>or Allia       | -7                 |                       | grave 1                               | *2               | 3.25 and          | 15 c'M"                    | 0.0  |
| -                |                          | -                  | agice .               |                                       |                  |                   | little angular             | 33   |
| 1                | ar 1                     | a las rathers      |                       | gravel;                               | crushed          | d Stone @         | 4.5' (60)                  | Company of the contract of the |
| 15-1             | -10                      | પ. ١               |                       | 50-6                                  | 5.6'             | 111 75            | ird; voice                 | 0-6  |
|                  |                          | •                  |                       | JHÀ COMO                              | ed ga            | et , progs        | A CALLY SAM                | 0.0  |
|                  |                          |                    |                       | 5.0 - 8.5                             | 5 '- Si          | lty sand          | , trace                    | 0.0  |
| in one           |                          |                    | Section 1995          | Jubrou                                | ded-             | gravel;           | boord source               | 4 0.0  |
| -                |                          |                    | pr (4.4 ecc.) (2.5    | moist;                                | medium           | depose,           | red-bown                   | 0.0  |
|                  |                          |                    |                       | 8.5-11                                | 1 80n            | dchf              | ; trace si-1t;             | and the second s |
| 10               | 15                       | 3.3                | - 10384 1000-15 12    | some a                                | ngwar            | gravel            | ; poorly since             | 1; 0.0   |
|                  | ter I                    |                    |                       | dark gra                              | y brow           | n; with           | <u>e 11'</u>               | 0.6  |
|                  |                          |                    |                       |                                       |                  |                   | 1 1                        |  |

| Samp | le Log | (Cont.d) |
|------|--------|----------|
|      | •      |          |

| Vell/Boring<br>Prepared | MSA-BOS<br>J Denze        |                                       | Project Name and No. PPG SIR 107                       |  |                            |
|-------------------------|---------------------------|---------------------------------------|--|--|----------------------------|
|                         | le Depth<br>land surface) | Sample Recovery (feet)                | Time/Hydraulic<br>Pressure or<br>Blows per 6<br>Inches | Sample Description   | PID (ppm)                  |
| to                      | 15                        | cont.                                 |  | 11-15' sand and Sit; trace   | 0.0                        |
|                         |                           | 1 2 2 2 2                             | 1 4  | La acoust moory sorker,  | 0.0                        |
| (4)                     |                           |                                       |  | wet; dense; coarse sand & gravel   | 0.0                        |
|                         |                           |                                       |  | @ 141; no odors; dark gray   | 0.1100, Aur. 1             |
| 15                      | 20                        | 2.8                                   |  | 15-70' Name marrial / UND  | 00                         |
|                         |                           |                                       |  |  | 0.0                        |
| ÷                       |                           |                                       | 1 - 7 2  |  | 0.0                        |
|                         |                           |                                       |  | The second of th | 0,0                        |
| 7.3                     | i Jack                    | 131010                                |  |  | 0.0                        |
| -                       | 0                         |                                       |  |  | +                          |
|                         | DKI DIE                   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | L and the  |  |                            |
|                         |                           | 1.5                                   |  | +-   | magin of in termina        |
| 0.6                     | 1.79                      | T for his                             | a programme of the                                     |  | and 2 and - 1 4 1 1 2 1 1  |
| 3.                      | 1 3.7                     |                                       |  |  |                            |
| C                       |                           |                                       | 1690   |  |                            |
|                         | 1.300                     | L P VID                               | 1  |  |                            |
|                         |                           | 201-11                                | 1  |  | and a supplementary of the |
|                         |                           | 0.000                                 | . ) 4  | 3 484  | N. Marie                   |
|                         |                           | 4 4000                                | 100  |  |                            |
| 0.0                     | 10000                     | 1                                     |  |  |                            |

## ARCADIS Constants

| Well/Boring<br>Site         | B281                | 29   | _ Proje  | ect Name and No. PPG SIJE 10 /   |       |
|-----------------------------|---------------------|--|--|--|-------|
| Location                    | Jusey               | ay.  | NĪ   | Drilling Started 6800 Completed 0830   |       |
| Total Depth I               | Drilled             | _20  | _feet  | Hole Diameter 3 Inches Sampling Interval 5 feet  |       |
| Length and C<br>of Sampling | Diameter<br>Device  | 5'   | 3"   | Type of Sampling Device MGCr O Cor Couding Al worked   | inet) |
|                             |                     |  | 0 )  | dealth and the same of the sam | Page  |
| Drilling <b>Me</b> th       | od                  | Divice   | Push   | Drilling Fluid Used  |       |
| Drilling Cont               | ractor              | Casca  | al   | Driller Cascade Helper   | _     |
| Prepared<br>By              | 1                   | Demu   |  | Hammer Weight Drop inche   | •     |
| Sample<br>(feet below is    |                     | Sample   | Time/Hydraulic   |  | 1     |
| From                        | То                  | Recovery<br>(feet)   | Blows per 6<br>inches  | Sample Description PID (   | ppm)  |
| D                           | -5                  | 4.8  |  | 0-05' Sond; some angular-grace 0.  | 0     |
|                             | 1                   | 1  | 3  | poorly sured; moist; loose; gray; 0.   | 0     |
|                             |                     |  | 1  | Gitt 0.  |       |
|                             | produce produce and |  | 411  |  | .0    |
|                             |                     | was made and distributions   | minimum interpretation of the second   | ongular  | )_0   |
|                             | -                   |  | a do a continúe a partir de continue a conti | 2-51 sand f to m; trace anguar   |       |
| 5                           | 10                  | 4.4  |  | giarl; brick @ 3.5'; 12001y saled;   | ).0   |
|                             | - major y - shelper | A STATE OF THE STA |  | moist; loose; no odocs   | 0.0   |
|                             | material with       |  | - 1972 in Address Security   | 5-6.51 Sand medium, crushed  | ٥     |
|                             |                     |  |  | asphall @ 6-6.251; trace granuly +   | 6.6   |
|                             |                     | consistence of the contractor  |  | Colored Civiled  | 0,0   |
|                             | -40                 | (A)  |  | 6.5-7.5' Sand + toc; trace angular   | -     |
| 3                           | 15                  | 2.69   |  | garel; poorly sorted; moist; couse;  | 0.0   |
|                             | 1                   |  | and the second   | derk gray; no-odors  | 0.0   |
|                             | 3                   | 1990   | and the second of the second   | 7.5-61 Silt, trace fine Sana mora; arente;   | 0.0   |

| Well/Boring    | B2829    | Project Name and No. | DPG SIL 107 |   | _ |
|----------------|----------|----------------------|-------------|---|---|
| Prepared<br>By | T Danzer |                      |             | 7 |   |

| (feet below<br>From     | tend suffice)  | Sample<br>Recovery<br>(feet) | Pressure or<br>Blows per 6<br>inches | · /Y   | PID (ppm |
|-------------------------|----------------|------------------------------|--------------------------------------|--|----------|
| 0                       | 15             | *cont.                       |                                      | * Looks like ~ 0.7" of sluff from higher interval  | 0.0      |
|                         |                |                              |                                      | 10-151 Silt; som clay; well sorted;  | 0.0      |
| , irfs                  |                |                              |                                      | WILE 121; dense; gray-brown; no  |          |
| 5                       | 20             | 5.0                          |                                      | Let sill some day well sorka,  | 0.0      |
| na i s                  |                |                              |                                      | dense, gray-brown; no odo or, UND  | 0.0      |
|                         |                |                              |                                      | 18-20' Silty day; trace of sand;   | 0_0      |
|                         | -              |                              |                                      | trace rounded grant; as ony soiled;  | 0.0      |
|                         |                |                              |                                      | moist; dense; light gray - red   | 0.0      |
|                         | (f) ± x2       |                              | v1 /-                                |  | -        |
|                         | -              | **                           |                                      | brown  | +        |
|                         |                | 1 12 1                       | ÷ ,-                                 |  | -        |
|                         |                |                              |                                      |  |          |
| -                       |                |                              | 19-1                                 |  | 1        |
| 1                       |                |                              | edinante et en                       |  |          |
| -material conference of | manufacture of |                              |                                      | and the second s | 1984     |
|                         | 7              |                              | 1110                                 |  |          |
|                         |                |                              | 1                                    |  |          |
| -                       | 1              |                              | 7                                    |  | -        |
| $\dashv$                | , y            | 1 (                          | 15                                   |  | 4        |
| - ; /                   |                |                              | - 1 4-                               | Mary hours and the same of the | -        |
|                         |                | Sec. of                      | 30 25                                | And spile and a second   |          |

# ARCADIS -

## 1/11

| Site  Location  Started 1350  Drilling Started 1350  Comp  | • ILIX/)           |
|--|--------------------|
| <u> </u>   |                    |
| Total Depth Drilledfeet Hole Diameterinches Sampling Interval  | 5 feet             |
| Length and Diameter of Sampling Device  51, 311  Type of Sampling Device   | ro Core            |
| Drilling Method Drilling Fluid Used  |                    |
| Drilling Contractor Cascade Helper   |                    |
| Prepared Hammer Hammer Weight —  | ammer Drop inches  |
| Sample Depth Time/Hydraulic (Neet below land surface) Sample Pressure or Recovery Blows per 6 From To (feet) Inches Sample Description | PID (ppm)          |
| 0 5 4.7 0-0.5' Sand f to m; trace  |                    |
| trace orgula gravel. moist; 1  |                    |
| poorly sorted; dork brown  | 0.0                |
| 05-7.5' shingles, trace gro  | vel; dark 0.0      |
| brown - black x3.75-41 purpus  | use 0.0            |
| 2.5-7' sand; flom; sor   | ne argula          |
| 5 10 3.5 grant; trace sitt; poorly son   |                    |
| - medium dense; brick @ 7.51;  | crushed 0.0        |
| Stone @ 41; gray-brown; v  | 0.0                |
| 7-7.5' Sand f to vf; tro   | ce submonded 0.6   |
| growel; poorly sorted; trace   | 2) It : MODIN 6. 0 |
| m dense; red-brown   |                    |
| 10 15 4.9 7.5-9' Silt; trace him (SI   | ly sard); 0.0      |
| trace granules; pour sorte   |                    |
| dense; gray brown; no odo  |                    |

| Well/Boring                      | MSA          | - B3031            | Proje  | ect Name and No. PPG SIL 167           |           |
|----------------------------------|--------------|--------------------|--|--|-----------|
| Prepared<br>By                   | I            | Demier             | 72   |  |           |
| Sample<br>(feet below to<br>From | and surface) | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 |  | PID (ppm) |
| 110                              | Το.          | (feet)             | inches                                       | Sample Description                     |           |
|                                  |              | -                  |  | 9-10' Sily sand; trace angular gravely |           |
|                                  |              |                    |  | crushed stone; poorly sured; murst;    | 0.0       |
|                                  |              |                    |  | dense                                  |           |
| 15                               | 20           | 5.0                |  | UND/native starting@10!                | 0.0       |
|                                  |              |                    |  | 10-13' silly sand; trave subcounded    | 0.0       |
| 2 0                              |              |                    |  | gravel; poorly sorred; wet: dene;      | 0.0       |
|                                  |              |                    |  | gray-brown: no odors                   | 0.0       |
|                                  |              |                    |  | 13-18.41 Silt; Friesard/Uf;            | 6.0       |
|                                  |              |                    | urismellirings                               | Six sorted; trace rounded grand        | 0.0       |
|                                  |              |                    |  | poorly sorted; wet; dense; no          |           |
|                                  |              |                    |  | odors; gray brown                      | -         |
|                                  |              |                    | - \  | 18.4-701 Sond uf; trace silt;          |           |
| ,                                |              |                    | 181 Jp/                                      | well sorted; moist; very dance.        | -         |
|                                  |              |                    |  | light gay to red-brown: no             |           |
|                                  |              |                    |  | oders; coarsening downward             |           |
|                                  | V            |                    | **   |  |           |
|                                  |              |                    |  | - Agent                                |           |
|                                  |              |                    |  |  |           |
|                                  | * 10.1°      | 7 - 1              |  |  |           |
|                                  |              | 100                | 1.   |  |           |

# SARCADIS Design & Consultancy

| Total Deptit Defined  Longth and Diameter  of Sampling Device  Total Deptit Defined  Longth and Diameter  Total Deptit Defined  Longth and Diameter  of Sampling Device  The Contraction 111/2 Cascade 200 bogues (A SCAGE)  Defining Device  The Deptit Defined  To Proposed  To De Note 1 Total Deptit Device  The Deptit Defined  To De Note 2 10 bogues (A SCAGE)  The Deptit Device (A SCAGE)  The D |                      |                 |                     |                | Sai             | lible F    | og        |             |        |                     |         |       |       |
|--|----------------------|-----------------|---------------------|----------------|-----------------|------------|-----------|-------------|--------|---------------------|---------|-------|-------|
| Total Deptit Detilised  20 near Hole Dissenser 3 inches Sampling Interval 12 STATE ( reset  Longth and Dissenser  of Sampling Device   |                      | MSA_            | 61122               | Proj           | ect Name and No | PPG        | Site      | 107         |        |                     |         | 797.0 |       |
| Total Depth Drilled Length and Diameter  5, 3"  Type of Sampling Device  Macro Core  Drilling Method  Direct Musico io m. 1000   Brilling Device  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Method   Direct Musico io m. 1000   Brilling Device   Macro Core  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   Hammer Drop   Inches  Drilling Contractor   11/2 CRSCRIDE   210 biglier of ascrade   11/2 CRSCRIDE   11/2  |                      | Jers            | sey Ci              |                |                 |            | Delling   |             |        | Completed Completed | 1430    |       |       |
| Drilling Method by Disch Pusible form inos Brillophius James Theory Proposed Pusible form inos Brillophius Indian  | Total Depti          |                 | J                   | foot           |                 | 0          | inches    | Sampling In | terval | 31 1819             | TP      | _feet |       |
| Denzier Denzie |                      |                 | 5,3                 | 3"             | _               | Type of \$ | Sampling  | Device _    | Ma     | acro Co             | æ       |       |       |
| The production of the producti |                      |                 |                     |                |                 |            |           |             |        | . :tnos             | 01      |       | 7     |
| The production of the producti | Drilling Co          | ntracto()       | , 1-2 Cerga         | ade,           | -210 Polle      | Cas        | s,ca      | de          | Helper |                     |         | -     |       |
| Description of the property of |                      | I               | Denzie              | er             |                 |            |           |             |        |                     |         | inch  | 96    |
| Definition of the sample benefition of the concrete of the con | Sam<br>(front bodge) |                 | Sample Recovery     |                |                 | •          |           | . • .       |        | 4.2'                | 15      |       | 0;    |
| 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0  | From                 | То              | (foot)<br>(3.27/5.) | inches         |                 | A80.       | Sample Do | >(a         |        |                     |         | PID   | (ppm) |
| Sand F to C; Some angular 0.0  1.5   Sand F to C; Some angular 0.0  1.0   Sand F to C; Some angular 0.0  1.2.75   Shingles (Fill)   Shingles (Fill)    1.0   Shingles (Fill)   Shingles (Fill)    1.0   Sand F to C; Subangular 0.0  1.0   Sand F to C; Subangular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Some angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0  1.0   Sand F to C; Trace angular gravel, 0.0   | 8.6                  | 5               | 4.91                | ι              | 0-2,            | DGA        |           |             |        |                     |         | 0     | .0    |
| 1.0 2.0 50 00 1 12.75 Shingles (Fill) 1.2 2.2 0.0  1-2.75 Shingles (Fill) 1.2 2.2 0.0  2.75 Shingles (Fill) 1.2 2.2 0.0  2.75 Sand F to C; Subangular 0.0  5-8' Sand F to C; trace angular gravel; 0.0  5-8' Sand F to C; trace angular gravel; 0.0  5-8' Sand F to C; trace angular gravel; 0.0  Concrete C 5.25'; gray brown 0.0  (Fill) * nodules C 6.0-6.5' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  Grovel; trace clay: onely socked.   |                      |                 |                     |                | .5-1'           | Sano       | ,         | L -         | Som    | ie ang              | ular    | 0     | .0    |
| 1805e (Fill)  1-2.75 Shingles (Fill)  1-2.75 Shingles (Fill)  2.75 Sand F to C; subangular 0.8  2.75 Sand F to C; subangular 0.8  2.75 Sand F to C; subangular 0.0  2.75 Sand F to C; subangular 0.0  2.75 Sand F to C; subangular 0.0  5-8' Sand F to C; trace angular gravel; 0.0  5-8' Sand F to C; trace angular gravel; 0.0  5-8' Sand F to C; trace angular gravel; 0.0  5-8' Sand F to C; trace angular gravel; 0.0  (Fill) + nodules @ 6.0-6.5' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  9(ovel; trace clay: opensy socied; 0.0  | 0.0                  | 1):             | رميع ; ب            | क स्मार        | gravel          |            | XI -      | 7           |        | J                   | (4.1%)  | 0     | .0    |
| 1-2.75 Shingles (Fill) particles 0.0  2.75 Sand F to C; Subangular 20.0  brown; no odors (Fill) 3.25-3.75 10 total 0.0  5-8' Sand F to C; trace angular gravel; 0.0  trace silt; poorly sorted; crushed 0.0  concrete @ 5.25'; gray - brown 0.0  (Fill) + nodules@ 6.0-6.5' 10 total 18-13" 0.0  8-13.5' Silty Sand; trace subangular 0.0  growel; trace claus one of sorted in the subangular 0.0   | 0.0                  | 40              | (1) ; 92            | nap 6          | "Prose +        | 24:11      | 469-1     | 163         |        | 6                   | 45      | 0     | . 0   |
| 2.75-5 Sand F to C; Subangular 0.0  O.0 20050 on more of the chick @ 4'; concrete 0.0  O.0 @ 3.5'; moist; loose; dark gray- 70.0  brown; no odors (Fill) ** roadules @ to total 0.0  5-8' Sand F to C; trace angular gravel; 0.0  trace 5 ilt; poorly sorted; crushed 0.0  concrete @ 5.25'; gray-brown 0.0  (Fill) ** nodules @ 6.0-6.5' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  grove!; trace clad: one for sorted.   |                      |                 |                     |                | 1-2.75          | Shir       | • (       | •           | 1)     | MAN S'YO'           | (0)     | 1     | 0.0   |
| gravel; trace brick @ 41; concrete 0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0  | 0.0                  | 31              | a; 500              | IN San         | 2.75            | 5 50       | and       | Fto         | C ;    | Suban               | eular   |       | 7     |
| 0.0  Drown; no odors (Fill) **nodures @ total 0.0  5-8' Sand F to C; trace angular gravel; 0.0  trace silt; poorly sorted; crushed 0.0  concrete @ 5.25'; gray - brown 0.0  (Fill) **nodures @ 6.0-6.5' 10 total 1/8-1/3'' 0.0  8-13.5' Silty sand; trace subangular 0.0  grovel; trace clay: poorly sorted.   | 0.0                  |                 | 2703                | o'U            |                 | tra        | ce' &     |             |        |                     |         |       | 0.0   |
| brown; no odors (Fill) **nodules @ 1.0  5-8' Sand F to C; trace angular gravel; 0.0  trace silt; poorly sorted; crushed 0.0  concrete @ 5.25'; gray - brown 0.0  (Fill) **nodules @ 6.0 - 6.5' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  gravel; trace clay: one content of the content of  | 0.0                  |                 |                     |                | @ 3.5           |            |           |             |        |                     |         | -+    |       |
| 5-8' Sand F to C; trace angular gravel; 0.0  trace silt; poorly sorted; crushed 0.0  concrete @ 5.25'; gray - brown 0.0  (Fill) + nodules@ 6.0 - 6.5' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  growel; trace clay: onely sorted.   | 0.0                  |                 |                     |                |                 |            |           |             |        |                     | 7       |       |       |
| trace silt; poorly sorted; crushed 0.0  concrete @ 5.25'; gray - brown 0.0  (Fill) + nodules@ 6.0 - 6.5' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  grove!; trace clay: poorly sorted.   | 0.0                  |                 |                     | - (a a 20      |                 |            |           |             |        |                     |         |       |       |
| concrete @ 5.25'; gray-brown 0.0  (Fill) + nodules@ 6.0-6.5' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  growel; trace clay: poorly socked.   | 5                    | 10              | 4.5'                | a 2            |                 |            |           |             |        |                     |         | -1    | 0.0   |
| (Fill) + nodules@ 6.0-6.7' 10 total 1/8-1/3" 0.0  8-13.5' Silty Sand; trace subangular 0.0  growel; trace clay: onerly socied.   |                      |                 |                     | ar a a lace    | concre          | re C       | 5.2       | 51;         | gran   | 1 - bro             | wn      |       | 0.0   |
| grove; trace clay: poorly socied.  |                      |                 |                     |                | (FII)*          | - nodu     | ese       | 6.0-1       | 17.0   | 10 tota             | عا اله- |       |       |
| grove; trace clay; poorly sorted; 0.0  | Section Control      | a president des |                     | ge             |                 |            |           |             |        |                     |         |       |       |
|  |                      |                 |                     | and the second | govel;          | trac       | e Cl      | ay; p       | oorly  | Sorte               | d;      |       | 0.0   |

| Well/Boring<br>Prepared<br>By | _                              | :- B2122<br>Demie              | Pròje  | PSample Log (Cont.d)  Sample Log (Cont.d)  Settleme and No. PP6 Sik (074 41) USIST |                                |
|-------------------------------|--------------------------------|--------------------------------|--|--|--------------------------------|
|                               | nple Depth<br>rw land surface) | S 1 () Bample) Recovery (feet) | Time/Hydraulic<br>Plessure or<br>Blows per 6<br>Inches | 5,3"   | PID (ppm)                      |
| 2                             | 10                             | cont.                          |  | 8-13.5' cont. moisting dense; red-   | ()                             |
|                               |                                |                                |  | Brown ; Ano odors; 2000 87 stuff   |                                |
|                               | -                              |                                |  | 1 Denzier (III)  | Y                              |
| 10                            | 15                             | 4.2'                           |  | 13.5-15' UND; clay; tracesilt;   | 0.0                            |
|                               |                                |                                |  | well sorted; wet; very dense;  | 0. O                           |
| 0.0                           |                                | ,                              |  | light gray-brown   | 0.0                            |
| 0.0                           | (a.y                           | ist;                           | Son A  | 15-18 5 UND silty clay; well   | 0.0                            |
| 0.0                           |                                | 9, 101                         | 0111 (20   | sorted in wet in very dense; light   | 0.0                            |
| 0.0                           |                                | 1.5 1.8                        | /11:   | gray- brown  | (a) (1 (a) (a) (a) (a) (a) (b) |
| 15                            | 20                             | 4.81                           | * 0  | 18,5-20 UND; silly sand; some  | 0.0                            |
| 0.0                           | ()47.                          | neangu                         | 1,50   | clay; red-brown; no odors  | 0.0                            |
| 20.0                          | 3731                           | ) con                          | . 92   | graver, mark: in   | 0.0                            |
| ٥.٠٥                          | latal &                        | 90 nie 2                       | 7×/11  | 1) 200 he say a say and  | 0.0                            |
| 0.0                           | 12000                          |                                | اسع  | 5-81 5 and F to C.   | 0.0                            |
| · E-                          | ,                              |                                |  |  | 7                              |
| 0.0                           | <del>k</del> 9                 |                                | W 1997 W   | 10 11.5' trace silt; poorly s  | 1 6                            |
| 0.0                           |                                | hotal a                        | 0 0  | Concrete @ 5251 (Fill) + nodules @ 6.0   |                                |
| 0.0                           |                                |                                |  |  |                                |
| 0.0                           |                                |                                |  | R-13.51 Silty Sand   |                                |
| 0.0                           | il                             | Bocked                         | mood   | gave!; trace clay;   |                                |

## 12/14

## PARCADIS Design & Consultancy

| well/Boring<br>Site           | M24-            | C2223  | S Proje                                      | ect Name and No. PPG Site 107             |                    |
|-------------------------------|-----------------|--|--|---|--------------------|
| Site<br>Location              | Jers            | rey at   | y. NJ  | Started 10:35 Drilling Completed 11:0:    | 5                  |
| Total Depth D                 | rilled          | _20  | _feet  | Hole Diameter 3 inches Sampling Interval  | feet               |
| Length and D<br>of Sampling ( |                 | 5;3  | 2 11   | Type of Sampling Device                   |                    |
| Drilling Meth                 | od              | Dire ct  | Push   | Drilling Fluid Used                       |                    |
| Drilling Conta                |                 | Casca  |  | Driller Cas(ade Helper - Hammer           |                    |
| Ву                            |                 | Denzler  |  |   | inches             |
| Sample<br>(feet below i       | and surface)    | Sample<br>Recovery   | Time/Hydraulic<br>Pressure or<br>Blows per 6 |   |                    |
| From                          | To              | 4.6'   | inches                                       |   | PID (ppm)          |
| 0                             | 2               | 1.0  |  | 05' D6A;                                  | 0.0                |
|                               |                 |  |  | 5 7 7 5                                   | 0.0                |
|                               | na and the land |  |  | Soited; dark gray (Fill) (Solver)         | 0.0                |
|                               |                 | A PART OF THE PART |  | L3' Shingles (Fill) Non 18 x 200 /8       | 0.0                |
|                               |                 | and the second   | Marin company of the second                  | 3-5' Sand C to F; some angular            | 0.0                |
|                               |                 |  |  | gravel; poorly sorted; moist;             |                    |
| 5                             | 10              | 3.8'   |  | medium dense; crushed stone@              | 0.0                |
|                               |                 | * (esista<br>(efusal   | met  | 4.5'; gray-brown (Fill) *nodulis & rola   |                    |
|                               |                 | i had h  | , adjult                                     | T 105 8 C 0 1 0 C 2 C 1 / E: 11 14 miduks | 0.0                |
|                               |                 |  |  | 6.5-10' Silty sand VF; well sorted;       | 0.0                |
|                               |                 |  | 400  |   | 0.0                |
|                               |                 |  |  | ~9-10' sand/silt VF; trace                | -                  |
|                               |                 |  | 00. Konsen                                   | granules; trace angular gravel;           |                    |
|                               |                 |  | p c c ww                                     | poorly sorted; moist; gray-brown          | 4                  |
|                               |                 |  |  | (Fill)                                    |                    |
|                               |                 |  |  |   | Miles was a series |

Well/Boring MSA-C2223 Project Name and No. PP6 SIK 107
Prepared

Prepared

Denzier

| Sample [<br>(feet below lar |                 | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 |                                |           |
|-----------------------------|-----------------|--------------------|--|--------------------------------|-----------|
| From                        | То              | (feet)             | Inches                                       | Sample Description             | PID (ppm) |
| 10                          | 15              | 1.5'               | = '  | 10-15' Sand Flo M; angular     | 0.0       |
| -                           | 21              | # 10W              | 3  | gravel; poorly sorted; loose;  | 0.0       |
|                             |                 | due to             |  | brown (Fill)                   | 0.0       |
|                             | ·               |                    |  | 15-16' Sand M to C; subangular | 0.0       |
|                             | -               | y 000              |  | gravel; poorly sorted; wet;    | 0.0       |
| ў<br>В в                    | )               |                    |  | wose; gray-brown (Fill)        | - V.      |
| 15                          | 20              | 4.11               |  | 16-18.5' UND; SI IN clay; well | 0.0       |
|                             | f)<br>11 - 92 ( |                    | . (  | sorted; wet; dense; light      | 0.0       |
|                             |                 |                    |  | gray                           | 0.0       |
|                             |                 | H 141              |  | 18.5-20' UND; Silty Sand;      | 0.0       |
|                             |                 |                    |  | trace rounded gravel; wet,     | 0.0       |
|                             |                 |                    |  | dense; red-brown; no odors     |           |
| N                           |                 | 1 4                |  |                                |           |
|                             |                 |                    |  |                                |           |
|                             |                 |                    | - 1  |                                |           |
|                             | -               | 1                  | 1.7  |                                |           |
|                             |                 | 14                 | 1 3.11                                       |                                |           |
|                             |                 |                    | 1 4  |                                |           |
|                             |                 |                    |  |                                |           |

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| /ell/Boring            | MSA-                         | B2223  | Projec                                       | et Name and No. PPG SIK 107                |           |
|------------------------|------------------------------|--|--|--|-----------|
| ite<br>ocation         | Juse                         | y City.  | NT   | Drilling 9,15 Drilling Completed 9,15      |           |
| otal Depth             | Drilled                      | 20   | ieet   | Hole Diameter 3 inches Sampling Interval 5 | eet       |
| ength and lof Sampling |                              | 5', 3'   | ,  | Type of Sampling Device Macro Core         | × /~ ·    |
| Drilling <b>Me</b> ti  | nod                          | Direct   | Push   | Drilling Fluid Used                        |           |
| Drilling Con           | tractor                      | Carcade  | <u>.                                    </u> | Driller Cascade Helper Hammer              |           |
| Prepared<br>By         | TI                           | enzier   |  | ( squinter                                 | inches    |
| E 42 42                | ele Depth<br>r land surface) | Sample<br>Recovery   | Time/Hydraulic<br>Pressure or<br>Blows per 6 | e e e e e e e e e e e e e e e e e e e      | PID (ppm) |
| From                   |                              | 4.5'   | inches                                       |  | 0.0       |
| 0                      | 5                            | (, 3   | 6  | 05' DGA                                    | D. 0      |
|                        |                              | 7.7  | + 1 +  | 3-5' Sand F to VC; frace angular           | 0.0       |
|                        |                              | - 7 %  |  | gravel; trace granules; trace brick;       | 0.0       |
| 2000                   |                              |  | · · · ·                                      |  | 0.0       |
| 1                      |                              | 1  |  | poorly soited; mist; loose; no             | 0.0       |
| 5                      | 10                           | 4.7'   |  | odors; gray - brown (fill) * noaulse       | 0.0       |
| 3                      |                              |  |  | 5-5.5' Sand; poorly sorkd;                 | 0.0       |
|                        |                              |  |  | trace angular gravel; moist; loose;        | 0.0       |
|                        |                              | 1  | . 1  | dork brown (Fill)                          | O. O      |
|                        | 1                            |  |  | 5.5-6.5' Wood (Fill)                       | 0.0       |
|                        | 15                           | 3.81   |  | 4.5-7.5' Sand Fro M; crushed               | 0.0       |
| 10                     | 13                           | J. 6   |  | stone @ 7' + concrete; poorly socked;      | 0.0       |
|                        |                              |  |  | dense; gray-brown (Fill)                   | 0.0       |
|                        | Sharke I was not some on the |  |  | 7.5-10' silty sand; trace angular          | DE        |
|                        |                              | and the same of th |  | gravel; moist; red-brown (Fill)            |           |
|                        |                              | and the second s |  | July 1 (co. Diologi CF1)                   | 0.        |

Well/Boring MSA-B2223 Project I

Project Name and No. PP6 Sike 107

Prepared By

J Demier

| Sampi       | le Depth       | · (1~4                       | Time/Hydraulic                       |                                     |           |  |
|-------------|----------------|------------------------------|--------------------------------------|-------------------------------------|-----------|--|
| (feet below | land surface)  | Sample<br>Recovery<br>(feet) | Pressure or<br>Blows per 6<br>inches | Sample Description                  | PID (ppm) |  |
| 15          | 20             | 3.5'                         |                                      | 10-14.5' Silty sand; little angular | 0.0       |  |
|             |                | 940 S. 12 (81 1040 s.        | Maria Maria                          | gravel; poorly sorted; trace clay;  | D. D      |  |
| 7.4         |                |                              |                                      | dense; rea-brown; wet @ 13'         | 0.0       |  |
| -           |                |                              |                                      | (Fill)                              | 0.0       |  |
|             | 2              |                              |                                      | 14.5-15' Silry clay; trace sand;    | 0.0       |  |
| 1           |                |                              | 7 V                                  | trace angular gravel; dense;        |           |  |
|             |                |                              | ( )                                  | moist; gray-brown (Fill)            |           |  |
|             |                |                              |                                      | 15-16 Silty clay; trace VF sand;    | 1951      |  |
|             |                | , ),                         |                                      | trace angular gravel; poorly sorkd; | -         |  |
|             |                |                              |                                      | wet; dense; light gray *UND         |           |  |
|             |                | 1 4                          | l hus                                | @ 16'                               |           |  |
|             | an 2 - 27-an - |                              |                                      | 16-20' UND; Clay with SIH;          |           |  |
|             | A              |                              | ar s z                               | well sorted; moist; dense; no       |           |  |
| (           |                |                              | 1 77 3                               | odois; light gray-brown             |           |  |
|             |                | t                            | , , , , ,                            |                                     |           |  |
|             |                | 11                           | Ar and                               |                                     |           |  |
|             | V govern       | 1                            |                                      |                                     |           |  |
|             |                |                              |                                      |                                     |           |  |
| - t.        |                |                              |                                      |                                     | 1         |  |
| <u></u>     |                | (4-)                         | 1 1                                  |                                     |           |  |



|                            | 120.0                           |                              |  | Sample Log                            |           |
|----------------------------|---------------------------------|------------------------------|--|---------------------------------------|-----------|
| ug                         | MSA-C                           | <u>23031</u><br>y Ciry.      | 50 Post-   | Drilling 8:10 Drilling 6:30           |           |
| otal Depth D               |                                 | 20                           |  |                                       | feet      |
| ength and D<br>of Sampling | Diameter<br>Device              | 5', 3'                       |  | Type of Sampling Device MACYO CORE    |           |
| Orilling Meth              | od                              | Direct                       | Push   | Drilling Fluid Used                   |           |
| Drilling Cont              | tractor                         | Corcad                       | <u> </u>   | Driller Carca de Helper               |           |
| Prepared<br>By             | TDe                             | mer                          |  | Hammer Hammer Weight Drop             | inches    |
|                            | le Depth<br>land surface)<br>To | Sample<br>Recovery<br>(feet) | Time/Hydraulic<br>Pressure or<br>Blows per 6<br>inches | Sample Description                    | PID (ppm) |
| 0                          | 5                               | 4.4'                         | -  | 05' Sana Fto C; trace silt;           | 0,0       |
|                            |                                 |                              |  | some angular gravel; poorly socked;   | 0. O      |
|                            |                                 | S 649 11                     | <i>j</i> '   | wet, loose; dark gray (Fill)          | 0.0       |
|                            |                                 |                              |  | .5-2.25' Shingles (Fill)              | 0.0       |
| 4                          |                                 |                              |  | 2.25-5' Sond F to C; trace silt;      | 0.0       |
| 5                          | 10                              | 3.8'                         |  | trace angular gravel; trace brick @   | 0.0       |
|                            |                                 |                              |  | 41; poorly sorted; moist; no odors;   | 0.0       |
| 1                          |                                 |                              |  | gray-brown (Fill)                     | 0.0       |
|                            |                                 |                              |  | 5-7.5' Samu as 2.25-5'; brick @       | D.O       |
|                            |                                 | 5.0 555                      | -  | 71; 5/ag @ 6.51; gray-brown (Fill)    | 0.0       |
| 10                         | 15                              | 1.3'                         | de company and beauty                                  | 7.5-10' Silt; f Sand; trace           | 0.6       |
|                            |                                 | * minind                     |  | subsunded gravel; poorly socked;      | 0.0       |
|                            |                                 | and to                       |  | mist; measum dense; red-brown         | 0.0       |
|                            |                                 |                              |  | (Fill) ments for the                  | V.O       |
|                            |                                 |                              |  | 10-15.5' Sand Flo M; Slag; Wet (Fill) | 0.0       |

Well/Boring MSA-C3031 Project Name and No. PP6 SIR 107

Prepared By J Denzier

|      | Sample Depth Time/Hydraulic (feet below land surface) Sample Pressure or Recovery Blows per 6 |        | Pressure or                  |                                   | PID (ppm) |  |
|------|---|--------|------------------------------|-----------------------------------|-----------|--|
| From | То  | (feet) | inches                       | Sample Description                |           |  |
| 15   | 20  | 4.21   | - 4.9                        | 15.5-16.5 UND; sitt; trace clay;  | 0.0       |  |
|      |   | -      | -                            | well soiled; moist; dense; gray-  | 0.0       |  |
|      |   |        | e en ee - di                 | bown, no odois                    | D.O       |  |
|      |   |        |                              | 16.5-19.5' UND; Silty Sand;       | 0,0       |  |
| 15   |   | -      |                              | some clay; well soited; moist;    | 0.0       |  |
|      |   |        |                              | dense; light gray to light brown  |           |  |
|      |   |        |                              | 19.5-20' Sand; some silt; trace   |           |  |
|      |   |        |                              | gravel; poorly socked; red-brown; |           |  |
|      |   |        |                              | UND                               |           |  |
|      |   |        |                              |                                   |           |  |
| -    |   | 140 s  |                              |                                   |           |  |
|      |   |        |                              |                                   |           |  |
|      |   |        | and the second second second | 1                                 |           |  |
|      |   | D4     |                              |                                   |           |  |
| 1 4  | (   |        |                              |                                   |           |  |
| 1    |   |        |                              |                                   |           |  |
| -    | Week derweiten de   | 1.3    |                              |                                   |           |  |
|      |   |        |                              |                                   |           |  |
|      | s description of the second   |        |                              |                                   |           |  |
| 1-6  | and a   |        |                              |                                   |           |  |
|      | 1.1   | 4      | 15                           |                                   |           |  |

#### 12/15

# PARCADIS Design & Consultancy

| Well/Bor<br>Site<br>Location | ing MSA-                          |   |  | ect Name and No. PPU SIR 107                   |         |
|------------------------------|-----------------------------------|---|--|--|---------|
|                              | pth Drilled                       | ey City                                 | , NT   | Started 8:00 Drilling Completed 6:30           |         |
| Length a                     | and Diameter                      | 20                                      | feet   | Hole Diameter 3 inches Sampling Interval 5 fee | et      |
| of Samp                      | ling Device                       | 7', 3                                   | 3"   | Type of Sampling Device                        |         |
| Drilling I                   | Method                            | Direct                                  | Push   | _ Drilling Fluid Used —                        |         |
| Drilling (                   | Contractor                        | Cascad                                  | e  | Driller Coscade Helper                         | 1       |
| Prepared<br>By               | ' <u> </u>                        | Denzie                                  |  | Hammer Hammer                                  | hes     |
|                              | ample Depth<br>slow land surface) | Sample<br>Recovery<br>(feet)            | Time/Hydraulic<br>Pressure or<br>Blows per 6<br>inches   |  | D (nom) |
| ٥                            | 2                                 | 4.41                                    |  |  | D (ppm) |
|                              |                                   |   |  | ,5-1' Sand F to C; angular gravel;             | 0. D    |
|                              | 2 -1                              |   | TO THE STATE OF TH | poorly soited; trace sit; dark                 | 0.0     |
|                              |                                   |   |  | gray, no odocs (Fill)                          | O.D     |
|                              |                                   |   | 3.<br>   | 1-3' Shingles (Fill)                           | O.D     |
| 5                            | 10                                | 4.81                                    |  | 3-5' Sana F to M; trace sit;                   | 0.0     |
| 94.XX                        | and the second of                 |   |  | some angular gravel; poorly socked;            | 0.0     |
|                              |                                   | No. and the second                      |  | moist; gray - brown; trave brick &             | 0.0     |
|                              | 1                                 |   |  | 41; 51ag (Fill)                                | 0.0     |
|                              |                                   | and the second second                   | Europe un seguitorio   | 5-7' same as 3-5'; Ny" of sluft;               | 0,0     |
| <b>)</b>                     | 15                                | 3.01                                    |  | slag @ 6.75'                                   | 0.0     |
|                              |                                   |   | and processing the later operated  | 7-10' Silty sand UF; crushed Stone             | 0.0     |
|                              |                                   | man and a second of the                 |  | @ 81; bick @ 8.75'; trace angular              | 0.0     |
|                              |                                   | a company to the control of             | and the second   | gravel; poorly sorted; moist; red-             | 0.0     |
|                              |                                   | 11 to 1 t | No. 10 Kie W. C. Beet.   | brown (Fill)                                   | 0.      |
|                              |                                   |   |  |  | 10.     |

Well/Boring MSA-C2122
Prepared J Denzler

Project Name and No. PP6 Sik 107

| Sample (<br>feet below las | Depth<br>Id surface) | Sample<br>Recovery | Time/Hydraulic<br>Pressure or<br>Blows per 6 | Sample Description                   |           |
|----------------------------|----------------------|--------------------|--|--------------------------------------|-----------|
| From                       | То                   | (feet)             | inches                                       | Sample Description *                 | PID (ppm) |
| 12                         | 20                   | 40'                |  | 10-14' Same as 7-10'; wet@ 13';      | 0.0       |
|                            |                      |                    |  | birck @ 141 (Fill)                   | 0.0       |
|                            |                      |                    |  | 14-15' Sand VC, angular gravel,      | 0.0       |
|                            |                      |                    |  | siag; wet; dark gray (Fill)          | 0.0       |
|                            |                      |                    |  | 15-15.5' Sume as above, * UND        | 0.0       |
|                            |                      |                    |  | Storts @ 15.5'                       |           |
|                            |                      | i i                |  | 15.5-18' UND; silty clay; trace      |           |
|                            |                      |                    |  | Fire rounded pebbles; poorly sortea; |           |
|                            |                      | 7 7 9              |  | wet; dense; light gray-brown         |           |
|                            | ₩.                   | 2 2<br>3           |  | 18-20' UND; silly sand; trace clay;  |           |
|                            | 1 Ly 0               | A 10 10            |  | trace substanded gravel; wet; very   | -         |
|                            | 2 1                  |                    |  | dense; red-bown; no odois            |           |
|                            | 10.00 (F. 10.00)     |                    |  |                                      |           |
|                            |                      |                    | _  |                                      |           |
|                            | * **                 |                    | E 25 125 144 8                               |                                      |           |
|                            |                      |                    |  |                                      |           |
| A                          |                      |                    | - (max)                                      |                                      |           |
|                            |                      |                    |  |                                      | 15        |
|                            |                      | -19 John 65        | 19 19 19 19                                  |                                      |           |

# **Appendix D**

**Air Monitoring Reports** 

# **Appendix D-1**

**Weekly Real-Time Data Reports** 

#### **Weekly Air Monitoring Summary**

Client: PPG Industries

Location: Site 107: Fashionland Site - Jersey City, NJ

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- Table 1: Site-Specific Alarm Levels;
- **Table 2:** Weekly Real-Time PM<sub>10</sub> Data Summary;
- Table 3: Weekly Hand-Held Data Summary;
- Table 4: Weekly Elevated Readings Summary for PM<sub>10</sub>;
- Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub>;
- Figure 1: Meteorological Data; and
- Figure 2: Station Location Map.

This report covers real-time air monitoring from November 30 through December 6, 2020 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 5 stations and periodic hand-held monitoring. See Figure 2 for station locations.

#### Perimeter air monitoring includes the following:

- Real-time 15-minute average PM<sub>10</sub> readings at each location during the work day;
- · Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

#### Summary of Real-Time Air Monitoring Results for PM<sub>10</sub> Concentrations

15-minute Time Weighted Average (TWA)  $PM_{10}$  Site action levels are shown in Table 1. The maximum 15 minute TWA  $PM_{10}$  readings are shown in Table 2. The maximum hand-held  $PM_{10}$  concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

#### Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium ( $Cr^{+6}$ ) and total dust are updated when available. Program-to-date average concentrations for integrated  $Cr^{+6}$ , total dust, and real-time  $PM_{10}$  readings are shown in Table 5.

#### **Summary of Meteorological Monitoring**

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.



Table 1: Site-Specific Action Levels

| Alarm Levels     | Alert Level (15 minute TWA) | Action Level (15 minute TWA) |
|------------------|-----------------------------|------------------------------|
| PM <sub>10</sub> | 255 μg/m³                   | 339 µg/m³                    |

Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary

| Maximum 15-Minute PM <sub>10</sub> TWA (Action Level: 339 μg/m³) |       |       |       |       |  |
|--|-------|-------|-------|-------|--|
| Date   | AMS 1 | AMS 2 | AMS 3 | AMS 4 |  |
| 11/30/2020   | 40.9  | 120.0 | 44.3  | 36.7  |  |
| 12/1/2020  | 22.3  | 51.2  | 28.0  | 26.6  |  |
| 12/2/2020  | 6.5   | 8.4   | 9.3   | 13.6  |  |
| 12/3/2020  | 25.5  | 38.0  | 24.6  | 29.5  |  |
| 12/4/2020  | 23.9  | 26.1  | 27.4  | 27.1  |  |
| 12/5/2020  | 27.3  | 30.4  | 31.3  | 30.2  |  |
| 12/6/2020  | 3.2   | 6.0   | 5.3   | 10.0  |  |
| Weekly Statistics  |       |       |       |       |  |
| Max  | 40.9  | 120.0 | 44.3  | 36.7  |  |
| Average  | 9.7   | 12.2  | 12.7  | 12.0  |  |

Note: Highlighted cells indicate exceedance of the action level.

Table 3: Weekly Hand-Held Data Summary for PM<sub>10</sub> Concentration

|            | Maximum Instantaneous Hand-Held PM <sub>10</sub> Concentration |       |          |  |  |  |
|------------|--|-------|----------|--|--|--|
| Date       | PM <sub>10</sub> (μg/m³)                                       | Time  | Location |  |  |  |
| 11/30/2020 | 36   | 11:00 | AMS2     |  |  |  |
| 12/1/2020  | 20   | 9:00  | AMS3     |  |  |  |
| 12/2/2020  | 15   | 13:00 | AMS3     |  |  |  |
| 12/3/2020  | 22   | 10:00 | AMS1     |  |  |  |
| 12/4/2020  | 24   | 8:00  | AMS4     |  |  |  |

Table 4: Weekly Elevated Readings Summary

| Location | Date | Time | Weather Conditions | Elevated<br>Concentration | Explanation |
|----------|------|------|--------------------|---------------------------|-------------|
| N/A      | N/A  | N/A  | N/A                | N/A                       | N/A         |

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub> Summary

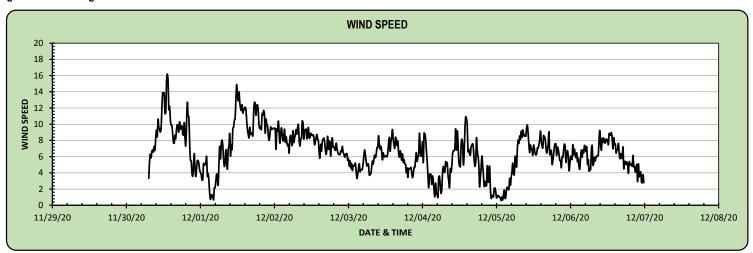
| Program-to-Date Averages (Cr <sup>+6</sup> & Total Dust Results from 11/30/20-12/4/20) |       |       |       |       |  |
|--|-------|-------|-------|-------|--|
|  | AMS 1 | AMS 2 | AMS 3 | AMS 4 |  |
| Cr <sup>+6</sup> Concentration (ng/m <sup>3</sup> )                                    | 6.1   | 6.2   | 2.7   | 4.7   |  |
| Total Dust Concentration (µg/m³)   | 59.3  | 61.1  | 26.4  | 46.1  |  |
| Real-Time PM <sub>10</sub> (µg/m <sup>3</sup> )  | 9.7   | 12.2  | 12.7  | 12.0  |  |

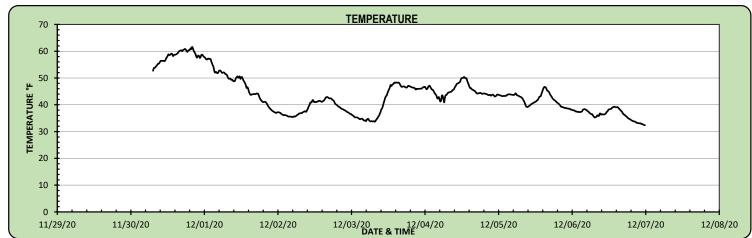
 $ng/m^3$  - Nanograms per cubic meter  $\mu g/m^3$  - Micrograms per cubic meter

NA - Not Applicable



Figure 1: Meteorological Data





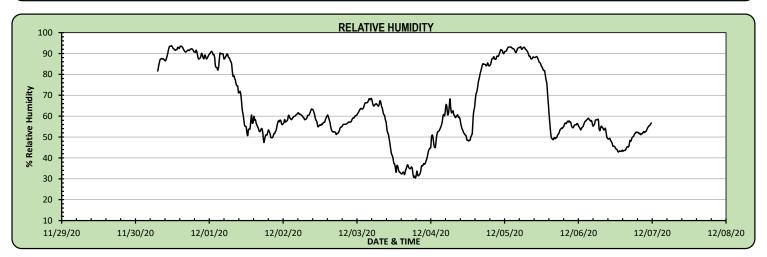




Figure 2: Station Location Map





### **Weekly Air Monitoring Summary**

Client: PPG Industries

Location: Site 107: Fashionland Site - Jersey City, NJ

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- Table 1: Site-Specific Alarm Levels;
- **Table 2:** Weekly Real-Time PM<sub>10</sub> Data Summary;
- Table 3: Weekly Hand-Held Data Summary;
- Table 4: Weekly Elevated Readings Summary for PM<sub>10</sub>;
- Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub>;
- Figure 1: Meteorological Data; and
- Figure 2: Station Location Map.

This report covers real-time air monitoring from December 7 through December 13, 2020 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

## Perimeter air monitoring includes the following:

- Real-time 15-minute average PM<sub>10</sub> readings at each location during the work day;
- · Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

## Summary of Real-Time Air Monitoring Results for PM<sub>10</sub> Concentrations

15-minute Time Weighted Average (TWA)  $PM_{10}$  Site action levels are shown in Table 1. The maximum 15 minute TWA  $PM_{10}$  readings are shown in Table 2. The maximum hand-held  $PM_{10}$  concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

#### Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium ( $Cr^{+6}$ ) and total dust are updated when available. Program-to-date average concentrations for integrated  $Cr^{+6}$ , total dust, and real-time  $PM_{10}$  readings are shown in Table 5.

#### **Summary of Meteorological Monitoring**

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.



Table 1: Site-Specific Action Levels

| Alarm Levels     | Alert Level (15 minute TWA) | Action Level (15 minute TWA) |
|------------------|-----------------------------|------------------------------|
| PM <sub>10</sub> | 255 μg/m³                   | 339 µg/m³                    |

Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary

| Maximum 15-Minute PM <sub>10</sub> TWA (Action Level: 339 μg/m³) |       |                   |       |       |  |
|--|-------|-------------------|-------|-------|--|
| Date   | AMS 1 | AMS 2             | AMS 3 | AMS 4 |  |
| 12/7/2020  | 11.4  | 13.3              | 11.8  | 18.9  |  |
| 12/8/2020  | 7.6   | 11.0              | 7.2   | 14.9  |  |
| 12/9/2020  | 49.5  | 52.9              | 52.8  | 60.6  |  |
| 12/10/2020   | 51.1  | 54.5              | 54.3  | 62.6  |  |
| 12/11/2020   | 59.7  | 61.5              | 67.9  | 63.0  |  |
| 12/12/2020   | 144.9 | 136.3             | 134.3 | 116.6 |  |
| 12/13/2020   | 96.0  | 93.4              | 141.4 | 73.9  |  |
|  |       | Weekly Statistics |       |       |  |
| Max  | 144.9 | 136.3             | 141.4 | 116.6 |  |
| Average  | 24.5  | 26.0              | 28.1  | 28.8  |  |

Note: Highlighted cells indicate exceedance of the action level.

Table 3: Weekly Hand-Held Data Summary for PM<sub>10</sub> Concentration

| Maximum Instantaneous Hand-Held PM <sub>10</sub> Concentration |     |       |      |  |  |  |  |
|--|-----|-------|------|--|--|--|--|
| Date PM <sub>10</sub> (μg/m³) Time Location                    |     |       |      |  |  |  |  |
| 12/7/2020  | 17  | 9:00  | AMS3 |  |  |  |  |
| 12/8/2020  | 11  | 13:00 | AMS2 |  |  |  |  |
| 12/9/2020  | 85  | 14:00 | AMS2 |  |  |  |  |
| 12/10/2020   | 59  | 8:00  | AMS2 |  |  |  |  |
| 12/11/2020   | 142 | 11:00 | AMS3 |  |  |  |  |

Table 4: Weekly Elevated Readings Summary

| Location | Date | Time | Weather Conditions | Elevated<br>Concentration | Explanation |
|----------|------|------|--------------------|---------------------------|-------------|
| N/A      | N/A  | N/A  | N/A                | N/A                       | N/A         |

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub> Summary

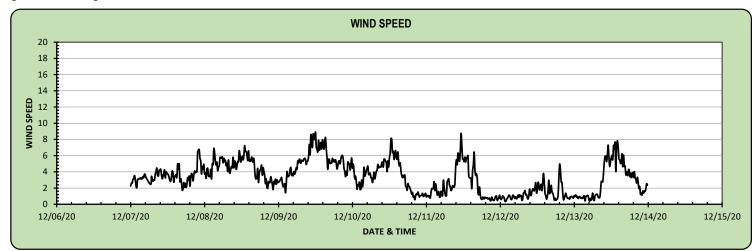
| Program-to-Date Averages (Cr <sup>+6</sup> & Total Dust Results from 11/30/20-12/4/20) |                         |      |      |      |  |  |
|--|-------------------------|------|------|------|--|--|
|  | AMS 1 AMS 2 AMS 3 AMS 4 |      |      |      |  |  |
| Cr <sup>+6</sup> Concentration (ng/m <sup>3</sup> )                                    | 6.1                     | 6.2  | 2.7  | 4.7  |  |  |
| Total Dust Concentration (µg/m³)   | 59.3                    | 61.1 | 26.4 | 46.1 |  |  |
| Real-Time PM <sub>10</sub> (μg/m <sup>3</sup> )  | 17.3                    | 19.3 | 20.5 | 20.6 |  |  |

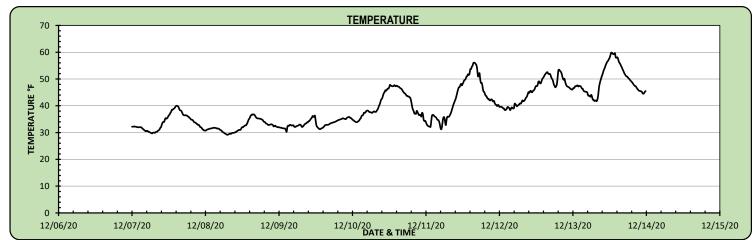
ng/m³ - Nanograms per cubic meter μg/m³ - Micrograms per cubic meter

NA - Not Applicable



Figure 1: Meteorological Data





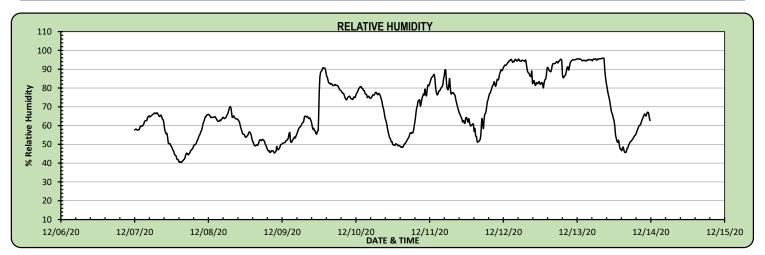




Figure 2: Station Location Map





## **Weekly Air Monitoring Summary**

Client: PPG Industries

Location: Site 107: Fashionland Site - Jersey City, NJ

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- Table 1: Site-Specific Alarm Levels;
- Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary;
- Table 3: Weekly Hand-Held Data Summary;
- Table 4: Weekly Elevated Readings Summary for PM<sub>10</sub>;
- Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub>;
- Figure 1: Meteorological Data; and
- Figure 2: Station Location Map.

This report covers real-time air monitoring from December 14 through December 20, 2020 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

## Perimeter air monitoring includes the following:

- Real-time 15-minute average PM<sub>10</sub> readings at each location during the work day;
- Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

#### Summary of Real-Time Air Monitoring Results for PM<sub>10</sub> Concentrations

15-minute Time Weighted Average (TWA)  $PM_{10}$  Site action levels are shown in Table 1. The maximum 15 minute TWA  $PM_{10}$  readings are shown in Table 2. The maximum hand-held  $PM_{10}$  concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

## Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium ( $Cr^{+6}$ ) and total dust are updated when available. Program-to-date average concentrations for integrated  $Cr^{+6}$ , total dust, and real-time  $PM_{10}$  readings are shown in Table 5.

#### **Summary of Meteorological Monitoring**

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.



Table 1: Site-Specific Action Levels

| Alarm Levels     | Alert Level (15 minute TWA) | Action Level (15 minute TWA) |
|------------------|-----------------------------|------------------------------|
| PM <sub>10</sub> | 255 μg/m³                   | 339 µg/m³                    |

Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary

|            | Maximum 15-Minute PM <sub>10</sub> TWA (Action Level: 339 μg/m³) |                   |       |       |  |  |
|------------|--|-------------------|-------|-------|--|--|
| Date       | AMS 1  | AMS 2             | AMS 3 | AMS 4 |  |  |
| 12/14/2020 | 17.5   | 31.7              | 18.9  | 22.7  |  |  |
| 12/15/2020 | 8.7  | 8.6               | 9.7   | 15.2  |  |  |
| 12/16/2020 | 22.3   | 101.8             | 18.5  | 141.6 |  |  |
| 12/17/2020 | 29.5   | 55.6              | 8.0   | 19.2  |  |  |
| 12/18/2020 | 21.1   | 40.5              | 21.0  | 29.3  |  |  |
| 12/19/2020 | 40.7   | 56.5              | 40.5  | 42.0  |  |  |
| 12/20/2020 | 42.0   | 60.6              | 41.5  | 44.7  |  |  |
|            |  | Weekly Statistics |       |       |  |  |
| Max        | 42.0   | 101.8             | 41.5  | 141.6 |  |  |
| Average    | 14.4   | 27.1              | 14.0  | 19.1  |  |  |

Note: Highlighted cells indicate exceedance of the action level.

Table 3: Weekly Hand-Held Data Summary for PM<sub>10</sub> Concentration

|            | Maximum Instantaneous Hand-Held PM₁₀ Concentration |       |      |  |  |  |  |  |
|------------|--|-------|------|--|--|--|--|--|
| Date       | Date PM <sub>10</sub> (μg/m³) Time Location        |       |      |  |  |  |  |  |
| 12/14/2020 | 18   | 12:00 | AMS4 |  |  |  |  |  |
| 12/15/2020 | 7  | 14:00 | AMS3 |  |  |  |  |  |
| 12/16/2020 | 26   | 10:00 | AMS4 |  |  |  |  |  |
| 12/17/2020 | N/A  | N/A   | N/A  |  |  |  |  |  |
| 12/18/2020 | 7  | 9:00  | AMS3 |  |  |  |  |  |

Note: Site closed on 12/17/20 due to snow. No monitoring conducted.

## Table 4: Weekly Elevated Readings Summary

| Location | Date | Time | Weather Conditions | Elevated<br>Concentration | Explanation |
|----------|------|------|--------------------|---------------------------|-------------|
| N/A      | N/A  | N/A  | N/A                | N/A                       | N/A         |

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub> Summary

| Program-to-Date Averages (Cr <sup>+6</sup> & Total Dust Results from 11/30/20-12/4/20) |                         |      |      |      |  |  |
|--|-------------------------|------|------|------|--|--|
|  | AMS 1 AMS 2 AMS 3 AMS 4 |      |      |      |  |  |
| Cr <sup>+6</sup> Concentration (ng/m <sup>3</sup> )                                    | 6.1                     | 6.2  | 2.7  | 4.7  |  |  |
| Total Dust Concentration (µg/m³)   | 59.3                    | 61.1 | 26.4 | 46.1 |  |  |
| Real-Time PM <sub>10</sub> (μg/m³)   | 18.3                    | 20.1 |      |      |  |  |

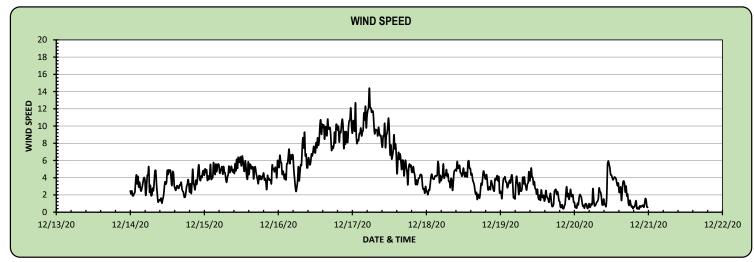
ng/m³ - Nanograms per cubic meter

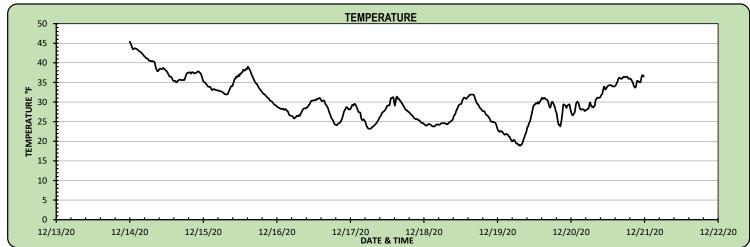
NA - Not Applicable

 $\mu g/m^3$  - Micrograms per cubic meter



Figure 1: Meteorological Data





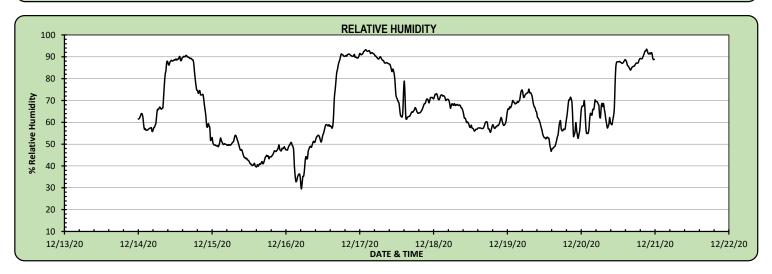
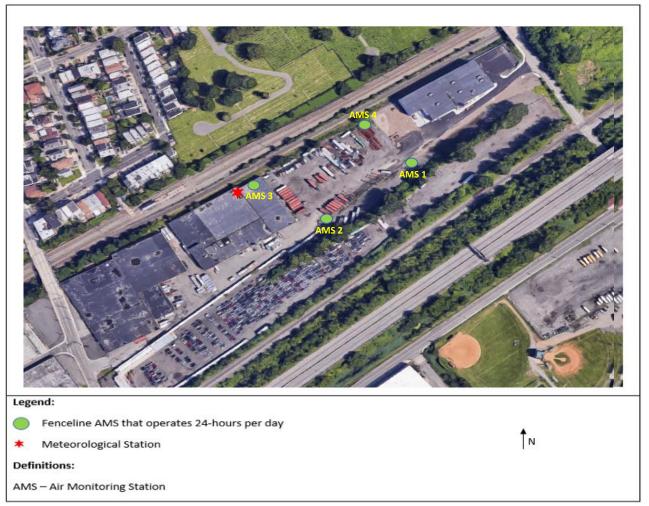




Figure 2: Station Location Map





### **Weekly Air Monitoring Summary**

Client: PPG Industries

Location: Site 107: Fashionland Site - Jersey City, NJ

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- Table 1: Site-Specific Alarm Levels;
- Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary;
- Table 3: Weekly Hand-Held Data Summary;
- Table 4: Weekly Elevated Readings Summary for PM<sub>10</sub>;
- Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub>;
- Figure 1: Meteorological Data; and
- Figure 2: Station Location Map.

This report covers real-time air monitoring from February 8 through February 14, 2021 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

## Perimeter air monitoring includes the following:

- Real-time 15-minute average PM<sub>10</sub> readings at each location during the work day;
- · Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

## Summary of Real-Time Air Monitoring Results for PM<sub>10</sub> Concentrations

15-minute Time Weighted Average (TWA)  $PM_{10}$  Site action levels are shown in Table 1. The maximum 15 minute TWA  $PM_{10}$  readings are shown in Table 2. The maximum hand-held  $PM_{10}$  concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

### Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium ( $Cr^{+6}$ ) and total dust are updated when available. Program-to-date average concentrations for integrated  $Cr^{+6}$ , total dust, and real-time  $PM_{10}$  readings are shown in Table 5.

#### **Summary of Meteorological Monitoring**

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.



Table 1: Site-Specific Action Levels

| Alarm Levels     | Alert Level (15 minute TWA) | Action Level (15 minute TWA) |
|------------------|-----------------------------|------------------------------|
| PM <sub>10</sub> | 255 μg/m³                   | 339 µg/m³                    |

Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary

|           | Maximum 15-Minute PM <sub>10</sub> TWA (Action Level: 339 μg/m³) |                   |       |       |  |  |
|-----------|--|-------------------|-------|-------|--|--|
| Date      | AMS 1  | AMS 2             | AMS 3 | AMS 4 |  |  |
| 2/8/2021  | N/A  | N/A               | N/A   | N/A   |  |  |
| 2/9/2021  | N/A  | N/A               | N/A   | N/A   |  |  |
| 2/10/2021 | N/A  | N/A               | N/A   | N/A   |  |  |
| 2/11/2021 | N/A  | N/A               | N/A   | N/A   |  |  |
| 2/12/2021 | 19.6   | 23.9              | 31.7  | 16.3  |  |  |
| 2/13/2021 | 24.0   | 40.0              | 28.3  | 22.2  |  |  |
| 2/14/2021 | 27.8   | 49.0              | 30.5  | 26.8  |  |  |
|           |  | Weekly Statistics |       |       |  |  |
| Max       | 27.8   | 49.0              | 31.7  | 26.8  |  |  |
| Average   | 18.7   | 29.7              | 23.4  | 16.3  |  |  |

Note: Highlighted cells indicate exceedance of the action level. Monitoring resumed on 2/12/2021 to coincide with site activity.

Table 3: Weekly Hand-Held Data Summary for PM<sub>10</sub> Concentration

| Maximum Instantaneous Hand-Held PM <sub>10</sub> Concentration |                          |       |          |  |  |  |
|--|--------------------------|-------|----------|--|--|--|
| Date   | PM <sub>10</sub> (μg/m³) | Time  | Location |  |  |  |
| 2/8/2021   | N/A                      | N/A   | N/A      |  |  |  |
| 2/9/2021   | N/A                      | N/A   | N/A      |  |  |  |
| 2/10/2021  | N/A                      | N/A   | N/A      |  |  |  |
| 2/11/2021  | N/A                      | N/A   | N/A      |  |  |  |
| 2/12/2021  | 47                       | 10:00 | AMS3     |  |  |  |

Note: Monitoring resumed on 2/12/2021 to coincide with site activity.

Table 4: Weekly Elevated Readings Summary

| Location | Date | Time | Weather Conditions | Elevated<br>Concentration | Explanation |
|----------|------|------|--------------------|---------------------------|-------------|
| N/A      | N/A  | N/A  | N/A                | N/A                       | N/A         |

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub> Summary

| Program-to-Date Averages (Cr <sup>+6</sup> & Total Dust Results from 11/30/20-12/22/20) |       |       |       |       |  |  |
|---|-------|-------|-------|-------|--|--|
|   | AMS 1 | AMS 2 | AMS 3 | AMS 4 |  |  |
| Cr <sup>+6</sup> Concentration (ng/m <sup>3</sup> )                                     | 6.0   | 6.7   | 2.8   | 7.1   |  |  |
| Total Dust Concentration (µg/m³)  | 58.9  | 62.3  | 24.9  | 58.4  |  |  |
| Real-Time PM <sub>10</sub> (µg/m <sup>3</sup> )   | 19.1  | 26.0  | 21.3  | 22.1  |  |  |

ng/m³ - Nanograms per cubic meter

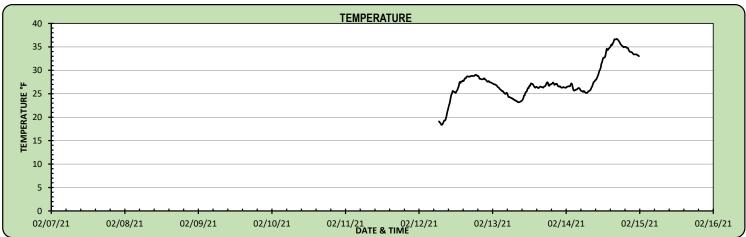
NA - Not Applicable

μg/m³ - Micrograms per cubic meter



Figure 1: Meteorological Data





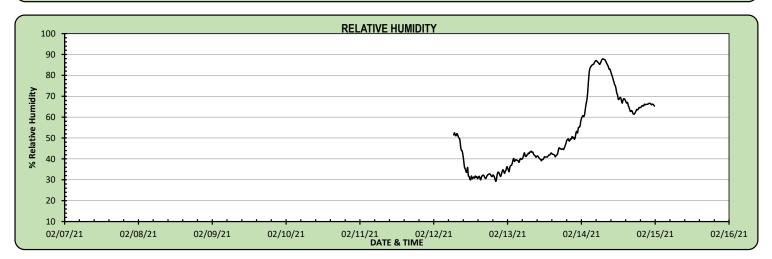




Figure 2: Station Location Map





### **Weekly Air Monitoring Summary**

Client: PPG Industries

Location: Site 107: Fashionland Site - Jersey City, NJ

This weekly air monitoring report includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan for the above-referenced project and reporting period. The following information is provided in the data summary:

- Table 1: Site-Specific Alarm Levels;
- Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary;
- Table 3: Weekly Hand-Held Data Summary;
- **Table 4:** Weekly Elevated Readings Summary for PM<sub>10</sub>;
- Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub>;
- Figure 1: Meteorological Data; and
- Figure 2: Station Location Map.

This report covers real-time air monitoring from February 15 through February 21, 2021 at the Fashionland Site (Site). Real-time air monitoring is divided into three types of monitoring including; perimeter air monitoring (at the site boundaries), meteorological monitoring, and hand-held monitoring. The air monitoring report details results associated with the site, consisting of 4 stations and periodic hand-held monitoring. See Figure 2 for station locations.

## Perimeter air monitoring includes the following:

- Real-time 15-minute average PM<sub>10</sub> readings at each location during the work day;
- · Periodic hand-held readings during remedial activities;
- Time integrated 8-to-10-hour Total Dust and Hexavalent Chromium laboratory sampling;
- Time integrated 24-hour Total Dust and Hexavalent Chromium laboratory sampling; and
- Meteorological measurements of 15-minute average wind speed, relative humidity, and temperature are recorded onsite at Air Monitoring Station 3.

## Summary of Real-Time Air Monitoring Results for PM<sub>10</sub> Concentrations

15-minute Time Weighted Average (TWA)  $PM_{10}$  Site action levels are shown in Table 1. The maximum 15 minute TWA  $PM_{10}$  readings are shown in Table 2. The maximum hand-held  $PM_{10}$  concentrations are shown in Table 3. Elevated readings above the Site alarm levels are presented and explained in Table 4, if applicable.

### Summary of the Program-to-Date Integrated Sampling and Real-Time Air Monitoring Results

Integrated sampling results for hexavalent chromium ( $Cr^{+6}$ ) and total dust are updated when available. Program-to-date average concentrations for integrated  $Cr^{+6}$ , total dust, and real-time  $PM_{10}$  readings are shown in Table 5.

#### **Summary of Meteorological Monitoring**

The time series plots of wind speed, temp, and relative humidity for the report period are shown in Figure 1.



Table 1: Site-Specific Action Levels

| Alarm Levels     | Alert Level (15 minute TWA) | Action Level (15 minute TWA) |
|------------------|-----------------------------|------------------------------|
| PM <sub>10</sub> | 255 μg/m³                   | 339 µg/m³                    |

Table 2: Weekly Real-Time PM<sub>10</sub> Data Summary

|           | Maximum 15-Minute PM <sub>10</sub> TWA (Action Level: 339 μg/m³) |       |       |       |  |  |  |
|-----------|--|-------|-------|-------|--|--|--|
| Date      | AMS 1  | AMS 2 | AMS 3 | AMS 4 |  |  |  |
| 2/15/2021 | 49.1   | 68.8  | 42.2  | 39.9  |  |  |  |
| 2/16/2021 | 46.8   | 59.0  | 33.5  | 54.0  |  |  |  |
| 2/17/2021 | N/A  | N/A   | N/A   | N/A   |  |  |  |
| 2/18/2021 | N/A  | N/A   | N/A   | N/A   |  |  |  |
| 2/19/2021 | N/A  | N/A   | N/A   | N/A   |  |  |  |
| 2/20/2021 | N/A  | N/A   | N/A   | N/A   |  |  |  |
| 2/21/2021 | N/A  | N/A   | N/A   | N/A   |  |  |  |
|           | Weekly Statistics  |       |       |       |  |  |  |
| Max       | 49.1   | 68.8  | 42.2  | 54.0  |  |  |  |
| Average   | 20.9   | 42.8  | 23.7  | 18.0  |  |  |  |

Note: Highlighted cells indicate exceedance of the action level. Monitoring discontinued after 2/16/21 due to completion of intrusive activities. Monitoring stations removed on 2/17/21.

Table 3: Weekly Hand-Held Data Summary for PM<sub>10</sub> Concentration

| Maximum Instantaneous Hand-Held PM₁₀ Concentration |                          |       |          |  |  |
|--|--------------------------|-------|----------|--|--|
| Date   | PM <sub>10</sub> (µg/m³) | Time  | Location |  |  |
| 2/15/2021  | 33                       | 10:00 | AMS4     |  |  |
| 2/16/2021  | 29                       | 9:00  | AMS3     |  |  |
| 2/17/2021  | N/A                      | N/A   | N/A      |  |  |
| 2/18/2021  | N/A                      | N/A   | N/A      |  |  |
| 2/19/2021  | N/A                      | N/A   | N/A      |  |  |

Note: Monitoring discontinued after 2/17/21 due to completion of intrusive activities. Monitoring stations removed on 2/17/21.

Table 4: Weekly Elevated Readings Summary

| Location | Date | Time | Weather Conditions | Elevated<br>Concentration | Explanation |
|----------|------|------|--------------------|---------------------------|-------------|
| N/A      | N/A  | N/A  | N/A                | N/A                       | N/A         |

Table 5: Program-to-Date Average Concentrations for Hexavalent Chromium, Total Dust, and Real-Time PM<sub>10</sub> Summary

| Program-to-Date Averages (Cr <sup>+6</sup> & Total Dust Results from 11/30/20-2/16/21) |       |       |       |       |  |  |
|--|-------|-------|-------|-------|--|--|
|  | AMS 1 | AMS 2 | AMS 3 | AMS 4 |  |  |
| Cr <sup>+6</sup> Concentration (ng/m <sup>3</sup> )                                    | 5.8   | 6.4   | 2.6   | 6.7   |  |  |
| Total Dust Concentration (µg/m³)   | 56.9  | 60.1  | 23.5  | 56.8  |  |  |
| Real-Time PM <sub>10</sub> (μg/m <sup>3</sup> )  | 19.5  | 27.7  | 21.5  | 21.8  |  |  |

ng/m³ - Nanograms per cubic meter

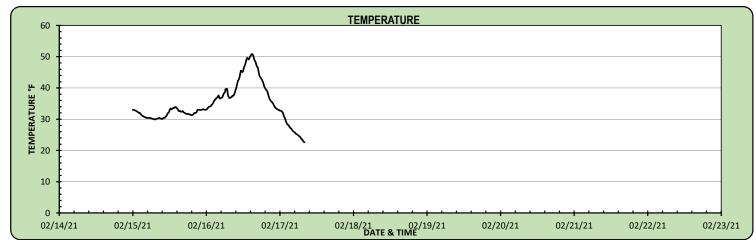
NA - Not Applicable

 $\mu\text{g/m}^3$  - Micrograms per cubic meter



Figure 1: Meteorological Data





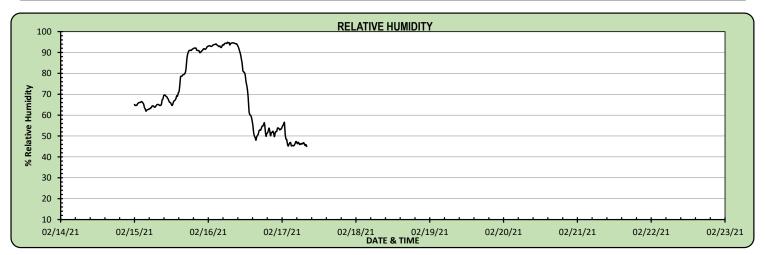




Figure 2: Station Location Map





# **Appendix D-2**

**Monthly Analytical Reports** 

# December 2020 & February 2021 Air Quality Report Site 107, Fashionland

Attached is a technical summary of air quality data for December 2020, including November 30, 2020, and February 2021 at the Site 107 cleanup site submitted by PPG Industries' air monitoring consultant.

This report provides air monitoring information about conditions at the perimeter associated with Site 107 (Fashionland).

Also, this document notes any deviations from the monitoring plan and work schedule caused by factors beyond the control of cleanup contractors, such as inclement weather and malfunctioning equipment.





Monthly Air Monitoring Report Site 107, Fashionland Jersey City, New Jersey

Reporting Period: December 2020 & February 2021

# Monthly Air Monitoring Report Site 107, Fashionland Jersey City, New Jersey

Reporting Period: December 2020 & February 2021

Prepared By: Carey Wu

Carry Nu

Reviewed By: Dave Tomsey

February 25, 2021

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# **List of Acronyms**

AAC – Acceptable Air Concentration

AMP – Air Monitoring Plan

AMS – Air Monitoring Station

Cr+6 - Hexavalent Chromium

FAM - Fixed Air Monitoring

LPM - Liters per Minute

ng/m<sup>3</sup> – Nanograms per Cubic Meter of Air

NJDEP - New Jersey Department of Environmental Protection

PM<sub>10</sub> – Particulate Matter 10 Microns or less in Diameter

PPG – PPG Industries, Inc.

μg/m<sup>3</sup> – Micrograms per Cubic Meter of Air

# **Executive Summary**

Air monitoring conducted at Site 107 was completed in accordance with the Site-Specific Air Monitoring Plan (AMP), and included sampling and analysis for 8-hour integrated hexavalent chromium (Cr<sup>+6</sup>) and total particulates, as well as real-time monitoring for PM<sub>10</sub> at all air monitoring stations. In addition to the air monitoring conducted in accordance with the AMP, 24-hour Cr<sup>+6</sup> and total particulate sampling with lab analysis was also conducted at one station. This program is designed to measure various aspects of air quality at the Site to ensure that remedial activities at the Site do not have an adverse effect on Site workers and the surrounding community.

Results of the integrated Cr<sup>+6</sup> sampling and analysis indicate that program-to-date average airborne Cr<sup>+6</sup> concentrations are significantly below the Acceptable Air Concentration (AAC) at each of the AMS locations. The results and calculations document continuing compliance with the current AAC set by the New Jersey Department of Environmental Protection (NJDEP), confirm that dust control measures continue to be effective, and indicate that the levels of Cr<sup>+6</sup> in dust generated at the Site do not represent an emission source of Cr<sup>+6</sup> sufficient to create potential offsite exposure to Cr<sup>+6</sup> at or exceeding the AAC.

# 1.0 Introduction

This monthly air monitoring report update includes both tabular information and written discussions summarizing the ambient air quality data collected in accordance with the Air Monitoring Plan (AMP) at Site 107 (referred herein as Site), in Jersey City, New Jersey.

This monthly report is designed to provide a summary of the air monitoring data collected during the intrusive activities associated with Site 107 through the reporting period. This monthly report includes both monthly and program-to-date summaries of the following:

- Integrated hexavalent chromium analytical results;
- Integrated total particulate analytical results;
- Real-time 15-minute average PM<sub>10</sub> readings; and
- Meteorological conditions.

Results have been evaluated and compared to the Site-specific Acceptable Air Concentration (AAC) and the Action Levels in accordance with the AMP.

# 2.0 Air Monitoring

This report summarizes air monitoring at the Site performed during the reporting period, with a focus on data collected during the recent month of activities. No baseline monitoring was conducted for this work as it is a continuation of work completed in 2018 and 2019 at the Site.

Intrusive activities began in the northern portion of the Site on November 30, 2020. Air monitoring stations provided protection during intrusive work from November 30, 2020 through December 22, 2020 and February 12, 2021 through February 16, 2021. The site contains four ground level stations. One station collects Cr<sup>+6</sup> and total particulate samples for 24 hours during the week and 72 hours over the weekend. **Figure 2-1** provides an overview of the Site and a typical configuration of the AMS for the Site through the end of the reporting period. **Table 2-1** provides an overview of the air monitoring approach.

Air monitoring results to date have confirmed protection of the community, and the overall effectiveness of the program will be evaluated on a continuous basis. Success will ultimately be determined at the end of the remediation program when the average Cr<sup>+6</sup> concentrations at each AMS location are compared to the AAC. This monthly report has been designed to evaluate the program's effectiveness on a monthly basis and a program-to-date basis. The Cr<sup>+6</sup> average concentrations measured at each AMS will continually be compared to the site-specific AAC for Cr<sup>+6</sup> to confirm the effectiveness of the program. Thus, the monthly reports will focus largely on the integrated analytical results collected as part of the Cr<sup>+6</sup> fence-line air monitoring.

Air monitoring data collected at the Site includes:

- 8-hour integrated Cr<sup>+6</sup> and total particulate sample collection and associated laboratory analysis;
- 24-hour and 72-hour integrated Cr<sup>+6</sup> and total particulate samples collection and laboratory analysis; and
- Real-time 15-minute average PM<sub>10</sub>, readings measured at the perimeter.
- Hand-held readings for PM<sub>10</sub> measured at the perimeter.

The following sections outline the types of data collected, frequency of collection, and the corresponding locations.

Table 2-1: Air Monitoring Approach

| Site     | Station                   | Integrated Air Monitoring   | Real-Time Air Monitoring   |
|----------|---------------------------|---|--|
| Site 107 | AMS1, AMS2,<br>AMS3, AMS4 | Integrated 8-hour Cr <sup>+6</sup> and total particulate sampling and analysis during work days. One 24-hour sample during the week and 72-hour over the weekend. | 15-minute average PM <sub>10</sub> readings measured for a 24-hour period. |

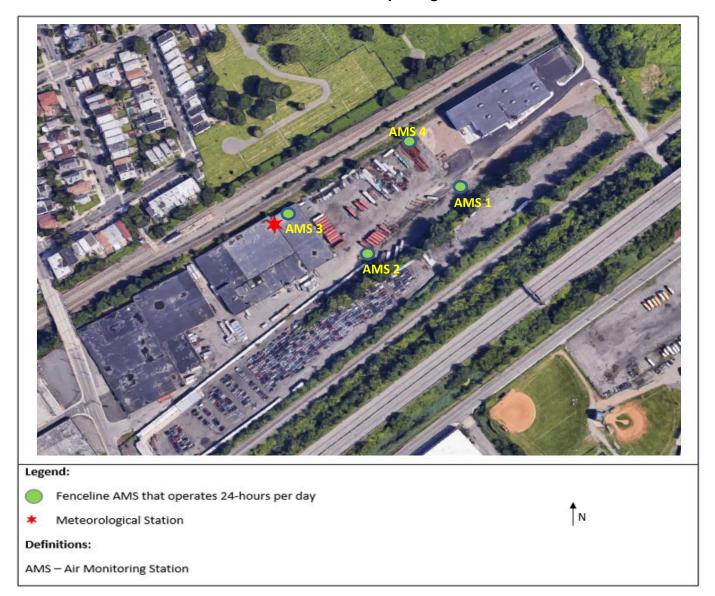
Note: 24-hour and 72-hour Cr<sup>+6</sup> sampling was conducted at station AMS3 for the reporting period.

# 2.1 Integrated Air Sampling

Integrated Cr<sup>+6</sup> and total particulate samples are collected at each of the AMS for an 8-hour-to-10-hour duration each working day (typically Monday – Friday). Samples are collected on a pre-weighed polyvinyl chloride 37mm filter cassette for both Cr<sup>+6</sup> and total particulate. Sampling pumps operate at or around 2 liters per minute and are calibrated at the beginning and end of each sampling run.

Figure 2-1: Site Overview

11/30/2020 - End of Reporting Period



# 2.1.1 Integrated Cr<sup>+6</sup> Sampling

The exposed Cr<sup>+6</sup> filters are shipped to an American Industrial Hygiene Association Industrial Hygiene Laboratory Accreditation Program-certified analytical laboratory for Cr<sup>+6</sup> analysis using Modified OSHA ID 215. The sample weights are provided by the laboratory with a laboratory detection limit of 20.0 ng. The sample weights and flow information are utilized to calculate 8-hour to 10-hour integrated Cr<sup>+6</sup> air concentrations in nanograms per cubic meter of air (ng/m³). Filter weights reported as non-detect are included in the concentration calculation at one-half the laboratory detection limit for data reporting purposes.

In addition to sampling performed during working hours, 24-hour and 72-hour Cr<sup>+6</sup> sampling and analysis are also performed at one AMS. These longer duration samples show Cr<sup>+6</sup> concentrations during overnight and weekend periods. The 24-hour samples are typically collected daily from 7AM to 7AM Monday through Thursday, and a single 72-hour sample is collected from 7AM Friday through 7AM Monday.

## 2.1.2 Integrated Total Particulate Sampling

The exposed total particulate filters are shipped to an American Industrial Hygiene Association Industrial Hygiene Laboratory Accreditation Program-certified analytical laboratory for total particulate analysis using NIOSH Method 0500. The sample weights are provided by the laboratory with a laboratory detection limit of 100 ug. The sample weights and flow information are utilized to calculate 8-hour-to-10-hour integrated total particulate air concentrations in micrograms per cubic meter of air ( $\mu$ g/m³). Filter weights reported as non-detect are included in the concentration calculation at one half the laboratory detection limit for data reporting purposes.

# 2.2 Real-Time Air Monitoring

Real-time air monitoring is divided into two types of monitoring including: perimeter monitoring and meteorological monitoring. Each monitoring type is described in more detail in the following sections.

## 2.2.1 Perimeter

Perimeter air monitoring consists of ground level stations at the perimeter of the Site. Perimeter monitoring includes the following:

Real-time 15-minute average PM<sub>10</sub> readings at each AMS location. All AMS operate 24 hours during remedial activities, Monday through Sunday.

## 2.2.2 Meteorological Measurements

Meteorological measurements of 15-minute average wind speed and direction, relative humidity, pressure, and temperature are recorded onsite at station AMS-3, 24-hours a day, seven days a week.

# 2.3 Hand-held Air Monitoring

Hand-held air monitoring consists of the collection of perimeter PM<sub>10</sub> readings. Monitoring is described in more detail in the following section.

# 2.3.1 Perimeter PM<sub>10</sub> Hand-held Monitoring

Hand-held readings will be taken along the downwind perimeter of the Site periodically each day during remedial activities and logged to be reported weekly. The readings will be collected as instantaneous readings and if levels are elevated, 15-minute averages will be recorded for comparison to adjacent perimeter stations.

# 3.0 Site-Specific Acceptable Air Concentration and Real-Time Action Levels

Site-specific Acceptable Air Concentration (AAC) and real-time Action Levels have been established for Cr<sup>+6</sup> and real-time PM<sub>10</sub> concentrations by NJDEP as part of the approved AMP, in compliance with risk assessment procedures. The AAC and real-time Action Levels have been developed to protect off-site receptors from potential adverse health impacts from Cr<sup>+6</sup> and particulates over the duration of the intrusive remediation activities.

Real-time monitoring and integrated results are compared against the AAC and the real-time action levels to alert Site management of the potential need to enhance control of emissions and curtail operations to maintain concentrations at levels below the specified criteria. The AAC and real-time action levels for integrated Cr<sup>+6</sup> concentrations and real-time PM<sub>10</sub> are outlined in the following sections.

## 3.1 Integrated Cr<sup>+6</sup> Acceptable Air Concentration

A Site-specific Cr<sup>+6</sup> AAC has been established by NJDEP to protect off-site receptors from potential adverse health impacts due to potential exposure to Cr<sup>+6</sup> in dust. The AAC for Cr<sup>+6</sup> was developed to represent the maximum allowable average concentration of Cr<sup>+6</sup> in the air at each AMS over the project duration. The AAC is protective of human health based on a carcinogenic exposure endpoint with a duration more than one calendar year for intrusive remedial activities.

The AAC of 100 ng/m³ is applicable at the perimeter and represents the maximum allowable average concentration measured over the project duration and was developed to ensure the protection of human health. This AAC is also used to evaluate the effectiveness of dust control. PPG has established an operational goal of achieving a project average hexavalent chromium air concentration of 49 ng/m³ to the extent practicable using best management practices throughout the duration of intrusive remedial activities at the site.

To ensure ongoing compliance with the AAC, shorter duration rolling averages are utilized to provide for the early and regular assessment of performance trends and, if necessary, allow for responsive corrective measures to be implemented to ensure that emissions of Cr<sup>+6</sup> are maintained well below the AAC over the duration of the project, and are minimized to the greatest extent practicable. These shorter duration average concentrations metrics include: program-to-

date, 90-day, 60-day, and 15-day running averages where the average Cr<sup>+6</sup> concentration over the previous 90-day, 60-day, and 15-day periods are calculated for each sample day. Sampling days are considered days where routine sampling was conducted (typically Monday – Friday). The shorter-term average concentrations are compared against the list of metrics provided in Table 3-1 which also depicts respective response actions.

Table 3-1: Running Cr<sup>+6</sup> Metrics

| Metric Observation  | Response Action  |  |  |  |  |
|---|--|--|--|--|--|
| 15-day <sup>1</sup> Cr <sup>+6</sup> average concentration greater than or equal to 100 ng/m3 | External meeting to review levels, evaluate activities each day when elevated concentrations were observed, and trigger corrective action if required. |  |  |  |  |
| 60-day <sup>1</sup> Cr <sup>+6</sup> average concentration greater than or equal to 90 ng/m3  |  |  |  |  |  |
| 90-day <sup>1</sup> Cr <sup>+6</sup> average concentration greater than or equal to 81 ng/m3  |  |  |  |  |  |
| <sup>1</sup> Refers to days on which samples were collected, not necessarily calendar days    |  |  |  |  |  |

## 3.2 Real-Time Alert and Action Levels

Real-time Alert and Action Levels were designed to monitor and assist in control of Site emissions to ensure protection of human health, and represent an important aspect of the remedial program at the Site. The real-time Alert and Action Levels used on Site are shown in Table 3-2.

Table 3-2: Site-specific Alert and Action Levels

| Parameter        | Alert Level (15-min TWA) | Action Level (15-min TWA) |  |
|------------------|--------------------------|---------------------------|--|
| PM <sub>10</sub> | 235 μg/m³                | 339 µg/m³                 |  |

# 4.0 Air Sampling and Monitoring Results

Results of air sampling and monitoring conducted between November 30, 2020 and February 16, 2021 are summarized herein. The following sections present both tabular and written discussions of the air sampling and monitoring results for the reporting period including:

- Monthly integrated and real-time results;
- Program-to-date integrated and real-time statistics;
- Evaluation of program success versus the Site-specific AAC and action levels;
- Meteorological results; and
- Hand-held monitoring results

Air sampling and monitoring results are presented in detail in the Appendices of this report. Appendix A includes summary of the air sampling and monitoring results for the reporting period. Appendix B includes program-to-date statistics and monthly comparison of results.

# 4.1 Integrated Air Sampling Results

Results of the integrated Cr<sup>+6</sup> and total particulate sampling and analysis are presented in the following sections.

# 4.1.1 Cr<sup>+6</sup> Sampling Results

Results of the Cr<sup>+6</sup> sampling from the reporting period and a program-to-date evaluation are discussed in the following sections.

## Reporting Period

Individual integrated 8-hour Cr<sup>+6</sup> concentrations measured during the reporting period are presented in Table A-1. If an individual sample result exceeds 80% of the project duration AAC, additional evaluation and review of relevant Site conditions and activities were performed to potentially modify procedures if necessary to reduce the potential for increasing Cr<sup>+6</sup> concentration trends. Any elevated concentration data during the reporting period are listed and discussed in Table A-5.

# Program-to-date

Sampling and analytical statistics for integrated 8-hour Cr<sup>+6</sup> results are shown in Table B-1 and include various program-to-date metrics relative to Cr<sup>+6</sup> analytical data. Monthly average 8-hour Cr<sup>+6</sup> concentration results are shown in Table B-2 for each AMS location.

Table 4-1: Short-Term Average 8-hour Integrated Cr<sup>+6</sup> Metrics

| Running Cr <sup>+6</sup> Metrics <sup>1</sup> |                   | Site 107       |                |                |                |
|---|-------------------|----------------|----------------|----------------|----------------|
|   | Metric<br>(ng/m³) | AMS-1<br>ng/m³ | AMS-2<br>ng/m³ | AMS-3<br>ng/m³ | AMS-4<br>ng/m³ |
| 15-day²                                       | 100               | 5.8            | 6.4            | 2.6            | 6.7            |
| 60-day <sup>2</sup>                           | 90                | N/A            | N/A            | N/A            | N/A            |
| 90-day <sup>2</sup>                           | 81                | N/A            | N/A            | N/A            | N/A            |
| PTD <sup>3</sup>                              | 73                | 5.8            | 6.4            | 2.6            | 6.7            |

ng/m<sup>3</sup> – nanograms per cubic meter

N/A – Not available due to insufficient amount of sampling days to calculate the metric.

- 1. Running Cr<sup>+6</sup> metrics are utilized to provide for the early and regular assessment of performance trends and, if necessary, allow for responsive corrective measures to be implemented ensuring that emissions of Cr<sup>+6</sup> are maintained well below the AAC over the duration of the project, and are minimized to the greatest extent practicable. The running Cr<sup>+6</sup> metrics are designed to evaluate the program success on short duration intervals (monthly) and do not represent the long-term (program) ending success.
- 2. Running Cr<sup>+6</sup> metrics are valid on the last day in the report period and include the previous 15, 60, or 90-days of sample results.
- 3. Program-to-date Air monitoring conducted from November 30, 2020 through the end of the reporting period.

# 4.1.2 Total Particulate Sampling Results

Results of the 8-hour integrated total particulate sampling and analysis from the reporting period and program-to-date results are discussed in the following sections.

# **Reporting Period**

Individual integrated 8-hour total particulate concentrations measured at each station during the reporting period are presented in Table A-2.

## Program-to-date

Sampling and analytical statistics for integrated total particulate are shown in Table B-3 and include various metrics relative to total particulate analytical data. Monthly average total particulate concentration results are shown in Table B-4 for each AMS.

# 4.1.3 Integrated Air Sampling Results Summary

There have been 19 sample days between November 30<sup>th</sup> and the end of the reporting period for stations AMS-1 through AMS-4. The results of the sample analysis are summarized in the following sections.

## **Air Monitoring**

The program through this reporting period shows the 8-hour Cr<sup>+6</sup> average concentrations, based upon lab analytical results at each AMS, were less than 6.74% of the AAC, demonstrating that the dust control measures continue to be effective.

# 4.2 Real-Time Air Monitoring Results

Real-time air monitoring for  $PM_{10}$  is conducted during all remedial activities. The results of the real-time air monitoring are presented in the following sections.

## 4.2.1 PM<sub>10</sub> Monitoring Results

Results of the real-time PM<sub>10</sub> sampling for the reporting period and the start of intrusive activities are discussed in the following sections.

# **Reporting Period**

Real-time 15-minute PM<sub>10</sub> averages measured during the reporting period are presented in Figure A-1. Real-time 15-minute PM<sub>10</sub> averages were compared directly to the PM<sub>10</sub> Action Level (339)

μg/m³) and averages greater than the action level are subject to additional evaluation. If applicable, elevated PM<sub>10</sub> averages are listed and discussed in Table A-5.

#### Program-to-date

Real-time monthly PM<sub>10</sub> averages are shown in Table B-5 for each AMS. Dust readings measured during the reporting period are similar to those during the baseline period (when no intrusive activities were occurring). This indicates that dust control measures during intrusive activities have been effective.

#### 4.3 Meteorological Monitoring Results

Time series plots for wind speed, temperature, and relative humidity for the reporting period are shown in Figure A-2 through Figure A-4, respectively. A wind-rose for the month displaying the primary wind directions is shown in Figure A-5.

#### 4.4 Hand-held Monitoring Results

Maximum hand-held monitoring results during the reporting period are displayed in Table A-3. Readings were compared directly to the 15-Minute TWA Action Level (339 ug/m³) and averages greater than the action level are subject to additional evaluation. If applicable, elevated averages are listed and discussed in Table A-5.

#### 4.5 Site Activities

Activities which occurred on the site during the months of December and February included:

- Excavation and side wall sampling of soils and chromium-impacted soils;
- Stock piling soils from excavations.

#### 4.6 Site Map(s)

Site maps during the reporting period are documented and included in Figure A-6.

#### 5.0 Conclusions

Results of the December 2020 & February 2021 reporting period for the Site 107 air sampling and monitoring program indicate that the average Cr<sup>+6</sup> concentrations for each AMS are well below the site safety goal of 49 ng/m³ and below the AAC of 100 ng/m³. The Cr<sup>+6</sup> concentrations and the percent Cr<sup>+6</sup> in dust samples through this period demonstrate that the dust control measures continue to be effective at maintaining concentrations of Cr<sup>+6</sup> in airborne dust at the Site well below the AAC. These results indicate that dust generated at the Site contains very small percentages of Cr<sup>+6</sup> and does not represent an emission source of Cr<sup>+6</sup> sufficient to create potential offsite exposure to Cr<sup>+6</sup> at or exceeding the AAC.

### Appendix A

### **Monthly Results Summaries**

- Integrated 8-hour Cr<sup>+6</sup> Concentrations
- Integrated 8-hour Total Particulate Concentrations
- Real-time PM<sup>10</sup> Readings
- Hand-held Readings
- Meteorological Data
- Site Map

Table A- 1: Daily Integrated 8-hour Cr<sup>+6</sup> Sampling Results

| Date of Sample               | AMS 1              | AMS 2 | AMS 3 | AMS 4 |
|------------------------------|--------------------|-------|-------|-------|
| Monday, November 30, 2020    | 12.0               | 12.0  | 12.0  |       |
| Tuesday, December 1, 2020    | 4.7                | 4.7   | 1.8   | 4.7   |
| Wednesday, December 2, 2020  | 4.8                | 4.9   | 1.8   | 4.9   |
| Thursday, December 3, 2020   | 4.4                | 4.7   | 1.8   | 4.6   |
| Friday, December 4, 2020     | 4.5                | 4.6   | 0.6   | 4.6   |
| Saturday, December 5, 2020   |                    |       | 0.6   |       |
| Sunday, December 6, 2020     |                    |       | 0.6   |       |
| Monday, December 7, 2020     | 5.5                | 4.7   | 1.7   | 4.6   |
| Tuesday, December 8, 2020    | 4.3                | 4.9   | 1.8   | 4.9   |
| Wednesday, December 9, 2020  | 4.8                | 4.9   | 1.8   | 5.0   |
| Thursday, December 10, 2020  | 4.9                | 4.9   | 5.6   | 5.0   |
| Friday, December 11, 2020    | 4.8                | 11.0  | 2.9   | 5.0   |
| Saturday, December 12, 2020  |                    |       | 2.9   |       |
| Sunday, December 13, 2020    |                    |       | 2.9   |       |
| Monday, December 14, 2020    | 4.8                | 5.0   | 1.8   | 5.0   |
| Tuesday, December 15, 2020   | 5.5                | 5.5   | 1.7   | 5.5   |
| Wednesday, December 16, 2020 | 9.5                | 9.5   | 2.1   | 28.0  |
| Thursday, December 17, 2020  |                    |       | 2.1   |       |
| Friday, December 18, 2020    | 7.0                | 9.5   | 1.5   | 9.5   |
| Saturday, December 19, 2020  |                    |       | 1.5   |       |
| Sunday, December 20, 2020    |                    |       | 1.5   |       |
| Monday, December 21, 2020    | 4.3                | 4.5   | 1.8   | 4.5   |
| Tuesday, December 22, 2020   | 10.5               | 11.5  | 12.5  | 11.0  |
|                              | Temporary Shutdown | •     |       |       |
| Friday, February 12, 2021    | 4.8                | 5.0   | 1.2   | 5.0   |
| Saturday, February 13, 2021  |                    |       | 1.2   |       |
| Sunday, February 14, 2021    |                    |       | 1.2   |       |
| Monday, February 15, 2021    | 4.6                | 4.8   | 1.8   | 4.8   |
| Tuesday, February 16, 2021   | 4.8                | 5.0   | 1.7   | 5.0   |

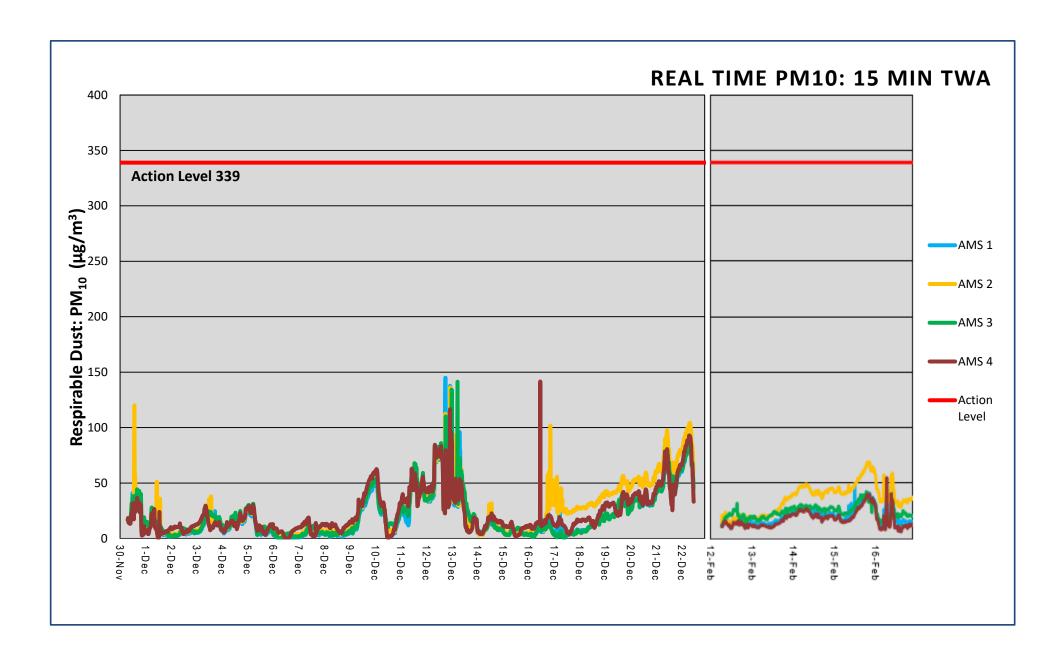
Results in nanograms per cubic meter. Highlighted cells indicate a detectable level of Cr<sup>+6</sup>. All other values are below the laboratory method detection limit (MDL). Values below the MDL are shown in the table at one-half the MDL for data reporting purposes. This established practice is consistent with PPG's Site 114 reporting of non-detects by AECOM. No sample collected at AMS 4 on 11/30/20 due to equipment failure. Monitoring discontinued after 12/22/20 during site shut down and resumed on 02/12/21. Monitoring discontinued after completion of intrusive activities on 02/16/21.

Table A- 2: Daily Integrated 8-hour Total Particulate Sampling Results

| Date of Sample               | AMS 1              | AMS 2 | AMS 3 | AMS 4 |
|------------------------------|--------------------|-------|-------|-------|
| Monday, November 30, 2020    | 115.0              | 120.0 | 115.0 |       |
| Tuesday, December 1, 2020    | 46.0               | 46.0  | 17.5  | 46.0  |
| Wednesday, December 2, 2020  | 47.5               | 48.0  | 17.5  | 48.5  |
| Thursday, December 3, 2020   | 43.5               | 46.0  | 17.0  | 44.5  |
| Friday, December 4, 2020     | 44.5               | 45.5  | 6.0   | 45.5  |
| Saturday, December 5, 2020   |                    |       | 6.0   |       |
| Sunday, December 6, 2020     |                    |       | 6.0   |       |
| Monday, December 7, 2020     | 55.0               | 45.0  | 16.5  | 44.0  |
| Tuesday, December 8, 2020    | 41.5               | 48.0  | 17.5  | 47.5  |
| Wednesday, December 9, 2020  | 46.5               | 47.0  | 17.5  | 48.5  |
| Thursday, December 10, 2020  | 47.0               | 48.0  | 17.5  | 50.0  |
| Friday, December 11, 2020    | 47.0               | 49.0  | 24.0  | 48.5  |
| Saturday, December 12, 2020  |                    |       | 24.0  |       |
| Sunday, December 13, 2020    |                    |       | 24.0  |       |
| Monday, December 14, 2020    | 47.5               | 50.0  | 17.5  | 49.0  |
| Tuesday, December 15, 2020   | 50.0               | 55.0  | 17.0  | 55.0  |
| Wednesday, December 16, 2020 | 95.0               | 95.0  | 8.6   | 100.0 |
| Thursday, December 17, 2020  |                    |       | 8.6   |       |
| Friday, December 18, 2020    | 70.0               | 95.0  | 19.0  | 95.0  |
| Saturday, December 19, 2020  |                    |       | 19.0  |       |
| Sunday, December 20, 2020    |                    |       | 19.0  |       |
| Monday, December 21, 2020    | 42.0               | 44.5  | 17.5  | 44.5  |
| Tuesday, December 22, 2020   | 105.0              | 115.0 | 120.0 | 110.0 |
|                              | Temporary Shutdown |       |       |       |
| Friday, February 12, 2021    | 47.0               | 49.0  | 17.0  | 50.0  |
| Saturday, February 13, 2021  |                    |       | 17.0  |       |
| Sunday, February 14, 2021    |                    |       | 17.0  |       |
| Monday, February 15, 2021    | 45.0               | 47.0  | 17.0  | 46.5  |
| Tuesday, February 16, 2021   | 46.5               | 49.0  | 16.5  | 49.0  |

Results in micrograms per cubic meter. Highlighted cells indicate a detectable level of total particulate. All other values are below the laboratory method detection limit (MDL). Values below the MDL are shown in the table at one-half the MDL for data reporting purposes. This established practice is consistent with PPG's Site 114 reporting of non-detects by AECOM. No sample collected at AMS 4 on 11/30/20 due to equipment failure. Monitoring discontinued after 12/22/20 during site shut down and resumed on 02/12/21. Monitoring discontinued after completion of intrusive activities on 02/16/21.

Figure A- 1: Real-Time 15-minute average PM<sub>10</sub> Monitoring Results



**Table A-3: Daily Maximum Hand-held Monitoring Instantaneous Results** 

| Date                         | PM10 (μg/m³) | Time            | Location |
|------------------------------|--------------|-----------------|----------|
| Monday, November 30, 2020    | 36           | 11:00           | AMS2     |
| Tuesday, December 1, 2020    | 20           | 9:00            | AMS3     |
| Wednesday, December 2, 2020  | 15           | 13:00           | AMS3     |
| Thursday, December 3, 2020   | 22           | 10:00           | AMS1     |
| Friday, December 4, 2020     | 24           | 8:00            | AMS4     |
| Saturday, December 5, 2020   | N/A          | N/A             | N/A      |
| Sunday, December 6, 2020     | N/A          | N/A             | N/A      |
| Monday, December 7, 2020     | 17           | 9:00            | AMS3     |
| Tuesday, December 8, 2020    | 11           | 13:00           | AMS2     |
| Wednesday, December 9, 2020  | 85           | 14:00           | AMS2     |
| Thursday, December 10, 2020  | 59           | 8:00            | AMS2     |
| Friday, December 11, 2020    | 142          | 11:00           | AMS3     |
| Saturday, December 12, 2020  | N/A          | N/A             | N/A      |
| Sunday, December 13, 2020    | N/A          | N/A             | N/A      |
| Monday, December 14, 2020    | 18           | 12:00           | AMS4     |
| Tuesday, December 15, 2020   | 7            | 14:00           | AMS3     |
| Wednesday, December 16, 2020 | 26           | 10:00           | AMS4     |
| Thursday, December 17, 2020  | N/A          | N/A             | N/A      |
| Friday, December 18, 2020    | 7            | 9:00            | AMS3     |
| Saturday, December 19, 2020  | N/A          | N/A             | N/A      |
| Sunday, December 20, 2020    | N/A          | N/A             | N/A      |
| Monday, December 21, 2020    | 141          | 11:00           | AMS2     |
| Tuesday, December 22, 2020   | 116          | 8:00            | AMS3     |
|                              | Temp         | oorary Shutdown |          |
| Friday, February 12, 2021    | 47           | 10:00           | AMS3     |
| Saturday, February 13, 2021  | N/A          | N/A             | N/A      |
| Sunday, February 14, 2021    | N/A          | N/A             | N/A      |
| Monday, February 15, 2021    | 33           | 10:00           | AMS4     |
| Tuesday, February 16, 2021   | 29           | 9:00            | AMS3     |

Note: Blank cells are days where no hand-held monitoring occurred. Monitoring discontinued after 12/22/20 during site shut down and resumed on 02/12/21. Monitoring discontinued after completion of intrusive activities on 02/16/21.

Table A- 5: Elevated Concentration Summary

| . <u>ubio / t o t</u> |      | OTTOOTTE GETOTT | <u> </u> |                    |                        |             |
|-----------------------|------|-----------------|----------|--------------------|------------------------|-------------|
| Parameter             | Date | Time            | Location | Wind<br>Conditions | Elevated Concentration | Explanation |
| N/A                   | N/A  | N/A             | N/A      | N/A                | N/A                    | N/A         |
| N/A                   | N/A  | N/A             | N/A      | N/A                | N/A                    | N/A         |

PM<sub>10</sub> – Respirable Particulate Matter measured in micrograms per cubic meter (µg/m³)

ng/m³ – nanograms per cubic meter

μg/m³ – micrograms per cubic meter

NA – Not Applicable

ND -No Data

Figure A-2: Wind Speed

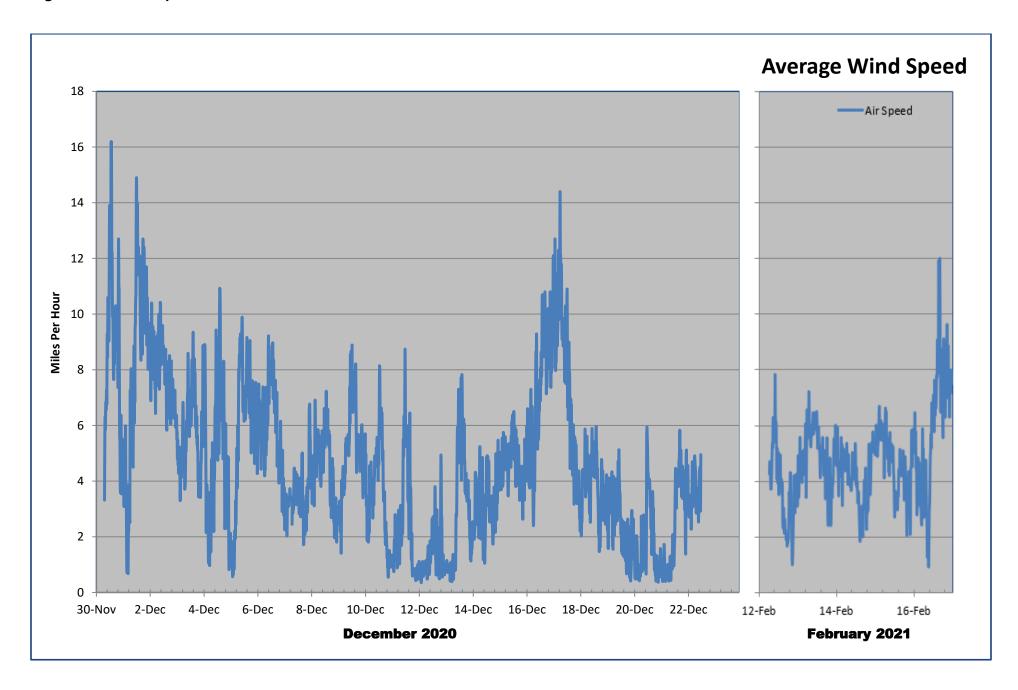


Figure A-3: Temperature

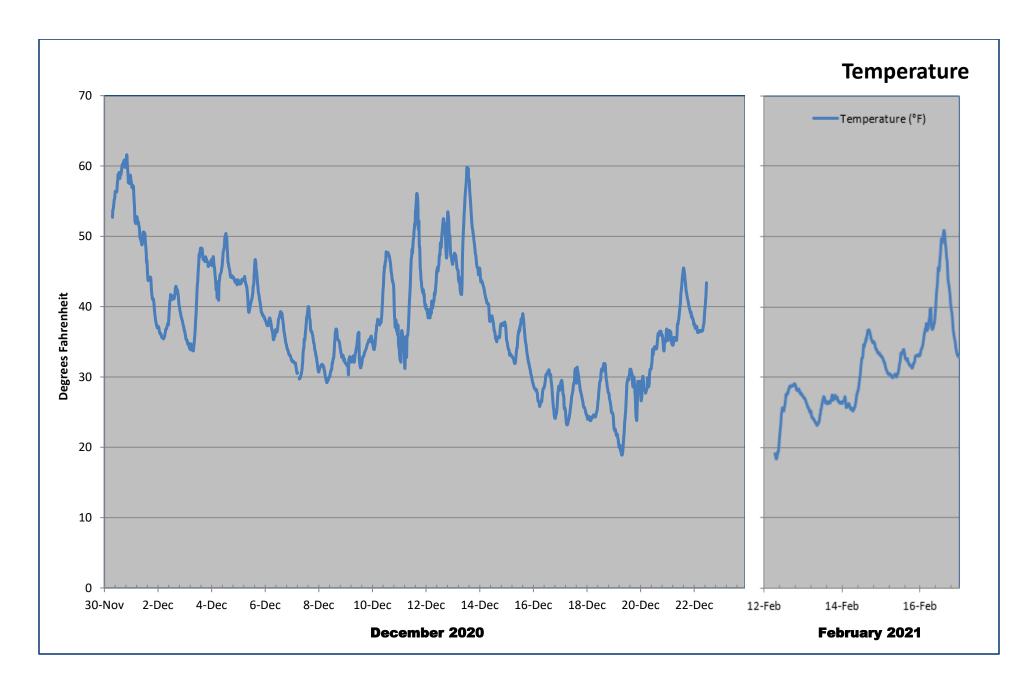


Figure A-4: Relative Humidity

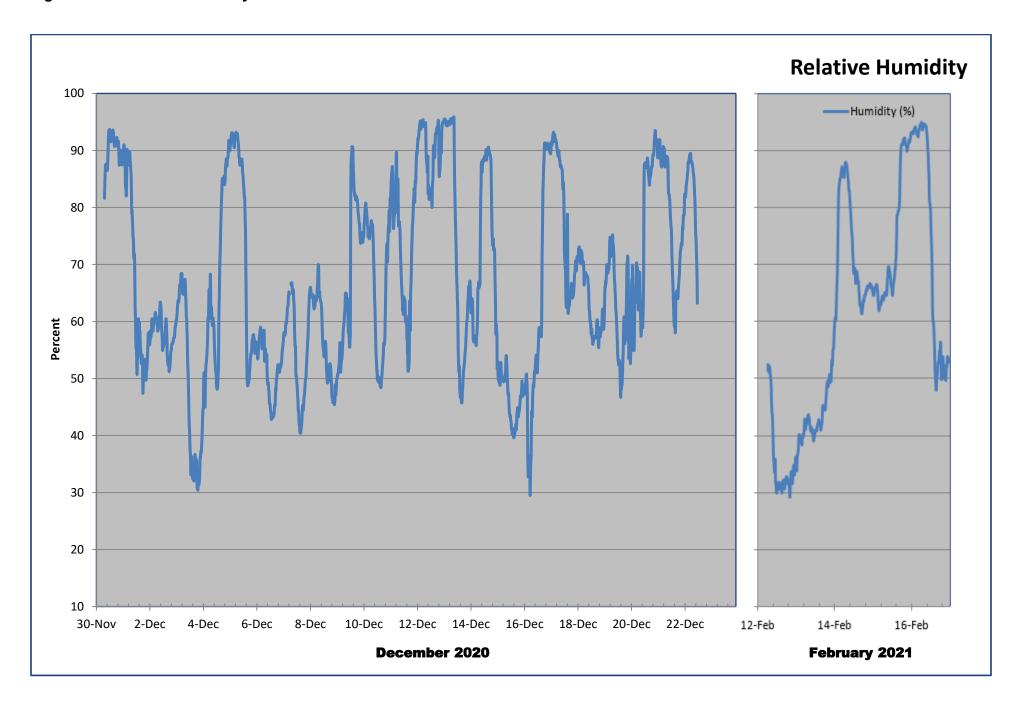


Figure A-5: Monthly Wind-Rose

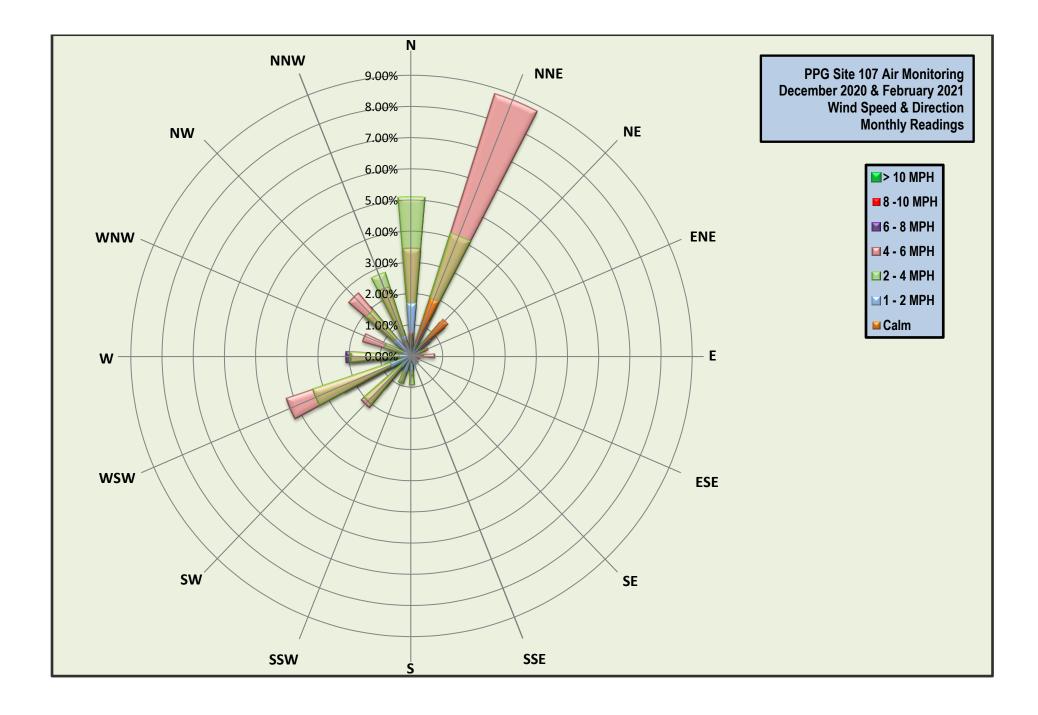
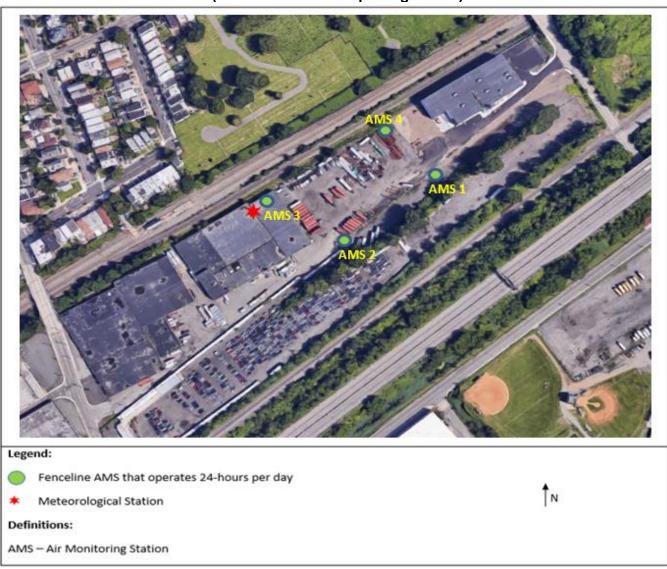


Figure A-6: Site Maps Site 107



(11.30.20 - End of Reporting Period)

### Appendix B

### **Program-to-date Result Summaries**

- Integrated 8-hour Cr<sup>+6</sup> Concentration Summaries
- Integrated 8-hour Total Particulate Concentration Summaries
- Real-time PM<sup>10</sup> Concentrations Summaries

Table B- 1: Program-to-date Integrated 8-hour Cr+6 Sampling Results Statistics

|   |        | Sit    | e 107  |        |
|---|--------|--------|--------|--------|
| Statistics <sup>1</sup>                         | AMS 1  | AMS 2  | AMS 3  | AMS 4  |
| Total Number of Samples <sup>1</sup>            | 19     | 19     | 19     | 18     |
| Rate of Data Collection                         | 100%   | 100%   | 100%   | 100%   |
| Number of Detected<br>Samples <sup>2</sup>      | 0      | 1      | 5      | 1      |
| % of Cr <sup>+6</sup> Samples Greater than MDL  | 0.0%   | 5.3%   | 26.3%  | 5.5%   |
| Number of Samples Above AAC                     | 0      | 0      | 0      | 0      |
| Average % Cr <sup>+6</sup> in Dust <sup>3</sup> | 0.010% | 0.011% | 0.012% | 0.011% |
| Maximum % Cr <sup>+6</sup> in Dust <sup>3</sup> | 0.011% | 0.022% | 0.032% | 0.028% |

Results in ng/m³ – nanograms per cubic meter

<sup>&</sup>lt;sup>1</sup> Total number of samples collected since November 30, 2020. Variations in the number of samples collected are specifically identified in Table A-1 within the report month of the variation. In general variations are caused by sampler malfunctions, site activities, weather conditions, etc.

<sup>&</sup>lt;sup>2</sup> Total number of sample results since November 30, 2020, reported above the laboratory reporting limit.

<sup>&</sup>lt;sup>3</sup> The program-to-date average and maximum percent Cr<sup>+6</sup> in dust was calculated using all the integrated Total Particulate and Cr<sup>+6</sup> sample results collected since November 30, 2020.

Table B- 2: Monthly Average Integrated 8-hour Cr+6 Sampling Results

| Statistics      | Site 107 |       |      |       |  |  |
|-----------------|----------|-------|------|-------|--|--|
| Statistics      | AMS 1    | AMS 2 | AMS3 | AMS 4 |  |  |
| November '20    | 12.0     | 12.0  | 12.0 | N/A   |  |  |
| December '20    | 5.6      | 6.3   | 2.4  | 7.1   |  |  |
| February '21    | 4.7      | 4.9   | 1.4  | 4.9   |  |  |
| Program to Date | 5.8      | 6.4   | 2.6  | 6.7   |  |  |

All readings in ng/m³ – nanograms per cubic meter

Table B- 3: Program-to-date Integrated Total Particulate 8-hour Sampling Results Statistics

|  | Site 107 |       |       |       |  |  |
|--|----------|-------|-------|-------|--|--|
| Statistics                             | AMS 1    | AMS 2 | AMS 3 | AMS 4 |  |  |
| Total Number of Samples <sup>1</sup>   | 19       | 19    | 19    | 18    |  |  |
| Rate of Data Collection                | 100%     | 100%  | 100%  | 100%  |  |  |
| Number of DetectedSamples <sup>2</sup> | 0        | 0     | 3     | 0     |  |  |
| % Detection                            | 0.0%     | 0.0%  | 15.8% | 0.0%  |  |  |

Results in ng/m³ – nanograms per cubic meter

<sup>&</sup>lt;sup>1</sup> Total number of samples collected since November 30, 2020. Variations in the number of samples collected are specifically identified in Table A-1 within the report month of the variation. In general variations are caused by sampler malfunctions, site activities, weather conditions, etc.

<sup>&</sup>lt;sup>2</sup> Total number of sample results since November 30, 2020, reported above the laboratory reporting limit.

Table B- 4: Monthly Average Integrated 8-hour Total Particulate Sampling Results

| Statistics      | Site 107 |       |       |       |  |  |  |
|-----------------|----------|-------|-------|-------|--|--|--|
| Statistics      | AMS 1    | AMS 2 | AMS 3 | AMS 4 |  |  |  |
| November '20    | 115.0    | 120.0 | 115.0 | N/A   |  |  |  |
| December '20    | 55.2     | 58.5  | 20.8  | 58.4  |  |  |  |
| February '21    | 46.2     | 48.3  | 16.9  | 48.5  |  |  |  |
| Program to Date | 56.9     | 60.1  | 23.5  | 56.8  |  |  |  |
|                 |          |       | •     | •     |  |  |  |

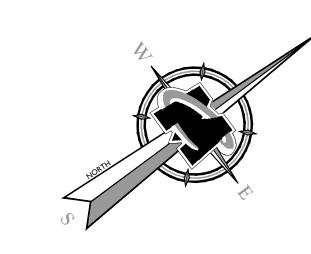
All readings in  $\mu g/m^3$  – micrograms per cubic meter

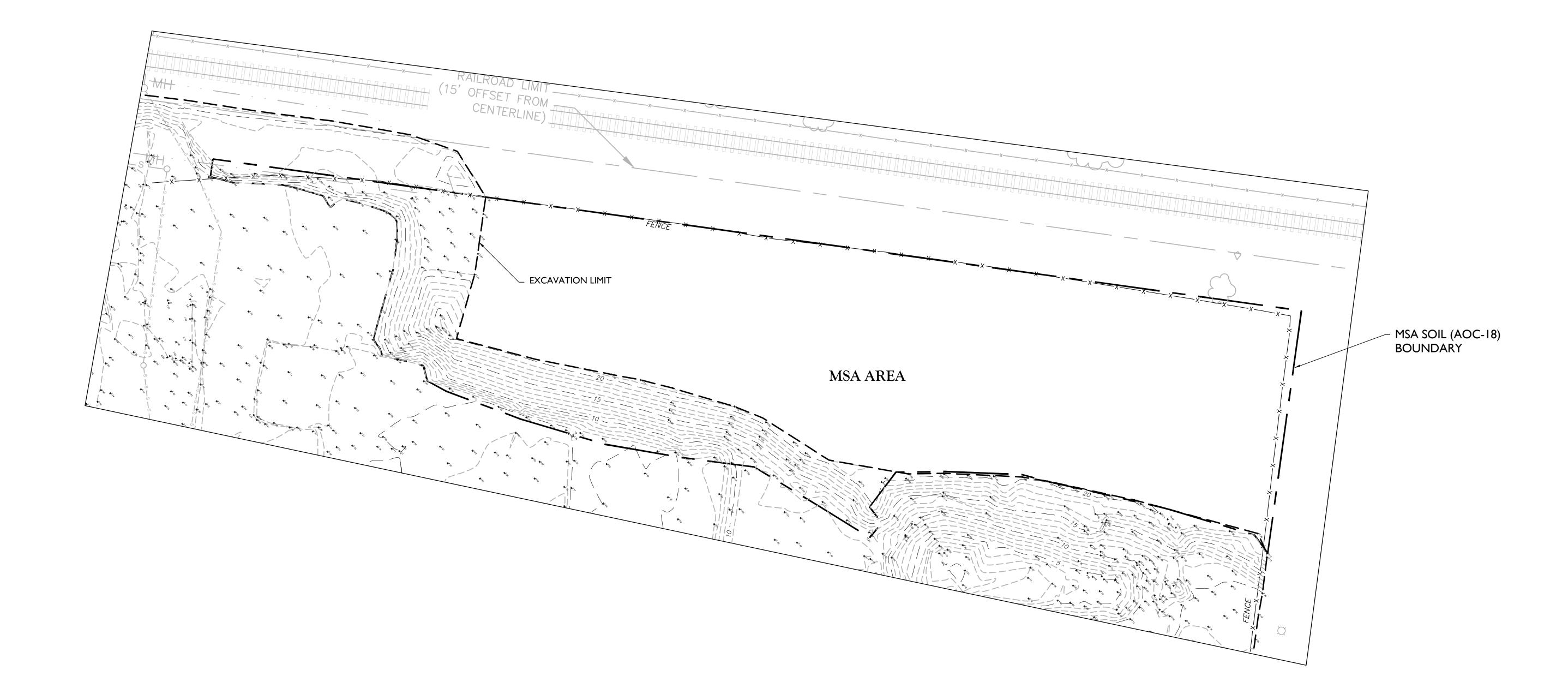
Table B- 5: Monthly Average Real-Time PM<sub>10</sub> Monitoring Results

| Statistics  |         | Sit   | e 107 |       |  |  |  |  |
|---|---------|-------|-------|-------|--|--|--|--|
| Statistics  | AMS 1   | AMS 2 | AMS 3 | AMS 4 |  |  |  |  |
| November '20 23.3 26.3 27.0 19.8                                    |         |       |       |       |  |  |  |  |
| December '20  | 19.0    | 25.5  | 20.9  | 23.0  |  |  |  |  |
| February '21 21.2 37.2 23.5 17.1                                    |         |       |       |       |  |  |  |  |
| Program to Date         19.5         27.7         21.5         21.8 |         |       |       |       |  |  |  |  |
| All readings in μg/m³ – micrograms per cubi                         | c meter |       |       |       |  |  |  |  |

# **Appendix F**

**As-Built Diagrams** 





**LEGEND** 

---- POST EXCAVATION MAJOR CONTOUR

---<sup>19</sup>---- POST EXCAVATION MINOR CONTOUR

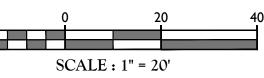
## GENERAL NOTES

- 1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW POST EXCAVATION CONDITIONS &
- ELEVATIONS WITHIN THE MSA AREA AT THE PROJECT SITE.

  2. MSA AREA POST EXCAVATION LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER
- CONSULTING P.A. & ENTACT, LLC. BETWEEN 6/18/18 & 9/27/19
  3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD '88.

## REFERENCES

- 1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.
- 2. PLANS ENTITLED, "FINAL AS-BUILT SURVEY, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A., LAST REVISED 3/26/21.
- 3. PLANS ENTITLED, "POST EXCAVATION SURVEY, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A., LAST REVISED 3/10/21.



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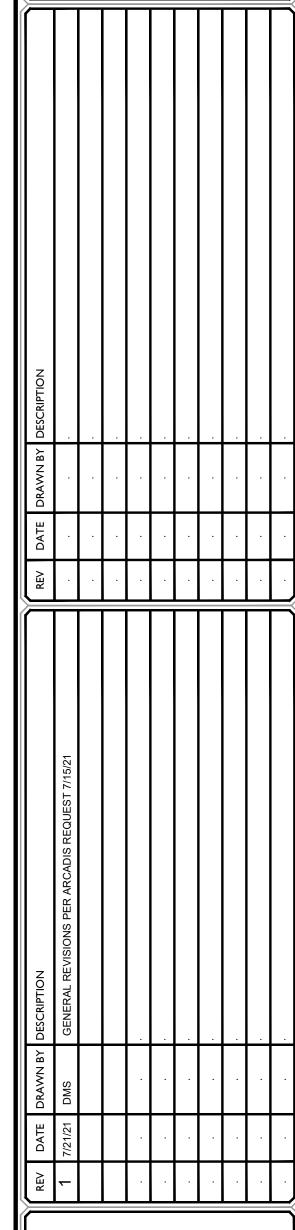
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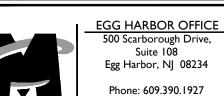
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LAND SURVEYOR - LICENSE NUMBER: GS36737

POST EXCAVATION SURVEY

ENTACT, LLC

MSA AREA
PPG SITE 107
FASHIONLAND
18 CHAPEL AVENUE

JERSEY CITY HUDSON COUNTY NEW JERSEY



Egg Harbor, NJ 08234

Phone: 609.390.1927

Fax: 609.390.0040

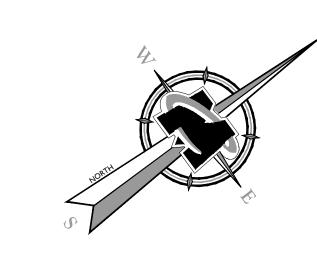
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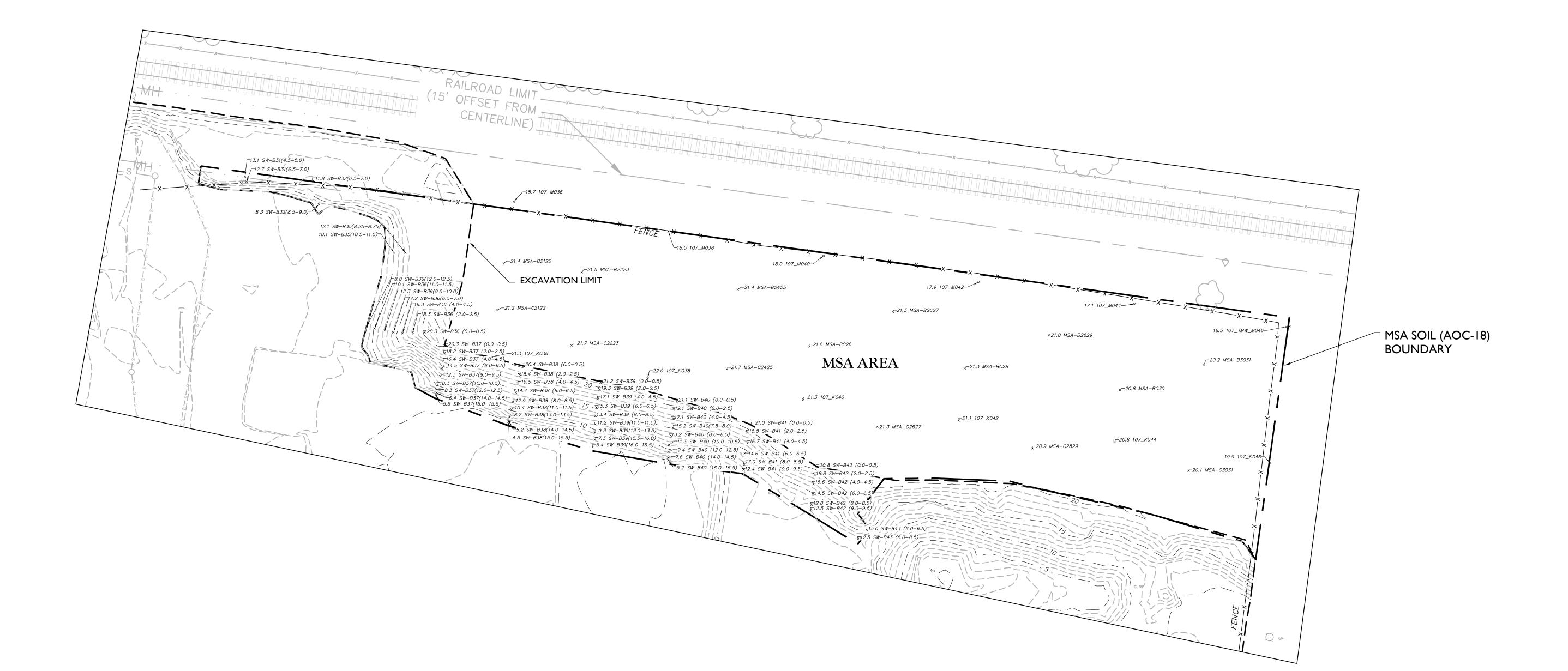
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5 SHOWN 5/14/21 DMS RTH

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17007872A V-POST-EX

POST EXCAVATION SURVEY

NUMBER:





## LEGEND

POST EXCAVATION MAJOR CONTOUR

POST EXCAVATION MINOR CONTOUR

FINAL AS-BUILT MAJOR CONTOUR

FINAL AS-BUILT MINOR CONTOUR

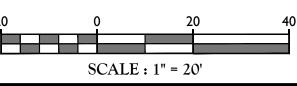
# GENERAL NOTES

- THE SOLE PURPOSE OF THIS PLAN IS TO SHOW POST EXCAVATION SAMPLE LOCATIONS & ELEVATIONS WITHIN THE MSA AREA AT THE PROJECT SITE.
   POST EXCAVATION SAMPLE LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER
- CONSULTING P.A. BETWEEN 11/30/20 AND 12/16/20.

  3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD '88.

## REFERENCES

- 1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.
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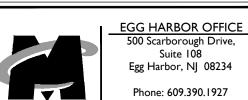
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POST EXCAVATION SAMPLE SURVEY FOR

ENTACT, LLC

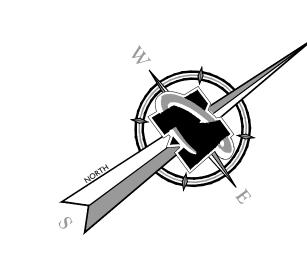
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PPG SITE 107
FASHIONLAND
18 CHAPEL AVENUE

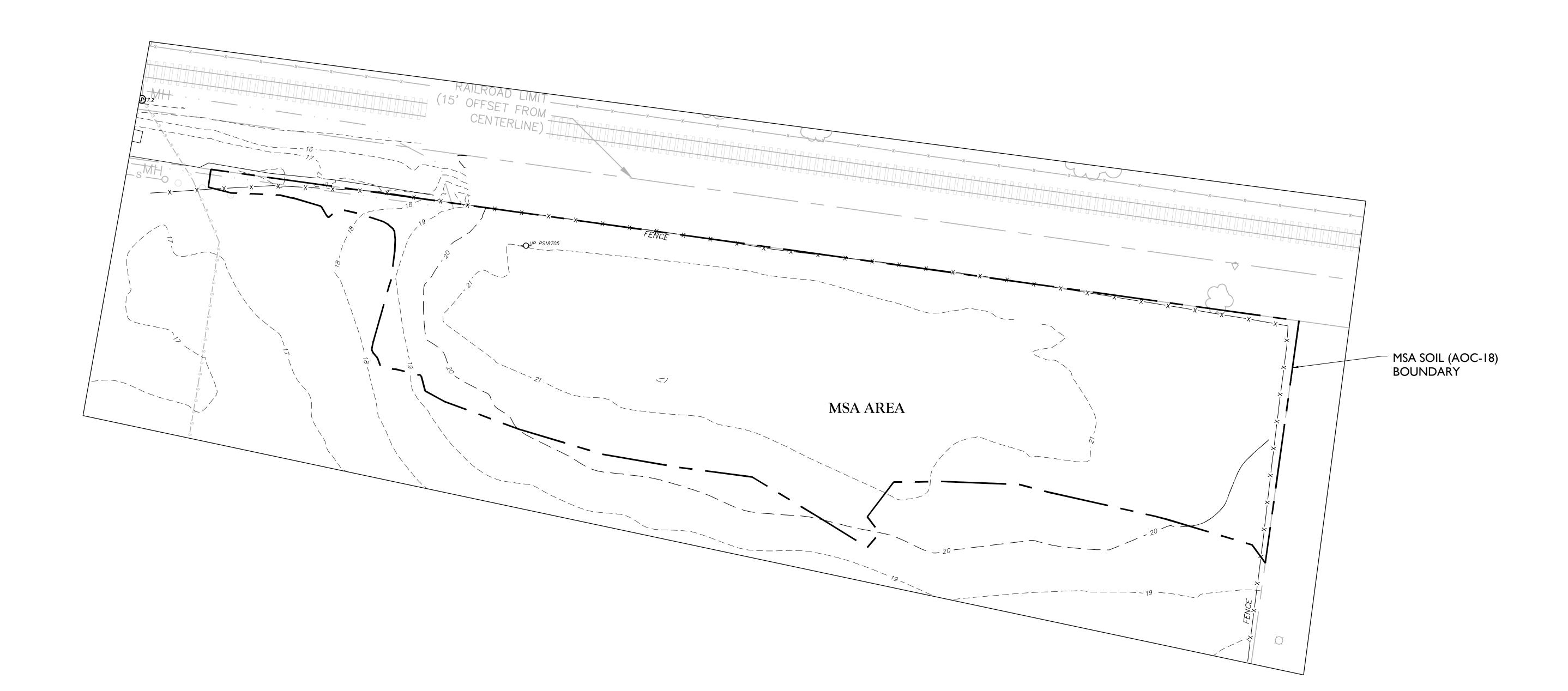
JERSEY CITY HUDSON COUNTY NEW JERSEY



POST EXCAVATION SAMPLE SURVEY

NUMBER:





# LEGEND

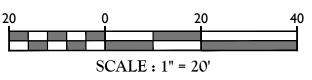
# GENERAL NOTES

- THE SOLE PURPOSE OF THIS PLAN IS TO SHOW THE INTREM AS-BUILT LOCATIONS & ELEVATIONS WITHIN THE MSA AREA OF THE PROJECT SITE.
   MSA INTREM AS-BUILT LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER
- CONSULTING P.A. ON 10/19/19 & 03/10/21.

  3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD '88.

# REFERENCES

- 1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.
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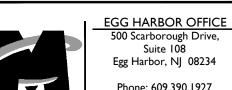
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FINAL AS-BUILT SURVEY

ENTACT, LLC

MSA AREA
PPG SITE 107
FASHIONLAND
18 CHAPEL AVENUE

JERSEY CITY HUDSON COUNTY NEW JERSEY



17007872A V-FNL-ASBT

Phone: 609.390.1927
Fax: 609.390.0040

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FINAL AS-BUILT
TOPOGRAPHIC SURVEY

NUMBER:

# **Appendix G**

**Non-Hazardous Waste Disposal Documentation** 



# Appendix G. Non-Hazardous Waste Disposal Documentation Site 107, AOC 1B. Material Staging Area, Garfield Avenue Group PPG Jersey City, New Jersey

This appendix includes bills of lading (BOLs) for non-hazardous wastes which were removed during implementation of the remedial action for the Material Staging Area Soil (MSA; AOC-1B) at the Hudson County Chrome (HCC) Site 107, Jersey City, New Jersey. As such, BOLs are identified based on waste stream and organized by disposal facility (**Table 1**):

Table 1. Non-Hazardous Waste BOLs Generated for HCC Site 107 MSA

| Profile Number /<br>Approval Number | Profile Name   | Treatment, Storage,<br>Disposal Facility  | Dates                                    | Loads | Volume        |
|-------------------------------------|--|---|--|-------|---------------|
| Soil and Concrete                   |  |   |  |       |               |
| WTS #42761, &<br>WTS #43503         | Non-Hazardous Soil, &<br>Non-Hazardous Soils,<br>Sand and Gravel | Cumberland County<br>Improvement Authority,<br>Deerfield Township, New<br>Jersey                    | February 15, 2021 –<br>February 16, 2021 | 10    | 250 tons      |
| Water                               |  |   |  |       |               |
| Not Applicable                      | Non-Regulated Material (groundwater)                             | Site 137 (Passaic Valley<br>Sewerage Commission<br>Sewer Use #31630035),<br>Jersey City, New Jersey | February 12, 2021                        | 2     | 9,000 gallons |
| Miscellaneous                       |  |   |  |       |               |
| Customer #PPG234                    | Non-RCRA solids, D.O.T.<br>Non-regulated (creosote<br>timbers)   | Clean Earth of New<br>Jersey, Inc., Kearny, New<br>Jersey   | February 18, 2021                        | 1     | ~ 20 tons     |

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# **Appendix G-1**

### Soil Profile and BOLs

 Non-hazardous soils were disposed of at Cumberland County Improvement Authority. Bills of lading are identified by the date material was transported off-site to Cumberland County Improvement Authority.

### Beneficial Soil Solutions, Inc.

12170 Mount Albert Rd. Ellicott City, Maryland 21042 Phone: 410. 531. 3205

Phone: 410, 531, 3205 Fax: 410, 531, 2028 Beneficial Re-Use #: Date:

P.O. Number:

#### SOIL / PRODUCT APPROVAL CONTRACT FORM

| Address: 435 N 2nd Street, Le    | ewiston, NY 14092        |                          |                               |
|----------------------------------|--------------------------|--------------------------|-------------------------------|
| Contact: Adam Thomas             |                          |                          |                               |
| Phone: 716-754-5400              | Fax: 716-754-8001        | Cell: 716-425-7445       | E-mail: athomas@wtsonline.com |
| Generator: PPG Industries, Inc.  |                          |                          |                               |
| Address: 440 College Park Dr     | ive, Monroeville, PA 151 | 45                       |                               |
| Contact: Jody Overmyer           |                          | Phone: 724-32            |                               |
| Job Site: Site 107               | Type of Operations       | Excavation / Remediation | n                             |
| Address: 18 Chapel Avenue,       |                          |                          |                               |
| Contact: Jody Overmyer           | Phone: 72                |                          | Cell:_412-235-8881            |
| Contaminant and Source: Chromium |                          | Tons/Yards: 20-          | 40,000                        |
| Lab Name SGS - Dayton NJ         | Sample ID #'s            |                          |                               |

Customer/Agent hereby acknowledges that Generator's information is true and accurate to the best of its knowledge, and that the landfill cover product/material is legally and lawfully owned by Generator until such time that Beneficial Soil Solutions, Inc. ("BSS") is paid in full for its services rendered, in accordance with the terms of this agreement (including the terms set forth on the letter agreement entitled Quote for Services, a copy of which is attached hereto and incorporated hereby). Customer/Agent covenants and agrees that no original bills of lading or certified weight tickets will be issued until payment is received in full by BSS. Customer/Agent and Generator each acknowledge that their utilization of BSS services is for commercial purposes/activities and not for personal, household or family purposes/activities. Each of Customer/Agent, Generator and BSS hereby: (i) acknowledge that this agreement shall be interpreted under the laws of the State of Maryland; (ii) waive their rights to a trial by jury concerning disputes arising hereunder; and (iii) consent to the jurisdiction of the courts located in Montgomery County, Maryland.

Generator, under penalty of law, does hereby certify that the product/material to be submitted for reuse/recycling/disposal to BSS is not a listed hazardous waste, nor does it contain a listed hazardous waste, nor does it exhibit any of the characteristics of a hazardous waste as defined in 40 CFR 261.

Generator also acknowledges that it has undertaken due diligence in determining the Non-Hazardous status of the said product/material, as defined in 40 CFR 261. Should, at any time after delivery, the product/material delivered for reuse/recycling/disposal be found to be nonconforming to the above, it shall be the responsibility of Generator to remove such product/material from the product/material's present location within five (5) days of notification (notification is to be verbal followed by written notification, overnight receipted). It is Generator's responsibility to abide by all Federal, State and Local regulations associated with the removal of its product/material. If the product/material is not removed within the specified time period, said disposal shall be arranged by a BSS representative and billed to Generator on a cost plus basis. Furthermore, Generator shall be responsible for any and all costs for decontamination and transportation incurred that are related to Generator's product/material and any and all liability for such nonconforming product/material shall revert to Generator.

In the event that any such product/material does not meet the above certification and conditions, or if any additional contaminants are contained and/or found nonconforming, then the Customer/Agent and Generator agree, jointly and severally, to indemnify, defend and hold BSS and its transferees harmless from and against any storage, transportation, treatment or other costs (including reasonable and court costs) that BSS and/or its transferees may incur as a result thereof, provided that in such event the Customer/Agent and Generator will be promptly notified of such breach of warranty and will be given reasonable opportunity to cure or mitigate the same. Customer/Agent and Generator hereby authorize any Clerk of any Court of Record in the State of Maryland to enter judgment by confession against each such party, jointly and severally, in favor of BSS for the full amount of the indebtedness due hereunder, including all costs and including reasonable due hereunder, and waives summons and other process and does further consent to the immediate execution of said judgment.

Generator acknowledges that all soils will be used as daily cover for a subtitle "D" landfill or beneficially reused at an authorized facility.

| Customer/Agent (Company Name): Adam Thomas (WTS) Signature: | Title: Project MgrDate: 4/16/18     |
|---|-------------------------------------|
| Generator (Company Name): Jody Overmyer (PPG) Signature:    | Title: Remediation Pr_Date: 4/17/18 |
| Beneficial Soil Solutions, Inc Signature:                   | Rick O'Brien President              |



|                           | Gener  | ator Information              |                        | W 15 II     |  |
|---------------------------|--|-------------------------------|------------------------|-------------|--|
| Generator EPA ID#:        | Genera   | ator imormation               | SIC/NAICS:             |             |  |
| Generator:                |  |                               | Main Number:           | . <b>L</b>  |  |
| Mailing Address:          |  |                               | City, State, Zip:      |             |  |
| Site Address:             |  |                               | City, State, Zip:      |             |  |
| Contact Name & Title:     |  |                               |                        |             |  |
| Phone:                    | ( )  | E-mail Address:               |                        |             |  |
| Business Contact:         | Billin   | ng Information                |                        |             |  |
| Billing Address:          |  |                               |                        |             |  |
| Phone Number:             | ( )  | Technical Contact:            |                        |             |  |
| Fax Number:               | ( )  | Technical Contact Phone:      | :( )                   | ( )         |  |
| Business Contact Email:   |  | Technical Contact Email:      |                        |             |  |
|                           | TSD  | F Information                 |                        |             |  |
| TSDF EPA ID#:             |  |                               |                        |             |  |
| Facility:                 |  |                               | Technology:            |             |  |
| Site Address:             |  |                               |                        |             |  |
| Contact Name & Title:     | Address  |                               | City, State, Zip       |             |  |
| Phone:                    | ( )  | E-mail Address:               |                        |             |  |
| Comments:                 |  |                               |                        |             |  |
|                           | Phys   | sical Properties              |                        |             |  |
| Waste Name:               |  |                               |                        |             |  |
| Physical State:           | Liquid % Solid % Semi-solid/Sludge % Compressed Gas %  |                               |                        |             |  |
| Flash Point Specif        | fic Gravity BTU/Ib   | pH                            |                        |             |  |
| Viscosity Color           | Odor A   | Appearance                    | Layering               |             |  |
| Process generating waste: |  |                               |                        |             |  |
| Basis of Knowledge:       | MSDS Analytical Data Gene  | erator Knowledge              |                        | _           |  |
|                           | Chemi  | cal Composition               |                        |             |  |
| Chemical Constituent(s)   |  | %, ppm F                      | Range                  |             |  |
|                           |  |                               |                        |             |  |
|                           |  |                               |                        |             |  |
|                           |  |                               |                        |             |  |
|                           |  |                               |                        |             |  |
|                           |  |                               |                        |             |  |
|                           |  |                               |                        |             |  |
|                           | CI :   | · I C                         |                        |             |  |
| DOT Shipping Name:        | Snipp  | ing Information               |                        |             |  |
| DOT Hazard Class:         | UN/N   |                               | Packing Group:         | <del></del> |  |
| Additional Description:   | A  |                               | RQ:                    |             |  |
| Packaging:                | Bulk Solid Bulk Liquid Drur  | m Tote Otl                    | her Type / Size        |             |  |
| Volume:                   |  | 1                             | 31                     |             |  |
| Frequency:                | Per Week Month Year 1  | Time Other Frequ              | iency                  |             |  |
| EPA Waste Numbers:        |  | - 1                           | •                      |             |  |
|                           |  |                               |                        |             |  |
| State Waste Codes:        | Disclai  | mer and Signature             |                        |             |  |
|                           | on submitted in this and any attached docume<br>the representative of the actual material being of | ents is correct to the best o | of my knowledge. I fur | ther        |  |
| Authorized Signature:     | Lody Jones   | Date:                         | 8/6/201                | 8           |  |
| Name (Print)              | es   | Title:                        |                        |             |  |



|  | Gener   | ator Information               |                              |
|--|---|--------------------------------|------------------------------|
| Generator EPA ID#:                     |   |                                | SIC/NAICS:                   |
| Generator:                             |   |                                | Main Number:                 |
| Mailing Address:                       |   |                                | City, State, Zip:            |
| Site Address:                          |   |                                | City, State, Zip:            |
| Contact Name & Title:                  |   |                                |                              |
| Phone:                                 | ( )   | E-mail Address:                |                              |
|  | Billi   | ng Information                 |                              |
| Business Contact:                      |   |                                |                              |
| Billing Address:                       |   |                                |                              |
| Phone Number:                          | ( )   | Technical Contact:             |                              |
| Fax Number:                            | ( )   | Technical Contact Phone:       | ( )                          |
| Business Contact Email:                | TOTAL   | Technical Contact Email:       |                              |
| TSDF EPA ID#:                          | TSD   | OF Information                 |                              |
|  |   |                                | L                            |
| Facility:                              |   |                                | Technology:                  |
| Site Address:                          | Address                                       |                                | City, State, Zip             |
| Contact Name & Title:                  |   |                                |                              |
| Phone:                                 | ( )   | E-mail Address:                |                              |
| Comments:                              |   |                                |                              |
|  | Phys  | sical Properties               |                              |
| Waste Name:                            |   |                                |                              |
| Physical State:                        | Liquid % Solid %                              | Semi-solid/Sludge %            | 6 Compressed Gas %           |
| Flash Point Specifi                    | ic Gravity BTU/Ib                             | pH                             |                              |
| Viscosity Color                        | Odor A  | Appearance                     | Layering                     |
| Process generating waste:              |   |                                |                              |
| Basis of Knowledge:                    | MSDS Analytical Data Gene                     | rator Knowledge                |                              |
|  | Chemi   | cal Composition                |                              |
| Chemical Constituent(s)                |   | %, ppm R                       | ange                         |
|  |   |                                |                              |
|  |   |                                |                              |
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|  | -   |                                |                              |
|  | -   |                                |                              |
|  |   |                                |                              |
|  | Shipp   | ing Information                |                              |
| DOT Shipping Name:                     |   |                                |                              |
| DOT Hazard Class:                      | UN/N<br>A                                     |                                | Packing Group:               |
| Additional Description:                |   |                                | RQ:                          |
| Packaging:                             | Bulk Solid Bulk Liquid Drur                   | n Tote Oth                     | ner Type / Size              |
| Volume:                                |   |                                |                              |
| Frequency:                             | Per Week Month Year 1                         | Time Other Freque              | ency                         |
| EPA Waste Numbers:                     |   |                                |                              |
| State Waste Codes:                     |   |                                |                              |
|  | Disclai                                       | mer and Signature              |                              |
|  | on submitted in this and any attached docume  | ents is correct to the best of | my knowledge. I further      |
| certify that any samples submitted are | e representative of the actual material being | evaluated                      |                              |
| Authorized Signature:                  | Local Jacomer                                 | Date:                          | 2/25/2019                    |
| Name (Print)                           | Jody Overmyers Title:                         |                                | Remediation Project Engineer |

#### STIPPING IDCUMENT

Beneficial Soil Solutions, Inc. 410, 531, 3205 12170 Nount Albert Rd Ellicott City, MD 21042 HLL OF LADING # DATE: 20210215 - 001 he-Use # 040218 CENERATOR/SITE INFORMATION TRANSPORTER INFORMATION PPG Industries MAME: NAME: J&D Hucking ADDRESS: DPG Site 107 ADDRESS: 3526 NW Boulevard Vineland,NJ 6350 18 Chapel Avenue 806. 691. 5145 Hone: JERSEY CITY NJ 07305 ne: 132-233-4552\_ |Fuck#\_ Driver Site Senature Release: NAME: Climberland County Improvement Auth. Utiver responsible for Compliance with IDT and Weight Laws ADDRESS: 169 Jesses Bridge Road Described Township, NJ 08352 SCALE HOUSE PHONE: \$56.825.3700 ext. 2200 CENERATOR STATEMENT I am the authorized ment of the Generator for the naturals offered on this Acceptance Taket for transportation and recycling, and by my signature below, carrify that the materials described below are non-hazardous at previously described in Beneficial Soil Solutions for (BESI) approved from Their approval process has required in the unuance of the above referenced SSSI. Tate: 02/15/2021 minted Name: Christin Cifelli on behalf d PPG TRANSPORTER STATEMENT I hereby certify that the contarials represented by this bill of lading were haded a the shows Character address and will be delivered to the distinction listed shows without brident and/or tempering of any kind. Signature: Hinted Name: SOIL MATERIAL LESCRIPTION 72900 Cross weight: Received by: 26520

Finted Name:

Signature:

Late:

lare weight:

Net weight:

46380

23.19

#### MIPPING DOCUMENT

Beneficial Soil Solutions, Inc. 12170 Nount Albert Rd Ellicott City, MD 21042

410 531. 3205

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ADDRESS: 3526 NW Bonlevard

JAD Tucking

IAG# ATSOUTH

Uneland, NJ 08360 806. 691. 5145

|        | ·      |           |        | " " " winds " | -   |
|--------|--------|-----------|--------|---------------|-----|
| T. NEK | HILLIK | 1391 1 M. | HVELIK | MAIL          | 1 1 |

NAME: PPG DOGUSTIES

ADDRESS PPG Site 107

18 Chapel Avenue Jersey City NJ07305

Feinberg Finne: 732-233-455 Friver Site Signature Release: E

Iruck#

LESTINATION INFORMATION

NAME: Cumberland County Improvement Auth.

Diver responsible for Compliance with DOT and Weight Laws

IN WIE.

mone:

ADDRESS: 189 Jesses Bridge Road

Deerfield Township, N 08352

SCALE HOUSE PHONE: \$56,825,3700 ext.2200

(MNERATOR STATIMENT)
I am the athorised agent of the Generator for the materials offered on this Acceptance Taket for transportation and recycling, and by my signature below, partify that the materials described below are non-hazardous at previously described in Beneficial Soil Solutions bec(BSSI) approved from mair approval process has resulted in the issuance of the above referenced 2051.

Printed Name:

Signature: Con Gelli

Date: 02/15/2021

Christin Cifelli on behalf d PPG

TRAINSPORTER STATEMENT

I bereby certify that the naterials represented by this bill of leding were baded a the above Generator address and will be delivered to the destination listed above without incident and/or tempering of any kind.

Hinted Name:

7/N-/2/

MATERIAL DESCRIPTION

SOIL.

Received by

Printed Name: Tare weight:

Signature:

45920

72460

26540

Late:

her weight

Goss weight:

22-96

### MIPPING IDCUVIENT

12170 Wount Albert Rd Ellicott City, MD 21042 410, 531, 3205 Reneficial Soil Solutions, Inc.

HLL OF LADING # 20210215-003 DATE 02/15/2021 Re-Use # 040218

| CENERATOR/SITE INFORMATION  | TRAINSP   | ORTER INFORMAT  | TON                  |
|---|---|---|----------------------|
| NAME: PPG Industries  | MME.  | J&D Fricking  |                      |
| ADDRESS: PPG Site 107 18 Chopel Avenue Jersey City NJ 07305   | Bone:   | 35: 3526 NW Bouleve<br>Vineland NJ 0836<br>856. 691. 5)45 |                      |
| Contact Lich Feinberg Hong 32-233 4552 Prick 7  | Ste Signature Release   | G# AUTSVID  |                      |
|   |   |   | ALEXE POR COMM       |
| NAME: Comberland County Improvement Auth. Driver  | responsible for Compliance  | e vith IDI and Weight                                     | Laws                 |
| ADDRESS: 159 Jesses Fridge Road<br>Deerfield Township, N 08352  |   |   |                      |
| SCALE HOUSE PHONE: 856.825.3700 ext.2200  |   |   |                      |
| ENERATOR SI ten the achorised agent of the Cenerator for the restences oriesed on this he below, cartify that the materials described below are rendered as a resulted in the issues approve process in resulted in the issues. | cepumce Ticket for transportation<br>unity described in Baseficial Sail   |   | signatura<br>zi žvm. |
| Christin Cifelli on behalf of PPG   |   | ate: 02/15/2021   |                      |
| TRANSPORTER & I hereby certify that the nationals represented by this bill of balling warm the destination listed above without haid  | at A 1 ENGEN 1  e badyd é fin shorre Ceneral lent add/or tampering of any | or oddrose and will be deb<br>Krad                        | nesed to             |
| terne Lib Ben Signature   | D   | ate: マーバーdox  | /                    |
| MATERIAL DESCRIPTION SOIL   |   |   |                      |
| Received by:  | Goss weight:  | 74800   |                      |
| Printed Name:   | Tare veight:  | 26660   |                      |
| Sgnature:   |   | 48140   |                      |
| Tate:   | Net weight:   | 24.07   |                      |

### SHIPPING IDCUMENT

410, 531, 3205

2-15-21

71600

26100

45500

22.75

Eeneficial Soil Solutions, Inc.

Printed Name:

Received by:

Hinted Name:

Signature:

Date:

Mike Stiteler

MATERIAL DESCRIPTION

12170 Mount Albert Rd Ellicott City, ND 21042 HLL OF LADING # 20210215-004 DATE: 02/15/2021 Re-Use # 040218 CENERATOR/SITE INFORMATION TRANSPORTER INFORMATION MAME TPG Industries MANIE: J&D Bucking PPG 5ite 107 ADDRESS: 18 Chapel Avenue ADDRESS: 3526 NW Boulevard Vineland, NJ 08360 JEBEX City NJ 07305 856. 691. 5145 Fhone: Contact: Rich Flinberg Frome: 732-233-Driver Site Signature Felease: TAG# LESTINATION INFORMATION mick# NAME: Cumberland County Improvement Auth. Triver responsible for Compliance with IDT and Weight Laws ADDRESS: 169 Jesses Bridge Road Described Township, NJ 0352 SCALE HOUSE PHONE: \$56.825.3700 ext.2200 CENERATOR STATEMENT I am the athorized agent of the Generator for the nesterials offered on this Acceptance Toket for transportation and recycling, and by my signature below, cartify that the metanials described below as manhazardous a previously described in Beneficial Soil Solutions has (BSSI) approval from Their approval process has resulted in the impance of the above referenced 2001. Date: 02/15/2021 Stinted Name: Chasha Cifelli on behelf TRANSPORTER STATEMENT I hereby cartify that the materials represented by this bill of leding were haded a the choice Camerator address and will be delivered to the destination. Used shows without haident add/or tempering of any kind.

4011

Goss weight:

lare veight:

Net weight:

### SHIPPING IDCUMENT

Esneficial Soil Solutions, Inc. 12170 Mount Albert Rd Hilcott City, ND 21042 410, 531, 5205

HLL OF LADING # 20210215-005 DATE: 02/15/2021

|  | Re-U   | SE # 040218   |
|--|--|---|
| GENERATOR/SITE INFORMATION   | RANSPOR  | TER INFORMATION   |
| NAME: PPG Industries   | NAME:  | J&D Trucking  |
| ADDRESS: PPO Site 107<br>18 Chapel Avenue  | ADDRESS:   | 3526 NW Boulevard<br>Vineland,NJ 08360                          |
| Mrs. Wilak T C776  | Phone:   | 856. 691. 5145  |
| Contact: Rich Feinberg Phone: 732-233 - Diver Ste Sign<br>4552   | nature Release:  | CAA   |
| IESTINATION INFORMATION 4558 Fruck# 15   | TAGE   | AU753D  |
| NAME: Cumberland County Improvement Auth. Diver responsible  | ile for Chmplianca w                                       | th DCT and Weight Laws  |
| ADDRESS: 169 Jesses Bridge Road<br>Deerfield Township, N 08352   |  |   |
| SCALE HOUSE PHONE: 806.825.3700 set.2200   |  |   |
| CENERATOR STATEMS I am the authorized agent of the Generator for the materials offered on this Acceptance I below, which the materials described below an un-harmedous a periously described below an exceptance of it | icket iv nammontation as<br>bed in Described Sal Sol       | d recycling and by my denauro<br>mions for (PSSI) approval from |
| Christin Cifelli on behalf Signature: Och Gel  | L. Date  | 02/15/2021  |
| TRANSPORTER STATEM Thereby cartify that the muterials represented by this till of baling were leaded to the destination liked doors without incident and/or  | IENT<br>s the dreve Comerator :<br>r tampering of any kind | edress and will be delivered to                                 |
| Claso GA Cloud D   | Date   | 2/15/21   |
| MATERIAL DESCRIPTION SOIL  |  |   |
| Received by:   | Cross weight: 7  | 9900  |
| Finted Pame:   | Tare veight:   | 26420   |
| Signature:   | 5  | 3480  |
| Tate:  | Net weight:  | 26.74   |
|  |  |   |

26.74

### SHIPPING DOCUMENT

| Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd. Ellicott   | t City, MD 21042  | 410. 531. 3205  |
|---|---|---|
| WTS# CW508244 RM 42449 GENERATOR/SITE INFORMATION   | DATE: 6 Re-Use #  | LADING #: 10210215-00<br>12   15   2021<br>1: 050218 CM<br>1: 0218<br>ORTER INFORMATION |
| ^-  | HOUNSE  | ATER INFORMATION  |
| NAME: Garfield Avenue Group #6 Industries   |   | kD Trucking   |
| ADDRESS: 900 Gartield Avenue PfG-Site 107 Halstead Properties 18 chapel Avenue Jersey City, NJ 07305  | Phone: 830  | 5: 3526 NW Boulevard<br>Vineland,NJ 08360<br>5: 691. 5145                               |
| Contact: Rich Feinberg Phone: 732.233.4552 Driver Site Signature of the Contact: Rich Feinberg Phone: 732.233.4552  | gnature Release   | pr UCM/ me  |
| DESTINATION INFORMATION Truck#  | TAC   | # ATGOLH  |
| NAME: Cumberland County Improvement Authority Driver response   | onsible for Compliant   | e with DOT and Weight Laws  |
| ADDRESS: 169 Jesses Bridge Road<br>Deerfield Township, NJ 08352   |   |   |
| SCALE HOUSE PHONE: 856. 691. 9550 ext. 4103   | ę.  |   |
| I am the authorized agent of the Generator for the materials offered on this Acceptant below, certify that the materials described below are non-hazardous as previously form. Their approval process has resulted in the issuance of the all Printed Name:  Signature:  Chrish's Cifelli | ice Ticket for transportati<br>described in Beneficial S<br>bove referenced BSSI ap | oil Solutions Inc.(BSSI) approval   |
| I hereby certify that the materials represented by this bill of lading were loaded the destination listed above without incident and Printed Name:  Signature:  Signature:  | at the above Generator  | d.  |
| MATERIAL DESCRIPTION Soil   |   |   |
| Received by:  | Gross weight:   | 75440   |
| Printed Name:   | Tare weight:  | 26420   |
| Signature:  |   | 49020   |
| Date:   | Net weight:   | 24.51   |

### SHIPPING LOCUMENT

Exacticist Soil Solutions Inc. 12170 Mount Albert Rd Hiscott City, NO 11042 410. 331. 3203 BLL OF LADING # 20210LIT-007 IMTE: 02 15/2021 CENERATOR/SITE INFORMATION TRANSPORTER INFORMATION PPG Industries JAD micking MAME: ADDRESS PPG SITE 107 ADDRESS: 3526 NW Boulevard 18 Chapelive Vineland,NJ 08360 thone: 816. 891. 5145 Jersey City NJ 67305 Phone 132-233-455 Diver Sta Senature Release: Familich Feinberg NAME: Cumberland County Improvement Auth. Diver responsible for Compliance with LOT and Weight Laws ADDRESS: 169 Jesses Hidge Road Desifield Township, N 08352 SCALE HOUSE PHONE: 856.825.9700 ext.2200 (HNERATOR STATENIEN)

I am the authorized agent of the Generator for the materials offered on the Acceptance Toket for managementation and secucions, and by my signature become partity that the materials described below second-acceptance a previously described in Senedicial Soil Solutions for (BSS) approval from Their approval process no resulted in the impance of the above referenced ESSI. Date: 02/15/2021 Mgnature: On Cfell Brinted Name Christin Cifells on behat 9 199 TRANSPORTER STATEMENT I harshy certify that the materials represented by this bill of being were baded a the above Conservor address and will be delivered to the destination Ested shows without haldent and/or tampering of any Smil. 2/10/21 Hinted Name: 44 111 MATERIAL DESCRIPTION Received by: Goss weight: 78840

Net weight:

lare weight:

26.15

26540

52300

Brinted Name:

Sgnature:

Late:

### SHIPPING INCUMENT

Peneficial Soil Solutions, Inc. 12170 Mount Albert R4 Ellicott City. ND 21042 410, 531, 3205

|   | MIL OF LADING # 20210215-008  DATE: 02/15/2021  Re-Use # 040218   |
|---|---|
| CENERATOR/SITE INFORMATION  | TRANSPORTER INFORMATION   |
| NAME: PPG Industries  | NAME: J&D Trucking  |
| ADDRESS: PPG Site 107   | ADDRESS: 5026 NW Boulevard  |
| 18 ChapelAve  | Vineland, NJ 08360<br>Fhone: 856, 691, 5145   |
| Jersly City NJ 07305 Contact the Flubra Phone 732-233-4552 Driver Site Sign   | marure Release: Cal   |
| TESTINATION INFORMATION  THICK# 3   | TAG= A-T901 H   |
| NAME: Comberland County Improvement Auth. Diver respons   | ible for Compliance with BIT and Weight Laws  |
| ADDRESS: 169 Jesses Bridge Road<br>Deerfield Township, N 08352  |   |
| SCALE HOUSE PHONE: \$56,825,3700 et 2200  |   |
| (ENERATOR STATEN) I am the authorised agent of the Constance for the meterials offered on this Acceptance below, certify that the nationals described below are non-hazardous a previously dec- iner approval process as required in the innance of | Trivet for transportation and projecting and by my agranuse wheel in Beneficial Sail Solutions for (BSSI) approved from |
| Frinted Name: Signature: Q- Q   | Telli Tate: 02/15/21  |
| Chi 1501/1 Citelli ex genti   |   |
| TRANSPORTER STATE Thereby certify that the materials represented by this till of being were keeded the destination listed shows without heident and   | MFNT<br>a tipo above Comerator address and will be delivered to<br>for tampering of any kind.                           |
| Frinted Pame: Signature: C Q .  | Date: 2/15/21   |
| CMANLEY   |   |
| MATERIAL IESCRIPTION SOIL   |   |
| Received by:  | Gross weight: 78880   |
| Printed Name:   | There weight: 26520   |
| Sgnamre:  | 52360   |
| Late:   | Net veight:   |
|   | 26.18   |
|   |   |

### SHIPPING DOCUMENT

| Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd. Ellicott   | City, MD 21042 410. 531. 3205   |
|---|---|
| WTS# <del>CW508244</del> 42499  | BILL OF LADING #: 20210216 -001  DATE: 02/14/2621  Re-Use #: 050218  040218   |
| GENERATOR/SITE INFORMATION  | TRANSPORTER INFORMATION   |
| NAME: Garfield Avenue Group PPG WAUSTRIES   | NAME: J&D Trucking  |
| ADDRESS: 900 Garfield Avenue PPG SITE 107  Halstead Properties 18 CHAPEL AUE.  Jersey City, NJ 07305  | ADDRESS: 3526 NW Boulevard<br>Vineland,NJ 08360<br>Phone: 856, 691, 5145  |
| Contact: Rich Feinberg Phone: 732.233.4552 Driver Site Sig  | nature Release:   |
| DESTINATION INFORMATION Truck#  | 3 TAG# AT901H   |
| NAME: Cumberland County Improvement Authority Driver respons  | nsible for Compliance with DOT and Weight Laws  |
| ADDRESS: 169 Jesses Bridge Road<br>Deerfield Township, NJ 08352   | * LAST-LOAD   |
| SCALE HOUSE PHONE: 856, 691, 9550 ext. 4103   |   |
| GENERATOR STATEM  I am the authorized agent of the Generator for the materials offered on this Acceptance below, certify that the materials described below are non-hazardous as previously deform. Their approval process has resulted in the issuance of the above the state of the | e Ticket for transportation and re-use, and by my signature escribed in Beneficial Soil Solutions Inc.(BSSI) approval |
| On behalf of PPG  TRANSPORTER STATEM I hereby certify that the materials represented by this bill of lading were loaded   |   |
| Printed Name: Signature: Signature:   |   |
| MATERIAL DESCRIPTION Soil   |   |
| Received by:  | Gross weight: 78440   |
| Printed Name:   | Tare weight: 26520  |
| Signature:  | 51920   |
| Date:   | Net weight: (25.96)   |

# SHIPPING DOCUMENT

1 64

| Beneficial Soil Solutions, Inc. 12170 Mount Albert Rd. Ellicott City, M  | ID 21042 410. 531, 3205   |
|--|---|
| WTS# CW508244 RAD 43 499   | BILL OF LADING #: 20210216 -007 DATE: 62 /16 /2021 Re-Use #: 050218 CHOCH 8 |
| GENERATOR/SITE INFORMATION   | TRANSPORTER INFORMATION   |
| NAME: Garfield Avenue Group PPG Industries   | NAME: J&D Trucking  |
| ADDRESS: 900 Garfield Avenue. PFG -Site 107 Halstead Properties Jersey City, NJ 07305  | ADDRESS: 3526 NW Boulevard<br>Vineland,NJ 08360<br>Phone: 856, 691, 5145    |
| Contact: Rich Feinberg Phone: 732.233.4552 Driver Site Signature   | Release   |
| DESTINATION INFORMATION Truck# 19  | TAG# AT 899 H   |
| NAME: Cumberland County Improvement Authority Driver responsible for   | or Compliance with DOT and Weight Laws                                      |
| ADDRESS: 169 Jesses Bridge Road<br>Deerfield Township, NJ 08352  |   |
| SCALE HOUSE PHONE: 856. 691. 9550 ext. 4103  |   |
| GENERATOR STATEMENT  I am the authorized agent of the Generator for the materials offered on this Acceptance Ticket below, certify that the materials described below are non-hazardous as previously described form. Their approval process has resulted in the issuance of the above refer Printed Name:  Signature:  Christin Cifclii  On behalf of PPG | in Beneficial Soil Solutions Inc.(BSSI) approval                            |
| TRANSPORTER STATEMENT  I hereby certify that the materials represented by this bill of lading were loaded at the above.  | ove Generator address and will be delivered to                              |
| Printed Name: Signature: Signature:  | ring of any kind. Date: 2.1621  |
| MATERIAL DESCRIPTION Soil  | 80600   |
| Received by: Gross   | weight:   |
| Printed Name:  | 26500<br>weight: 54100  |
| Signature:   | $\sim 05$   |
| Date: (27.05 Net w   | eight: () /, U  |

# **Appendix G-2**

# **Groundwater BOLs**

 No profile was required for Site 137 as disposal was in accordance with Passaic Valley Sewer Sewer Commission Use Permit No. 3160035.

# FREEHOLD CARTAGE INC.

P.O. BOX 5010 • FREEHOLD, NJ 07728-5010 (732) 462-1001 • FAX (732) 308-0924

BILL OF LADING FCI EPA ID NO. NJD054126164

M 417973

350 Pigeon Point Road New Castle, DE 19720 Phone: (302) 658-2005 Fax: (302) 658-6229

520 Beechcraft St. Bartow, FL 33830 Phone: (863) 533-4599 Fax: (863) 533-1613

5533 Dunham Road Maple Heights, OH 44137 Phone: (330) 835-3473 Fax: (330) 835-3732

108 Monahan Avenue Dunmore, PA 18512 Phone: (570) 342-7232

132 Myrtle Beach Hwy. Sumter, SC 29153 Phone: (803) 773-2611

| SHIPPER NAME/ADDRESS   |   |   | PHONE     | :                 | 152           | Fa        | x: (570) 34 | 2-7367            | Fax: (803) 7 | 73-2942     |         |
|--|---|---|-----------|-------------------|---------------|-----------|-------------|-------------------|--------------|-------------|---------|
|  |   |   | - HOILE   |                   |               |           |             | 1. 1 1 1          | 1 1 1        | 1 1         |         |
| PPG  |   |   | (AREA     | CODE)             |               |           |             |                   |              |             |         |
| Site 107   |   |   | TRACT     | OR                | TRAILER       |           |             | ADDOINTMENT TO AC |              |             |         |
| BAYONNE, NJ  | 07002                                     |   |           | 961               |               | 251       | 4           | APPOINTMENT TIME  | : 00         |             |         |
| FCI REP. LOADING (PRINT  | )   | PROCEDURE   |           | EQUIP. SPOT       | TED EOI       | UD DEM    | W/FD        |                   |              |             |         |
| TURCOTTE-ROI   | M   | 150   |           | Edoil . SFOT      | IED EQU       | JIP. REMO | VED         | TIME AT SHIPPER   | (MILIT.      | ARY TIME ON | _Y)     |
| IUNCVIIETNY  | N. C. | V4  |           |                   |               |           |             | 11 :12            | 1 9          | . >         |         |
| COMMENTS OR DELAYS   | AT SHIPPER                                |   |           |                   |               |           |             | EQUIPMENT USED    | DEP          | ARTURE TIME |         |
|  |   |   |           |                   |               |           |             | EGOIFIVIEIVI USED |              |             |         |
| E = 10 20 E = 10 20 E  |   |   |           |                   | 1             |           |             |                   |              |             |         |
| 認知語語   | 沿海系统沿海系                                   | <b>交为沿岸</b> 对   | 约翰克       | 一次的幻想             | FRY           |           |             |                   |              |             |         |
| <b>了一个大小人</b>  | <b>国际企业</b>                               |   | STATE OF  |                   | MANIFES       | ST/D      | OCIII       | MENT NO.          |              |             |         |
| とううがながらううかないから   | 可以のできる。                                   | A POST OF THE PROPERTY OF THE | R. C.     |                   |               | 7170      | 000         | WILITI ITO.       |              |             |         |
| (X)<br>HM PROPER U.S   | S. D.O.T. SHIPPING NAM                    | E U.S.  | D.O.T.    | NA/UN/NO.         | PACKING       | NO.       | CONT.       | NET               | UNIT         | WASTE       | FORM    |
|  |   | TIFERIO   | OUS CLASS |                   | GROUP         | CONT.     | TYPE        | QUANTITY          | MEASURE      | NO.         |         |
| 1/01/2 1)  | 1. HIZ L.                                 | mist of   | 11        | 11 12             | 17/3          | 01        | TT          | (-22)             | 13           |             | 4       |
| 2  |   |   |           |                   |               |           |             |                   |              | V Comment   |         |
| -  |   |   |           |                   |               |           |             |                   |              |             |         |
| 3  |   |   |           |                   |               |           |             |                   |              |             |         |
| SPECIAL HANDLING INST  |   |   |           |                   |               |           |             |                   |              |             |         |
| Payment to the contractor for vone contractor.  LEASE PRINT NAME/TITLE |   |   |           | R'S SIGNATURE     |               |           | arrier, th  | DA                | TE LOAD      |             | fferedt |
| Misk of the conference   |   |   | X _       |                   | 9 4           |           |             |                   | 15/          | 36 /        | LP II   |
| ONSIGNEE NAME/ADDRESS  |   |   |           | VE READ THE ABOVE | AND UNDERSTAN | D AND AGR | EE TO ALL   | OF ITS CONTENT.   | MO.          | DAY         | YR.     |
|  |   | PF  | HONE      |                   |               |           |             |                   |              |             |         |
| ITE 114, GAR   |   | (AF   | REA CODE  | 416               | 2-4A2-        | PP15      |             |                   | 11           | 11          | 11      |
| ERSEY CITY,  |   | And the second second second  | ACTOR     | TRA               | AILER         |           |             | POINTRAFAIT       |              |             |         |
| -110-1 -11111  | אח הישרק                                  |   | 96        | 1                 | 254           |           | A           | POINTMENT TIME    |              | -           |         |
| REP. UNLOADING (PRINT)   | PRO                                       | CEDURE  | IFOU      | UD CDC====        |               |           |             | d. d.             | : U          | D           |         |
| IRCOTTE - RON  |   |   | EQU       | IP. SPOTTED       | EQUIP. R      | EMOVED    | ) TI        | ME AT CONSIGNEE   | (MILIT       | ARY TIME O  | NII VI  |
|  |   | 101   |           |                   |               |           |             | 1200              | 13           | 36          | 3       |
| MENTS OR DELAYS AT CO  | NSIGNEE                                   |   |           |                   |               |           |             | ARRIVAL TIME      | DEC          | ADTUDE      |         |
|  |   |   |           |                   |               |           | EQ          | UIPMENT USED      | UEF          | PARTURE TI  | ME      |
| SE PRINT NAME/TITLE  |   |   |           |                   |               |           |             |                   |              |             |         |
|  | 0 1 4                                     | C   | ONSIGNE   | E CIONIA          |               |           |             |                   |              |             |         |
|  | troject m                                 | h   | ONOIGINE  | ESIGNATURE        | - 1           |           |             | DA                | TELINI       |             |         |
| 20. M/2 hl   | on Gehal                                  | X   | -/        | 17                | //            |           |             | DA                | TE UNLO      | PADED       |         |
| H-0257   | MD HILL                                   |   | -/        | 7 1               | 1             |           |             |                   | 150          | 13          | 1 -     |
| CT-HW-307<br>DE-HW-203   | MD HWH-167<br>2001-OPV-23                 |   | MO H-     | 1400              |               |           |             |                   | MO.          | DAY         | S. V.   |
| DE-HW-203<br>DE-SW-203   | ME ME-HWT-47                              | 335   | ND W      | 1-420             | OH UP         | W-01907   | 713-OH      |                   |              |             | YR      |
| JPW-0190713-OH   | ME-WOT-47                                 |   | NH TN     | H-0047            | UK UP         | W-01907   | 13-0H       |                   | TX           | 40705       |         |
| 1A-294   | MI UPW-019074                             | 0.00  | NJ S-2    | 265               | UNIAR         | O, CAN    | ADA A       | 840943            | WI           | 11602       |         |
| FCI Original Blue 50   | MN UPW-019071;                            | 3-OH  | 159       |                   | PA PA         | AH-0067   | 7           | -10040            | WV           | UPW-019     | 0712    |

White - FCI Original Yellow - FCI Billing

Blue - FCI Office/Customer Green - Retained by TSDF

NY NJ-113 Gold - Retained by Generator

PA PA-AH-0067 QUEBEC, CANADA QC-6ML-047 RI RI-535

WV UPW-0190713-OH

# BILL OF LADING FCI EPA ID NO. NJD054126164 FREEHOLD CARTAGE INC. P.O. BOX 5010 P.O. BOX 5010 • FREEHOLD, NJ 07728-5010 (732) 462-1001 M 417972 (732) 462-1001 • FAX (732) 308-0924 132 Myrtle Beach Hwy. 108 Monahan Avenue Sumter, SC 29153 Dunmore, PA 18512 Phone: (803) 773-2611 Phone: (570) 342-7232 5533 Dunham Road Fax: (803) 773-2942 Maple Heights, 0H 4137 Fax: (570) 342-7367 520 Beechcraft St. Phone: (330) 835-3473 Bartow, FL 33830 Phone: (863) 533-4599 350 Pigeon Point Road Fax: (330) 835-3732 New Castle, DE 19720 Fax: (863) 533-1613 Phone: (302) 658-2005 PHONE Fax: (302) 658-6229 APPOINTMENT TIME SHIPPER NAME/ADDRESS (AREA CODE) TRAILER 254 TRACTOR (MILITARY TIME ONLY) 961 TIME AT SHIPPER Site 107 EQUIP. REMOVED BAYONNE, NJ 07002 EQUIP. SPOTTED PROCEDURE DEPARTURE TIME FCI REP. LOADING (PRINT) ARRIVAL TIME **EQUIPMENT USED** TURCOTTE , RON COMMENTS OR DELAYS AT SHIPPER MANIFEST/DOCUMENT NO. WASTE UNIT FORM NET CONT. NO. NO. MEASURE PACKING QUANTITY U.S. D.O.T. TYPE CONT. NA/UN/NO. PROPER U.S. D.O.T. SHIPPING NAME GROUP HAZARDOUS CLASS SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER. SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation ILS FDA. transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accord the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and has a valid permit to do so if required by the shipment and by the s named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge. Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor. the contractor. DATE LOADED SHIPPER'S SIGNATURE PLEASE PRINT NAME/TITLE DAY I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT. MO. PHONE

Christin C 4/1/54/ Geologist on bokett 1 119 CONSIGNEE NAME/ADDRESS (AREA CODE) TRAILER TRACTOR APPOINTMENT TIME OE 254 (MILITARY TIME ONLY) EQUIP. SPOTTED FCI REP. UNLOADING (PRINT) TIME AT CONSIGNEE **PROCEDURE** EQUIP. REMOVED TURCOTTERRON DEPARTURE TIME ARRIVAL TIME COMMENTS OR DELAYS AT CONSIGNEE **EQUIPMENT USED** DATE UNLOADED CONSIGNEE SIGNATURE PLEASE PRINT NAME/TITLE

YR. DAY MO. MO H-1490 TX 40705 AR H-0257 MD HWH-167 OH UPW-0190713-OH ND WH-429 WI 11602 CT CT-HW-307 2001-OPV-2335 WV UPW-0190713-OH OK UPW-0190713-OH NH TNH-0047 DE DE-HW-203 ME ME-HWT-47 NJ S-2265

15939

NY NJ-113

MA MA-294 White - FCI Original Yellow - FCI Billing

DE-SW-203

IL UPW-0190713-OH

Blue - FCI Office/Customer Green - Retained by TSDF

ME-WOT-47

MI UPW-0190713-OH

MN UPW-0190713-OH Gold - Retained by Generator ONTARIO, CANADA A 840943 PA PA-AH-0067 QUEBEC, CANADA QC-6ML-047

RI RI-535

# **Appendix G-3**

# **Miscellaneous Material Profile and BOLs**

 Creosote timbers were disposed of at Clean Earth of New Jersey, Inc. Bill of lading is identified by the date material was transported off-site to Clean Earth of New Jersey, Inc.

# Clean Earth of North Jersey, Inc.

115 Jacobus Avenue, Kearny, NJ 07032 (973) 344-4004

### Approval Code D) \_\_\_\_\_ B) \_\_\_ Generic Code D) B) NON-HAZARDOUS WASTE PROFILE SHEET Customer # PPG234 LSR# A. GENERATOR INFORMATION Generator's Name PPG Industries Master WPS Mailing Address 440 College Park Drive, Monroeville, PA 15146 Technical Rep. Initials RM Waste Pickup Address 18 Chapel Ave. Jersey City, NJ 07305 Approval Date Tech Contact Jody Overmyer Phone 724-325-5070 Broker Name (if applicable) Process Generating Waste Site Remediation Common Name of Waste NonHazardous Creosote Timbers B. PHYSICAL/CHEMICAL CHARACTERISTIC **Physical State** Flash Point (F/CC Liquids) Odor × Solid □ <100 ☐ Liquid ≥100 ≤140 Powder >140 <u><</u>200 Describe very faint creosote fragrance Semi-Solid x >200 Single Phase Bi-Layered Ignitability (Solids) Yes 🗷 No Gas/Aerosol Corrosivity (pH) Reactivity (PPM) Color/Visual Description brown/black creosote wodden timber **Total Cyanides** ≤.2.0 2.01 - 5.0 Amenable Cyanides \_\_\_\_\_ None 5.01 - 9.0 x Reactive Sulfides 9.01 - 12.49 None ≥12.50 Water Reactive Yes 🗷 No Exact pH Air Reactive Yes X No Shock Sensitive Yes 🗷 No Generates Toxic fumes when Yes X No mixed with Water, Acid or Base C. CHEMICAL COMPOSITION Creosote Timbers sized to less than 5 feet Rock masonry debris < 3'x3'x3' See Data sets L1905961, PPG SITE 107 WC SAMPLES 2.14.19 E17 TOTAL 100 Please note: the total in the Range Min.-Max. column must equal 100%. E. SHIPPING INFORMATION D. HAZARDOUS CHARACTERISTICS Radioactive Bulk Liquid Drums (Steel) Compressed Gas Infectious **✗** Bulk Solid Drums (Poly) Flammable Solid Toxic ☐ Bulk Sludge Organic Peroxide Explosive ☐ Shock Sensitive ☐ Totes Pyrophoric Reactive Metals Other Describe Oxidizer via rolloff None of the above Quantity 50 tons Per event

OFFICIAL USE ONLY

Yes No

| F. <u>OSH/SARA 31</u>   | <u> 3 REQUIREMENTS</u>  |  |  |   |  |
|---|---|--|--|---|--|
| 1. Health Haz   | zard 🔲 Immediate (Acute) Haza   | ard 🔲 Delayed (0   | Chronic) Hazard  | None  |  |
| 2. Identify wh  | nat chemicals and chemical catego   | ories as defined in 40 C   | FR Part 372 as wel   | as the concent  | ration in the waste stream.  |
|   |   |  |  |   |  |
|   |   |  |  |   |  |
| 3. Identify an none   | y OSHA (29 CFR Part 1910 Subpa  | ,  |  | the waste strea                                       | m. List substance and %.   |
|   |   |  |  |   |  |
| G. <u>SHIPPING INF</u>  | FORMATION   |  |  |   |  |
| Is this a US DOT I  | Hazardous Material? Yes   | × No   |  |   |  |
| Proper DOT shipp  | oing name Non Regulated Materia   | 1  |  |   |  |
| Hazard Class n/a  | un/na # <u>r</u>  | n/a  | Packing Group <u>r</u>   | n/a   | RQ <u>n/a</u>  |
| H. WASTE DESC   | <u>RIPTION</u>  |  |  |   |  |
| Is this a US EPA H  | Hazardous Waste? ☐ Yes  | s 🗷 No   |  |   |  |
| Is this waste a trea  | atment residue from a previously lis  | sted or characteristic h   | azardous waste?  | □Yes 🗷 No   | )  |
| If yes, explain   |   |  |  |   |  |
| Is this waste a haz   | zardous waste as defined by any s   | tate or local regulations  | s? ☐Yes 🗷 I  | No  |  |
| If yes, explain   |   |  |  |   |  |
| Does this waste co  | ontain any PCBs? Yes 🗷 N  | lo If yes, indicate lev  | el   | TSCA Regulate   | ed? Yes No   |
| Does this waste co  | ontain any Herbicides, Pesticides,  | Dioxin or Residue there  | eof? Yes   | No  |  |
| Operations as pro   | P Applicability: Is this waste strean<br>vided in 40 CFR Part 61?<br>If yes, Benzene concentration  | n subject to manageme  |  | Emission Standa                                       | ards for Benzene Waste   |
| • •   | cial handling instructions for the dis<br>nal disposal to be Republic Cones   | sposal of this waste?  | x Yes □ No   |   |  |
| I. <u>SPECIAL HAND</u>  | DLING COMMENTS  |  | J. <u>OFFICIAL</u>   | USE ONLY  | Approval Committee<br>Env  |
|   |   |  |  |   | - Ops  |
|   |   |  |  |   | Tech   |
| K. <u>WARRANTY</u>  |   |  |  |   |  |
| I hereby warrant the hazardous or TSC and hold Clean Earny other terms are The information or | nat the material transferred to Clea<br>A regulated waste nor is it contamenth of North Jersey (CENJ) harmle<br>and conditions of this Waste Material<br>In this Waste Material Profile Sheet | ninated with any hazard<br>ess from any costs, dar<br>al Profile Sheet.<br>I may have been prepa | ous waste or toxic s<br>mages or other liabi<br>red by other individ | substances and<br>lities resulting fruals. By signing | hereby agree to indemnify<br>om breach of this warranty o<br>g below, I certify that all |
| hazards.  | ling any attached information, is co  | mpiete and is an accui   | rate representation  | oi the waste and                                      | u its known or suspected   |
|   |   |  |  | $\cap$  |  |
| 3/12/2019   | la de Ouarisse  | <b>D</b>   | on Duning to Control   | $\left( \right)_{0} \left( \right)$                   |  |
| Date  | Jody Overmyer Printed Name  | Remediation  | on Project Engineer  | Generator Sign  | nature <b>es</b>   |
|   |   |  |  | $\bigcup_{i} a_{i}$                                   | U  |

# Waste Profile CBU Sheet Addendum

| Generato   | or Name <u>F</u> | PPG Industries                                |                  |                       |
|------------|------------------|---|------------------|-----------------------|
| Address    | 40 Colleg        | ge Park Drive, Monroeville, PA 15146          |                  |                       |
|            | 18 Chape         | el Ave. Jersey City, NJ 07305                 |                  |                       |
|            | Nonhaza          | rdous Creosote Timbers                        |                  |                       |
| Custome    | r Name           | PPG Industries                                |                  |                       |
| Approval   | Number           |   |                  |                       |
| Does you   | ır waste st      | ream contain any of the below constituen      | ts? 💌 Yes        | □No                   |
| If ves inc | licate eith      | er less than the listed value or state the ac | ctual level in t | he appropriate column |

| Constituent            |        | Less Than | Actual Level |
|------------------------|--------|-----------|--------------|
| Arsenic                | 4,000  | X         |              |
| Cadmium                | 4,000  | X         |              |
| Chromium +6            | 21,400 | X         |              |
| Lead                   | 80,000 | X         |              |
| Mercury                | 80     | X         |              |
| Beryllium              | 800    | X         |              |
| Nickel                 | 80,000 | X         |              |
| Benzene                | 400    | X         |              |
| Chlorobenzene          | 400    | X         |              |
| Cumene                 | 960    | X         |              |
| Ethylene Glycol        | 56,000 | X         |              |
| Methanol               | 4,800  | X         |              |
| Methylene Chloride     | 880    | X         |              |
| Methyl Ethyl Ketone    | 800    | X         |              |
| Methyl Isobutyl Ketone | 1,360  | X         |              |
| Phenol                 | 1,360  | X         |              |
| Tetrachloroethylene    | 400    | X         |              |
| Toluene                | 560    | X         |              |
| Trichloroethylene      | 480    | X         |              |
| Xylene                 | 1,200  | X         |              |

<sup>\*</sup>mg/Kg

# **Certification**

I certify that the information provided to Clean Earth of North Jersey is complete and is an accurate representation of the waste.

| Generator's | Manne Pringt | Jody Overmyer |
|-------------|--------------|---------------|
| Signature   | Lody La      |               |
|             | V &          | es            |

| NON-HAZARDOUS<br>WASTE MANIFEST   | 1. Generator ID N  | NJR/100076156   |                 | 2. Page 1 of      | \$12-   | 134-4519  | 02                    | tracking/Nur                            | 313  |
|---|--|---|-----------------|-------------------|---|---|-----------------------|---|--|
| Generator's Name and Mai  |  | PPG Insustries<br>440 College Par<br>Monroeville, PA                                      |                 |                   | 18 Cha  | (if different that<br>sustries<br>pel Ave<br>City, NJ |                       | 55)                                     |  |
| enerator's Phone:<br>Transporter 1 Company N  | ime  |   |                 |                   | 4   |   | U.S. EPA ID           | Number                                  | NJR986628162   |
|   | ransport inc   |   |                 |                   |   |   | U.S. EPA ID           | Number                                  | THE STREET SHAPE FOR   |
| . Transporter 2 Company N   | ime  |   |                 |                   |   |   |                       | , |  |
| Designated Facility Name  | and Site Address   | Clean Earti<br>105 Jacob  |                 | h Jersey.         | Inc.  |   | U.S. EPA ID           | Jumber                                  |  |
| acility's Phone: 97334  | 44004  | Keamy NJ  |                 |                   | 40.0  |   | 14.5                  | 140 154                                 | NJD991291105   |
| 9a. 9b. U.S. DOT Descr<br>HM and Packing Group  |  | er Shipping Name, Hazard Cla  | iss, ID Number  | ۲,                | 10. Contai  | ners<br>Type  | 11. Total<br>Quantity | 12. Unit<br>Wt./Vol                     |  |
|   | solids, D.O.T  | Non-regulated   |                 |                   | 1   | C#  | 20                    | 405                                     | ID27   |
| 2.  |  |   |                 |                   |   |   |                       |   |  |
| 3.  |  |   |                 |                   |   |   |                       |   |  |
| 4.  |  |   |                 |                   |   | <del>  -</del>  |                       |   |  |
| ۴۰.   |  |   |                 |                   |   |   |                       | İ                                       |  |
| 13. Special Handling Instruct (1) 193080337 - No  |  |   |                 |                   |   |   | Orde                  | r#. 2219                                | 213 - Note:  |
| 13. Special Handling Instruc<br>(1) 193080337 - No  | n hazardous cr   | eozote timber   | ove on this mar | nifest are not su | ubject to federal regulations                         | for reporting   |                       |   | s Waste.   |
| 13. Special Handling Instruct (1) 193080337 - No.  14. GENERATOR'S CER Generator's Printe   | n hazardous or TIFICATION: I certi d/Typed Name  | fy the materials described abo  |                 |                   | Signature   | Gel   | proper disposal       |   |  |
| 13. Special Handling Instruct (1) 193080337 - No.  14. GENERATOR'S CER Gene ator's/Offeror's Printe  15. International Shipments Transporter signature (for   | TIFICATION: I certid/Typed Name  Company I for Impoexports only):  | fy the materials described about the materials described about the first part of the U.S. |                 | ,                 | im U.S. Port of                                       | for reporting  G-G entry/exit:aving U.S.              | proper disposal       |   | s Waste.  Month Day  |
| 13. Special Handling Instruct (1) 193080337 - No.  14. GENERATOR'S CER Generator's/Offeror's Printe  15. International Shipments Transporter signature (for.)  16. Transporter Acknowledge            | TIFICATION: I certing d/Typed Name  L. F. I imposexports only): gment of Receipt of M  | fy the materials described about the materials described about the first part of the U.S. |                 | Export froi       | im U.S. Port of                                       | GGC<br>entry/exit:                                    | proper disposal       |   | s Waste.  Month Day  2 [/8]  Month Day                                       |
| 13. Special Handling Instruct (1) 193080337 - No.  14. GENERATOR'S CER Gene ator's/Offeror's Printe  15. International Shipments Transporter signature (for   | TIFICATION: I certid/Typed Name L. G. III impo exports only): gment of Receipt of M d Name   | fy the materials described about the materials described about the first part of the U.S. |                 | Export from       | m U.S. Port of Date lea                               | GGC<br>entry/exit:                                    | proper disposal       |   | s Waste.<br>Month Day<br>  2   [8]   |
| 13. Special Handling Instruct  (1) 193080337 - No.  14. GENERATOR'S CER Generator's/Offeror's Printe  Charles  15. International Shipments  Transporter signature (for 16. Transporter 1 Printed/Type | TIFICATION: I certid/Typed Name  L. G. IIII  Manager of Receipt of Manager of Receipt of Manager of Name   | fy the materials described about the materials described about the first part of the U.S. |                 | Export from       | m U.S. Port of Date leases                            | entry/exit:aving U.S.                                 | proper disposal       | of Hazardous                            | Month Day 2   18    Month Day 2   18    Month Day 2   18                     |
| 13. Special Handling Instruct (1) 193080337 - No.  14. GENERATOR'S CER Generator's/Offeror's Printe L. L  | TIFICATION: I certid/Typed Name L. G. Impo exports only): gment of Receipt of M d Name d Name  | fy the materials described above to U.S. aterials   | / PPG           | Export from       | m U.S. Port of Date less Signature Signature Residue  | entry/exit:aving U.S.                                 | proper disposal       | of Hazerdous                            | Month Day  2 /8  Month Day  2 /8  Month Day  2 /8  Month Day                 |
| 13. Special Handling Instruct (1) 193080337 - No.  14. GENERATOR'S CER Generator's/Offeror's Printe L. L  | TIFICATION: I certid/Typed Name L. G. Impo exports only): gment of Receipt of M d Name d Name  | fy the materials described above to U.S. aterials   | / PPG           | Export from       | m U.S. Port of Date lease Signature Signature Residue | entry/exit:aving U.S.                                 | proper disposal       | of Hazardous                            | Month Day  2 / 8  Month Day  2 / 8  Month Day  2 / 8  Month Day  Full Reject |
| 13. Special Handling Instruct (1) 193080337 - No.  14. GENERATOR'S CER Generator's/Offeror's Printe  L. L   | TIFICATION: I certical difference of Receipt of Manne of Receipt of Manne of Name of Receipt of Manne of R | fy the materials described above to U.S. aterials   | / PPG           | Export from       | m U.S. Port of Date lease Signature Signature Residue | entry/exit:aving U.S.                                 | proper disposal       | of Hazardous                            | Month Day  2 / 8  Month Day  2 / 8  Month Day  2 / 8  Month Day  Full Reject |

# **Appendix H**

**Licensed Quarry Material Documentation** 



### Appendix H. Licensed Quarry Material Documentation Site 107, AOC 1B. Material Staging Area, Garfield Avenue Group PPG Jersey City, New Jersey

This appendix includes a list of load reports for licensed quarry material that was used to backfill and restore the Material Staging Area (MSA; AOC-1B) at the Hudson County Chrome (HCC) Site 107, Jersey City, New Jersey. As such, load reports are identified based on licensed quarry facility (**Table 1**):

Table 1. Imported Licensed Quarry Material and DGA for HCC Site 107 MSA

| Material Type            | Licensed Quarry   | Dates             | Loads | Volume      |
|--------------------------|---|-------------------|-------|-------------|
| Licensed Quarry Material | Tilcon, 625 Mount Hope<br>Road, Wharton, New<br>Jersey (Mount Hope)   | February 15, 2021 | 6     | 148.99 tons |
| Licensed Quarry Material | Tilcon, Broad Street,<br>Pompton Lakes, New<br>Jersey (Pompton Lakes) | February 16, 2021 | 2     | 51.69 tons  |

The licensed quarry material placed was certified by Tilcon, the licensed quarry (certification included in this Appendix), as from a virgin source. Per the 2015 Fill Material Guidance for SRP Sites (NJDEP, 2015), "Whenever licensed quarry/mine material, certified as such by the quarry/mine operator, is delivered to a property undergoing remediation, the investigator may rely on the certification for the purpose of issuing a remedial action outcome (RAO) without sampling the delivered licensed quarry/mine material."

www.arcadis.com

# **Appendix H-1**

# **Licensed Quarry Material – Load Reports**

• Load reports are identified by the date material was transported to the Site from Tilcon (Mount Hope or Pompton Lakes Licensed Quarry).



|      |           |          | Net<br>Weight | Total Volume |
|------|-----------|----------|---------------|--------------|
| Load | Date      | Ticket   | (Tons)        | (Tons)       |
| 1    | 2/15/2021 | 41864365 | 24.65         | 24.65        |
| 2    | 2/15/2021 | 41864366 | 25.46         | 50.11        |
| 3    | 2/15/2021 | 41864376 | 24.83         | 74.94        |
| 4    | 2/15/2021 | 41864379 | 24.63         | 99.57        |
| 5    | 2/15/2021 | 41864381 | 24.63         | 124.20       |
| 6    | 2/15/2021 | 41864392 | 24.79         | 148.99       |

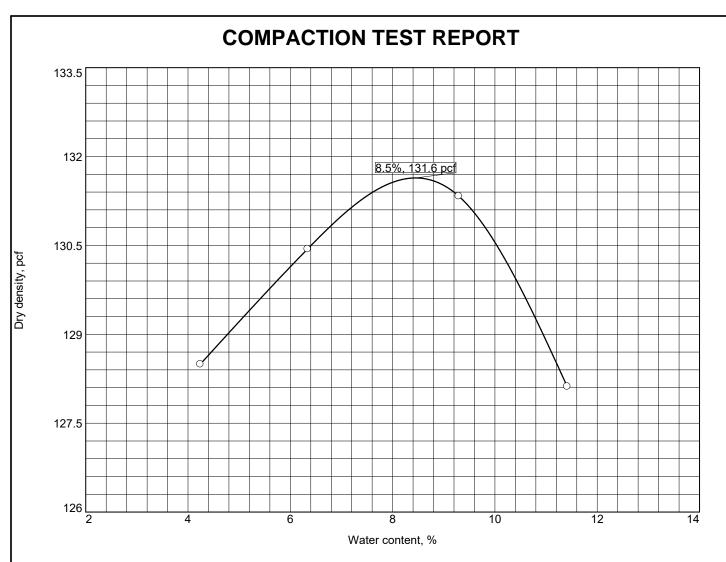


| Load | Date      | Ticket   | Net<br>Weight<br>(Tons) | Total Volume<br>(Tons) |
|------|-----------|----------|-------------------------|------------------------|
| 1    | 2/16/2021 | 42551367 | 25.95                   | 25.95                  |
| 2    | 2/16/2021 | 42551368 | 25.74                   | 51.69                  |

# **Appendix H-2**

# **Licensed Quarry Material - Information and Analytical Data Report**

- Licensed quarry material collected by Tilcon from the Mount Hope quarry (reports included in this
  Appendix) exceeded the DIGWSSL for manganese. Manganese is a naturally occurring and the
  applicable Groundwater Quality Standards are based on secondary considerations (primarily
  aesthetic considerations such as taste, odor, and appearance) and not health considerations; as
  such, the exceedances do not need to be addressed for the impact to groundwater pathway.
- Licensed quarry material collected by Tilcon from the Pompton Lakes quarry (reports included in this Appendix) exceeded the DIGWSSLs for manganese. Manganese is naturally occurring and the applicable Groundwater Quality Standards are based on secondary considerations (primarily aesthetic considerations such as taste, odor, and appearance) and not health considerations; as such, the exceedance does not need to be addressed for the impact to groundwater pathway.

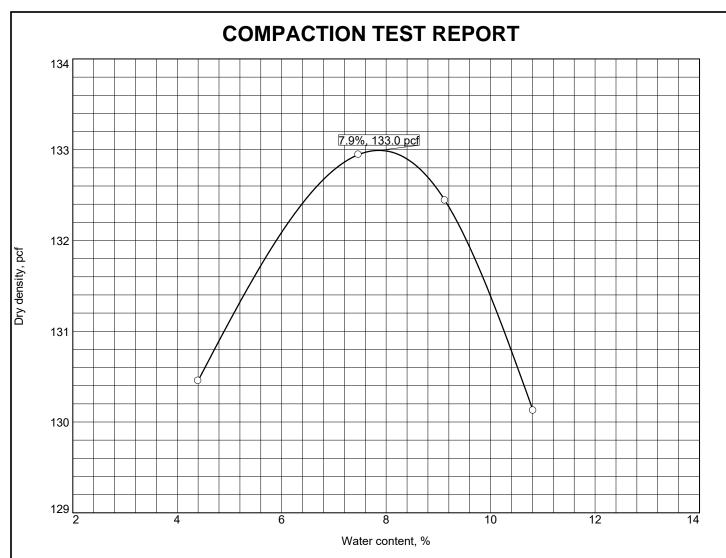


Test specification: ASTM D 1557-12 Method B Modified

| Elev/ | Classit | fication | Nat.   | C C   | - 11 | DI | % >     | %<     |
|-------|---------|----------|--------|-------|------|----|---------|--------|
| Depth | USCS    | AASHTO   | Moist. | Sp.G. | LL   | PI | 3/8 in. | No.200 |
|       | SP-SM   | A-1-b    |        | 2.75  | NV   | NP | 0.0     | 11.8   |

| TEST RESULTS                         | MATERIAL DESCRIPTION                    |
|--------------------------------------|---|
| Maximum dry density = 131.6 pcf      | Light Gray poorly graded sand with silt |
| Optimum moisture = 8.5 %             |   |
| Project No. 889 Client: CHEMTECH     | Remarks:                                |
| Project: K4541 - PPG Site 107        | SG Assumed<br>8-30-19                   |
| ○Sample Number: 107-SCREENINGS-PL001 |   |
| RSA Geolab                           |   |
| Union, New Jersey                    | Figure                                  |

Tested By: MF Checked By: KP



Test specification: ASTM D 1557-12 Method B Modified

| Elev/ | Classif | fication | Nat.   | Sn C  |    | PI | % >     | % <    |
|-------|---------|----------|--------|-------|----|----|---------|--------|
| Depth | USCS    | AASHTO   | Moist. | Sp.G. | LL | FI | 3/8 in. | No.200 |
|       | SP-SM   | A-1-b    |        | 2.75  | NV | NP | 0.0     | 11.6   |

| ,                                    | TEST RESULTS   |  |                     | MATERIAL       | DESCRIPT      | ION       |
|--------------------------------------|----------------|--|---------------------|----------------|---------------|-----------|
| Maximum dry density = 133.0 pcf      |                |  | Ligh                | nt Gray poorly | y graded sand | with silt |
| Optimum moisture = 7.9 %             |                |  |                     |                |               |           |
| Project No. 889 Client:              | СНЕМТЕСН       |  | Remarks             | s:             |               |           |
| <b>Project:</b> K4541 - PPG Site 107 |                |  | SG Assur<br>8-30-19 | med            |               |           |
| ○Sample Number: 107-SCREENINGS       | S-MH001        |  |                     |                |               |           |
|                                      | RSA Geolab     |  |                     |                |               |           |
| Uni                                  | on, New Jersey |  |                     |                | Figure        |           |

Tested By: BP Checked By: KP



# TILCON NEW YORK INC.

PHONE: 973-366-7741 9 ENTIN ROAD, PARSIPPANY, New Jersey 07054

### 2021 Clean Fill Material Certification- NJ Locations Only

Tilcon NY Inc. New Jersey Division confirms to the best of our knowledge that the aggregates produced at the locations below are virgin stone products, contain no hazards or contamination prior to shipment of materials and conform to section 901 of the 2007 New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, The material is identified on the job with Tilcon NJ delivery tickets. The quarries are listed in the Quality List (QPL) of the NJDOT website

http://www.state.nj.us/transportation/eng/materials/qualified/QPLDB.shtm

**Pompton Lakes Quarry- Granite Gneiss**, 84 Borough of Pompton Lakes, Passaic County Blocks No(s) 5105, 5105 - Lot(s) 84, 14.2.Pompton Lakes quarry contains NJDOT approved crushed stone and certified fill products.

**Mt. Hope Quarry- Granite Gneiss**, 625 Mt Hope Road, Wharton Borough, Morris County NJ, Block No 20001 Lot(s) No(s) 5.01, 5.02, 7; Block No 70001 Lot No 2; Block No 20101 Lot No 6. Mt Hope quarry contains NJDOT approved crushed stone, washed products and certified fill products.

Tilcon NY Inc. has had Pompton Lakes and Mt Hope quarries analyzed under the EPA Target Compound List as required by the LSRP program- NJDEP Residential Direct Contact Soil Remediation Standards/Clean Fill Criteria. A copy of the report is available upon request. To the best of our knowledge, the materials produced at the above quarries comply with Section 7 of the Fill Material Guidance for SRP Sites.

**Riverdale Quarry- Granite Gneiss,** 125 Hamburg Turnpike, Riverdale, Morris County NJ, Block No9s0 25, 26, 27, 29 Lot No 3. Riverdale Quarry NJDOT approved crushed stone, washed products and certified fill materials.

**Oxford Quarry- Granite Gneiss and Limestone**, Quarry and Mt Pisgah Avenue, White Township, Warren County Block 32- Lots 15,16 Block 33- Lots 22,23 Block 34 Lots 19,20 Block 25- Lots 3,5,9,90.1 NJDOT approved crushed stone, washed products and certified materials.

Tilcon New York, INC Quality Control 973-659-3790

# S & S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Road, Cedar Grove, NJ 07009 Tel (973) 857-7188 Fax (973) 239-8380

Kamil Sor, Ph.D. Orhun Sor, P.E. Atilla Sencar, P.E.

This report is the confidential property of the Client, and information contained may not be published or reproduced without our written permission.

| Client:  | Tilcon New Y  | ork, Inc.            |              |            |           |
|----------|---------------|----------------------|--------------|------------|-----------|
| Project: | Mount Hope,   | NJ (NJDEP-SRS)       |              |            |           |
| Subject: | Laboratory Ar | nalysis of Aggregate | Sample (Quar | ry Fines)- | -NJ       |
| Job No.: | 07E34         | Report Number:       | 20-E-64      | Date:      | 5/21/2020 |

We present herewith the laboratory test results of an aggregate sample delivered to our laboratory (identified as Quarry Fines) on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) indicated that the aggregate sample **meet** the **NJDEP-RDCSRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours,

S & S ENVIRONMENTAL SCIENCES, INC.

Kamil Sor, Ph.D.

President

KS/ag

Attachments:

(1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client

Steve O'Reilly

email: soreillv@tilconny.com

# S&S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

88 Sand Park Rad, Cedar Grove, NJ 07009 Tel (973) 857-7188 Fax (973) 239-8380

NJDEP Lab Certification No. 07073

# **SAMPLE CHAIN OF CUSTODY**

| CLIENT:                                       | TIL                                     | ron              |                |                   | DATE:    | 11-1         | 4-20     |
|---|---|------------------|----------------|-------------------|----------|--------------|----------|
| ADDRESS:                                      |   |                  |                |                   | SSES JOE | B NO.        | T -      |
| CONTACT:                                      |   | 4                |                |                   | TEL. #:  |              |          |
| PROJECT:                                      | M 1 . 11                                | UPC, NT          | _              |                   | PROJECT  | LABID#:      | 120.04   |
|   |   | -0 C 1           |                |                   |          |              |          |
| SAMPLE<br>NUMBER                              | SAMPLING<br>DATE                        | SAMPLING<br>TIME | SAMPLE<br>TYPE | NO. OF<br>BOTTLES |          | ALYSES REC   |          |
| 20-049  | 4.28.50                                 | 900              | Comb           |                   | NY-N     | 7 Clein      | 411      |
|   |   |                  |                |                   |          |              |          |
|   |   |                  |                |                   |          |              |          |
|   |   |                  |                |                   |          | 11 12 7/1/12 |          |
|   |   |                  |                |                   |          |              |          |
|   |   |                  |                |                   |          |              | M        |
|   |   |                  |                |                   |          |              |          |
|   |   |                  |                |                   |          |              |          |
|   |   |                  |                |                   |          |              |          |
|   |   |                  | - 311          |                   |          |              |          |
| Comments:                                     |   |                  |                |                   |          |              |          |
|   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                  |                |                   |          |              |          |
| PRESER  | VATIVE                                  | ī                | pH Meter       |                   |          |              |          |
| cooled at 4°C?                                |   |                  | No.:           | Reading           | тс       | Time         | Analyst  |
| ICI   |   | }                |                |                   |          |              |          |
| INO <sub>3</sub>                              |   | F                | ρΗ             |                   |          |              |          |
| 2504  |   | Ţī               | oH Dup.        |                   |          |              |          |
| IaOH  |   |                  |                |                   |          |              |          |
| la <sub>2</sub> S <sub>2</sub> O <sub>3</sub> |   |                  |                |                   |          |              |          |
| other   |   |                  |                |                   |          |              |          |
| iampled By:                                   | 5.0 =                                   |                  |                |                   |          |              |          |
| RELINOUS                                      | HED BY:                                 | 1                | RECEIVE        | D BY:             |          | DATE A       | ND TIME: |
| M   |   | 1                | 111            |                   |          |              |          |
| J. 4  |   | Ĵ                | 11/            |                   | -        | 4.28.2       | 11:15    |
| 1   |   |                  |                | -                 |          |              |          |
|   |   | -                |                |                   | -        |              |          |
|   |   |                  |                |                   |          |              |          |

Contact Us; 973-361-4252 Fax: 973-989-5288 Web: www.lalonllne.com

# **Chain of Custody Record**

Integrated Analytical Labs 273 Franklin Road Randolph, NJ 07869

| Customer Information   |  | Reportii       | Reporting Inform        | ation                          |             | Rush TAT<br>Charge   | <u>.</u>       | Delive                             | Deliverables                                      |             | EDDs                                | Concentrations Expected                                |
|--|--|----------------|-------------------------|--------------------------------|-------------|--|----------------|------------------------------------|---|-------------|-------------------------------------|--|
| Company: S < S   | REPORT TO:                                     |                | . 8                     |                                | 188         | 24 hr - 100%   | _              | NJ, CT, PA                         | λN  | 0           | NJ SRP                              | Low Med High   |
| Address:   | Address:                                       |                |                         |                                |             | 48 hr - 75%<br>72 hr - 50%   |                | Results Only<br>(Level I)          | ☐ ASP Category                                    |             | NYSDEC EQUIS                        | Known Hazard:  |
|  |  | c              | 0                       |                                |             | 96 hr - 35%<br>5 day - 25%   |                | Reduced<br>(Level Intil)           | :   |             | lab approved custom EDD             | □ YES □ NO   |
| Telephone #: 973 - 231 - 600   | / Attn:  | 1              |                         |                                |             | 6-9 day - 10%  |                | Regulatory/ Full'<br>(Level IV)    | ☐ ASP Category                                    |             | NO EDD REQ'D                        | Describe:  |
| Fax #:   | FAX#   |                |                         |                                |             |  | Turn           | Turn-Around Time (TAT)             | ne (TAT)  |             | Regul                               | Regulatory Requirement                                 |
| Project Manager: P . 1 C   | INVOICE TO:                                    |                |                         |                                | 13          | Standard (10   | business       | Standard (10 business days) Verbal |   |             | New Jorsey                          | New York   |
| EMAIL Address:   | Address:                                       |                |                         |                                |             | Rush/data needed   | peq<br>(pevouc |                                    |   |             | □ GWQS                              | ☐ AWQS (TOGS Table 1)                                  |
| Project Name: MONA HOX   |  |                |                         |                                |             | Hard Copy: Std 3 week  | : Std 3 w      | Sek<br>Bek                         | Other - call for price                            | or price    | P. G.                               | ☐ GWEL (TOGS Table 5)                                  |
| Project Location (State):  | Attn:  |                |                         |                                |             | Petrole  | on Hydro       | arbons - Se                        | Petroleum Hydrocarbons · Selection is REQUIRED    | IRED        | SRS                                 | Part 375-6.8(a) - Unrestricted                         |
| Bottle Order #:  | PO #   | Ŋ              | 010                     | 640                            |             | O NJEPH  | -DRO - Cata    | gory 1 TAT                         | ☐ NJ EPH-DRO - Catagory 1 Other than 2 weeks:     |             | ☐ Ecological                        | Part 375-6.8(b) - Restricted                           |
| Report to"/"Invoice To" same as above  | Quote #  |                |                         |                                |             | □ NJ EPH-C48 - Catagory 2  | Cdo - Cata     | 2 / 10                             | CT ETPH   | (0)         | Ma □                                | CP-51 Table 2 of February                              |
| Sampled by: S O  | 400  | -30            | Sample Matrix           |                                | 1           | ☐ NJ EPH-Fractionated - Cat 2  | Fractional     | d-Cet 2                            | ☐ DRO-8015  |             | □ SPLP                              | Other States / Criteria                                |
| ن ا  | WW - Waste Water                               | Water          | 01-0il<br>8-Soil        |                                |             | 72   | ANALYTIC       | AL PARAME                          | ANALYTICAL PARAMETERS (please note if contingent) | e if contin | gent)                               | ☐ Pennsylvania Act 2                                   |
| Field Sampling Equipment Rental  | SW - Surface Water                             | atter<br>Vater | SOL - Solid (specify)   | nent<br>(specify)              |             | (K)  | <br>           | +                                  | -   |             |                                     | ☐ CT RCSA 22a-133k1-k3                                 |
| SAMPLE INFORMATION   | LIQ - Liquid (specify) M - Multiphasic         | ecify)         | SL - Sludge<br>W - Wipe |                                |             | 17   | H              | _                                  | _   |             |                                     | ☐ TSCA PCBs  |
| Client ID Depth (ft only)  | _  | Buji           | Metrix                  | *                              | M           | 30   | 10             | 'つ                                 |   |             |                                     | OTHER Regulatory Requirements -<br>specify in comments |
|  | Date   | Time           |                         | containers                     |             | +  | _              |                                    |   |             |                                     | Sample Specific Notes:                                 |
| 30-049   | 02.82.1  | 9.62           | ۲<br>۲                  | VI                             |             | 7  | )              |                                    |   | 1-9         |                                     |  |
|  |  |                | 100                     |                                | - 8         | 100  |                | 66                                 |   |             |                                     | 200 200 200 200  |
|  |  |                |                         |                                |             |  |                |                                    |   |             |                                     |  |
|  |  |                |                         | Carl<br>Carl                   |             | 200  | 1.95           | 100                                |   |             | 35 H 28 N                           |  |
|  | Ř.   |                | le i                    | 100 mg                         | id s        |  |                |                                    |   |             |                                     |  |
| Samples previously analyzed by IAL?  | Container                                      | 12             | ğ                       | Preservative (use code)        | (epao es    |  | 72             |                                    |   | ch          |                                     | FOR LAB USE ONLY                                       |
| YES / NO   |  |                | Conta                   | Container Type (use code)      | (apoo es    |  |                |                                    |   |             |                                     | 1,00   |
| Please print legibly and fill out 1 = None 2 = HCl Completely. Samples cannot be 3 = HNO3 processed and the turnaround time 4 = MeOH (TAT) will not start unitiany | A = Amber Glass B = Plastic C = Vial D = Glass | Special II     | nstructions<br>+        | C Sequin                       | 2 S 5       | Special Instructions/OC Requirements & Comments:                         | neg.           | 3                                  | 17-KZ   |             | Cice & Margarette                   | SpG #: 3878  |
|  | E = EnCore<br>T = Terracore                    | 2              | inquished by            | hed by (Signature and Company) | d Company   |  | Date           | Time                               | Received  | by (Signatu | Received by (Signature and Company) | T FEE  |
| Samples rec'd at lab > 50M. Carrier (check one): BY EVERTITING THIS CONE.  | ck one):                                       | 1              | 1                       |                                |             | 5  | 7/13/2         | 1415                               | 7   | 1           | 1                                   | 412900 145   |
|  | Client Courier                                 |                |                         |                                |             |  |                |                                    |   |             |                                     |  |
| (found on rear of pink copy).  | L Fedex/UPS***                                 |                |                         | 1                              | i           | 1  |                |                                    |   |             |                                     |  |
| LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK  |  |                | Certification           | Ds: TNI (TNIO                  | 284); CT (P | IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (88-00773) | 751); NY (11   | 102); PA (68-00                    | 73).  |             |                                     | - 4  |

# SAMPLE RECEIPT VERIFICATION

| CASE NO: <b>E 20</b> 02898  | CLIENT: 5+5   |
|---|---|
| COOLER TEMPERATURE: 2° - 6°C:   | ( See Chain of Custody)   |
| COC: COMPLETE/ INCOMPLETE   | Comments  |
| KEY  ✓ = YES/NA   | VOA received: Fincore IGW - Methanol  |
| ⇒ = NO  | (check one) Terra Core No Preservative  |
| ✓ Bottles Intact  |   |
| ✓ no-Missing Bottles ✓ no-Extra Bottles   |   |
| ✓ Sufficient Sample Volume  |   |
| <ul><li>✓ no-headspace/bubbles in VOs</li><li>✓ Labels intact/correct</li></ul>   |   |
| <ul> <li>✓ pH Check (exclude VOs)¹</li> <li>✓ Correct bottles/preservative</li> </ul>   |   |
| Sufficient Holding/Prep Time <sup>1</sup>   |   |
| Multiphasic Sample Sample to be Subcontracted   |   |
| ✓ Chain of Custody is Clear   |   |
| <sup>1</sup> All samples with "Analyze Immediately" holding times will the following tests: pH, Temperature, Free Residual Chlori | be analyzed by this laboratory past the holding time. This includes but is not limited to ne. Total Residual Chlorine, Dissolved Oxygen, Sulfite. |
| ADDITIONAL COMMENTS:  |   |
|   | A .   |
| SAMPLE(S) VERIFIED BY: INITIAL  | DATE 4/28/20  |
| CORRECTIVE ACTION REQUIRED  | YES SEE BELOW) NO Y   |
| If COC is <b>NOT</b> clear, <b>STOP</b> until you ge  | t client to authorize/clarify work.   |
| CLIENT NOTIFIED: YES  | Date/ Time: NO NO   |
| PROJECT CONTACT: SUBCONTRACTED LAB:   |   |
| DATE SHIPPED:   | 1911-01-01  |
| ADDITIONAL COMMENTS:  |   |
| 70172 + 31431   |   |
|   |   |
| VEDICIED/TAKEN BV: INITIAL  | N.I. DATE 4/20/20   |

777 New Durham Rd., Edison, NJ 08817

| CLIENT & PROJECT   | REPOR             | REPORTING & BILLING    | DNI          | ,           |              |                       |            |                 |  |              |                         |                 | 7    | ist-   | $\frac{1}{2}$             |                |
|--|-------------------|------------------------|--------------|-------------|--------------|-----------------------|------------|-----------------|--|--------------|-------------------------|-----------------|------|--|---------------------------|----------------|
| Name: Integrated Analytical Laboratories LLC   | Contact:          | Thomas Malanga         | 22           |             |              |                       |            | Turnar          | Turnaround Time  | e            |                         |                 |      | Report   | Report Format             |                |
|  | Fax#:             |                        |              |             | Verbal/Fax   | ×ا                    |            |                 |  |              |                         |                 | Redu | Reduced / Level III  | Ξ                         |                |
| Address: 273 Franklin Road   | EMail to:         | tmalanga@ialonline.com | ne.com       |             | 24 hr*       | 48 hr <sup>4</sup> 73 | 72 hr* 1   | 1 wk*           | 2 wk 0   | Other:       | 6 Business Days         | ss Days         |      |  |                           |                |
| Randolph, NJ 07869   | Report to:        | Thomas Malanga         | 38           |             | Hard Copy    | ≱                     |            |                 |  |              |                         |                 | S    | Special Requirements   | quireme                   | nts            |
|  | Address:          |                        |              |             | 72 hr*       | 1 wk* 2               | 2 wk* 3    | 3 wk            | 0  | Other:       |                         |                 |      |  |                           |                |
| Telephone #: 973-361-4252  |                   |                        |              |             | *Prior to    | sample                | arrival, 1 | Lab not         | *Prior to sample arrival, Lab notification is required | s requir     | ed.                     |                 |      |  |                           |                |
| Fax #: 973-989-5288  |                   |                        |              | •11         |              |                       |            |                 |  |              |                         |                 | Pre  | Preservative   |                           |                |
| Project Name: E20-02898  | Invoice to:       | Thomas Malanga         | 38           |             | AN           | 4LYTICA               | L PARA     | METE            | ANALYTICAL PARAMETERS / PRESERVATIVES                  | SERVAT       | IVES                    |                 | - +  | 1 = HCL; 2 = N3OH; 3 = HNO <sub>3</sub><br>4 = H <sub>2</sub> SO <sub>4</sub> , 5= MeOH; 6 = Other | OH, 3 = HN<br>IcOH, 6 = 0 | D <sub>3</sub> |
| Project Location (State): NJ   | Address:          |                        |              | 1 2 3 4 5 6 | 123          | 123 1                 | 123 1      | 1 2 3 1 4 5 6 4 | 123   1  | 123 12       | 3 123                   | 3 1 2 3 6 4 5 6 | 123  | 1 2 3  | 123                       | 4 5 6          |
| Project Manager:   |                   |                        |              |             |              |                       |            |                 |  |              |                         |                 |      |  |                           |                |
| Reference ID#: PO#   |                   |                        |              | (BZ         |              |                       |            | -               |  |              |                         |                 |      |  |                           | 1.1            |
| SAMPLE INFORMATION   |                   |                        |              | 106) əpi    |              |                       |            |                 |  |              |                         |                 |      |  |                           |                |
|  |                   |                        |              | _yan        |              |                       | _          | _               |  |              |                         |                 |      |  |                           |                |
| Sample 1D Sample Depth (in Feet)   | Sampling          | Matrix                 | # of         | (Ato        |              |                       |            | -               |  |              |                         |                 |      |  |                           |                |
|  | -                 | Lico                   | -            | D           |              |                       |            | -               |  |              |                         |                 |      |  |                           |                |
|  | +                 |                        |              |             |              |                       |            | +               |  | +            | +                       | 1               |      |  |                           |                |
| ō of   |                   |                        |              |             |              |                       |            |                 |  |              |                         |                 |      |  |                           |                |
| 37   |                   |                        |              |             |              |                       |            |                 |  |              |                         |                 |      |  |                           |                |
|  |                   |                        | *            |             |              |                       |            |                 |  |              |                         |                 |      |  |                           |                |
|  |                   |                        |              |             |              |                       | -          |                 |  | -            |                         |                 |      |  |                           |                |
|  |                   |                        |              |             |              |                       |            | -               |  | -            |                         |                 |      |  |                           |                |
|  |                   |                        |              |             |              |                       | -          |                 |  |              |                         |                 |      |  |                           |                |
|  | 460-208555        | 460-208555 Chair       |              |             |              |                       |            |                 |  |              |                         |                 |      |  |                           |                |
|  | <br> -            | Citati of Custody      |              | . 1         |              |                       |            |                 |  |              |                         |                 |      |  |                           |                |
|  |                   |                        |              |             |              |                       |            |                 |  |              |                         | L               |      |  |                           |                |
|  |                   |                        |              |             |              |                       | -          | -               |  |              |                         |                 |      |  |                           |                |
| Please print legibly and fill out completely. Samples cannot be processed and the turnaround time will not start until any ambiguities have been resolved. | nnot be processed | l and the turnaround   | time will no | t start unt | il any ambig | uities have           | <u> </u>   | COOLER TEMP.    |  | Concentratio | Concentrations Expected |                 | Know | Known Hazard: yes  | es no                     |                |
|  | METDIA            | d INOTH A              |              |             |              |                       |            |                 | ာ့   | LOW ME       | MED HIGH                | Describe        |      |  |                           |                |
| EMAIL CONFIRMATION REQUIRED  | NFIKM             | AIIONK                 | ECO          | KE          |              |                       | Note       | ial i           |  |              |                         |                 |      |  |                           | ]              |

# 907 KGOLSA)

|                   |                                   |              | 10              | REV   |
|-------------------|-----------------------------------|--------------|-----------------|---|
|                   |                                   |              | PAGE:           |   |
| 4                 | a Color                           | Lab Case #   |                 | No. 2 |
| Signature/Company | Received by Ly Profest 5 8/20 167 | Received by: | Received by:    | 490 TRII 1205   |
| Time              | 1136                              |              |                 |   |
| Date              | 5/1/20                            |              |                 |   |
| Signature/Company | ed by: Ofmy of                    | sd by:       | ed by:          | (001-101)   |
| 5/1               | Renuished b                       | Renquished b | Relinquished by |   |
|                   |                                   |              |                 |   |

Client: S & S Environmental Project: MOUNT HOPE Lab Case No.: E20-02898

| Lab ID:                                    |          | 02898-001 |
|--|----------|-----------|
| Client ID:                                 |          | 20-049    |
| Matrix:                                    |          | Soil      |
| Sampled Date                               |          | 4/28/20   |
| PARAMETER(Units)                           | Conc     | Q MDL     |
| Volatiles (Units)                          |          | (mg/Kg)   |
| Dichlorodifluoromethane                    | ND       | 0.000419  |
| Chloromethane                              | ND       | 0.00046   |
| Vinyl chloride                             | ND       | 0.000458  |
| Bromomethane                               | ND       | 0.000646  |
| Chloroethane                               | ND       | 0.000514  |
| Trichlorofluoromethane                     | ND       | 0.000434  |
| Acrolein                                   | ND       | 0.00524   |
| 1,1-Dichloroethene                         | ND       | 0.000441  |
| Acetone                                    | ND       | 0.00276   |
| Carbon disulfide                           | ND       | 0.000273  |
| Methylene chloride                         | ND       | 0.0021    |
| Acrylonitrile                              | ND       | 0.0021    |
| tert-Butyl alcohol (TBA)                   | ND       | 0.0011    |
| trans-1,2-Dichloroethene                   | ND       | 0.000432  |
| Methyl tert-butyl ether (MTBE)             | ND<br>ND | 0.000432  |
| 1,1-Dichloroethane                         | ND       | 0.000321  |
| cis-1,2-Dichloroethene                     | ND<br>ND | 0.000374  |
| 2-Butanone (MEK)                           | ND<br>ND | 0.00103   |
| Bromochloromethane                         | ND<br>ND | 0.00103   |
| Chloroform                                 | ND<br>ND | 0.000608  |
|  | ND<br>ND | 0.000306  |
| 1,1,1-Trichloroethane Carbon tetrachloride |          |           |
|  | ND       | 0.000298  |
| 1,2-Dichloroethane (EDC)                   | ND       | 0.000409  |
| Benzene                                    | ND       | 0.000234  |
| Trichloroethene                            | ND       | 0.000315  |
| 1,2-Dichloropropane                        | ND       | 0.000253  |
| 1,4-Dioxane                                | ND       | 0.039     |
| Bromodichloromethane                       | ND       | 0.000216  |
| cis-1,3-Dichloropropene                    | ND       | 0.000232  |
| 4-Methyl-2-pentanone (MIBK)                | ND       | 0.000793  |
| Toluene                                    | ND       | 0.000247  |
| trans-1,3-Dichloropropene                  | ND       | 0.00028   |
| 1,1,2-Trichloroethane                      | ND       | 0.000332  |
| Tetrachloroethene                          | ND       | 0.000404  |
| 2-Hexanone                                 | ND       | 0.00166   |
| Dibromochloromethane                       | ND       | 0.000297  |
| 1,2-Dibromoethane (EDB)                    | ND       | 0.000214  |
| Chlorobenzene                              | ND       | 0.000246  |
| Ethylbenzene                               | ND       | 0.000298  |
| Total Xylenes                              | ND       | 0.00116   |
| Styrene                                    | ND       | 0.00036   |
| Bromoform                                  | ND       | 0.000375  |
| Isopropylbenzene                           | ND       | 0.000367  |
| 1,1,2,2-Tetrachloroethane                  | ND       | 0.000473  |
| n-Propylbenzene                            | ND       | 0.0003    |

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

Client: S & S Environmental Project: MOUNT HOPE Lab Case No.: E20-02898

| Lab ID:<br>Client ID:<br>Matrix:<br>Sampled Date   |  | 02898-001<br>20-049<br>Soil<br>4/28/20   |
|--|--|--|
| PARAMETER(Units)   | Conc                                     | Q MDL  |
| Volatiles (Units)  |  | (mg/Kg)  |
| 1,3,5-Trimethylbenzene   | ND                                       | 0.000488   |
| tert-Butylbenzene  | ND                                       | 0.000345   |
| 1,2,4-Trimethylbenzene   | ND                                       | 0.000558   |
| sec-Butylbenzene   | ND                                       | 0.000359   |
| 1,3-Dichlorobenzene  | ND                                       | 0.000319   |
| 4-Isopropyltoluene   | ND                                       | 0.000415   |
| 1,4-Dichlorobenzene  | ND                                       | 0.000319   |
| n-Butylbenzene   | ND                                       | 0.000446   |
| 1,2-Dichlorobenzene  | ND                                       | 0.0003   |
| 1,2-Dibromo-3-chloropropane  | ND                                       | 0.000596   |
| 1,2,4-Trichlorobenzene   | ND                                       | 0.000423   |
| 1,2,3-Trichlorobenzene   | ND                                       | 0.000427   |
| 1,1,2-Trichloro-1,2,2-trifluoroethane  | ND                                       | 0.000477   |
| Methyl acetate   | ND                                       | 0.000332   |
| Cyclohexane  | ND                                       | 0.000491   |
| Methylcyclohexane  | ND                                       | 0.000314   |
| 1,3-Dichloropropene (cis- and trans-)  | ND                                       | 0.00028  |
|  |  | 0.00020  |
| TOTAL TIC's:   | ND                                       |  |
| Semivolatiles (Units)  |  | (mg/Kg)  |
| N-Nitrosodimethylamine   | ND                                       | 0.028  |
| Benzaldehyde   | ND                                       | 0.027  |
| Phenol   | ND                                       | 0.032  |
| Aniline  | ND                                       | 0.021  |
| Bis(2-chloroethyl) ether   | ND                                       | 0.026  |
| 2-Chlorophenol   | ND                                       | 0.026  |
|  |  | 0.032  |
| Benzyl alcohol   | ND                                       | 0.032  |
| •  | ND<br>ND                                 | 0.020  |
| Benzyl alcohol<br>2-Methylphenol<br>2,2'-Oxybis(1-Chloropropane)   |  |  |
| 2-Methylphenol<br>2,2'-Oxybis(1-Chloropropane)   | ND                                       | 0.020  |
| 2-Methylphenol<br>2,2'-Oxybis(1-Chloropropane)<br>4-Methylphenol **  | ND<br>ND                                 | 0.020<br>0.032   |
| 2-Methylphenol<br>2,2'-Oxybis(1-Chloropropane)<br>4-Methylphenol **<br>N-Nitrosodi-n-propylamine   | ND<br>ND<br>ND                           | 0.020<br>0.032<br>0.023  |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone   | ND<br>ND<br>ND<br>ND                     | 0.020<br>0.032<br>0.023<br>0.023   |
| 2-Methylphenol   | ND<br>ND<br>ND<br>ND<br>ND               | 0.020<br>0.032<br>0.023<br>0.023<br>0.028  |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane  | ND<br>ND<br>ND<br>ND<br>ND               | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027   |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene   | ND<br>ND<br>ND<br>ND<br>ND<br>ND         | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022  |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol  | ND            | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022<br>0.024<br>0.030  |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol  | ND      | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022<br>0.024<br>0.030<br>0.020                                     |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Bis(2-chloroethoxy) methane   | ND N | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022<br>0.024<br>0.030<br>0.020<br>0.027                            |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Bis(2-chloroethoxy) methane Benzoic acid                                | ND N | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022<br>0.024<br>0.030<br>0.020<br>0.027<br>0.028                   |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Bis(2-chloroethoxy) methane Benzoic acid 2,4-Dichlorophenol             | ND N | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022<br>0.024<br>0.030<br>0.020<br>0.027<br>0.028<br>0.028          |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Bis(2-chloroethoxy) methane Benzoic acid 2,4-Dichlorophenol Naphthalene | ND N | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022<br>0.024<br>0.030<br>0.020<br>0.027<br>0.028<br>0.026<br>0.026 |
| 2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol ** N-Nitrosodi-n-propylamine Acetophenone Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Bis(2-chloroethoxy) methane Benzoic acid 2,4-Dichlorophenol             | ND N | 0.020<br>0.032<br>0.023<br>0.023<br>0.028<br>0.027<br>0.022<br>0.024<br>0.030<br>0.020<br>0.027<br>0.028<br>0.028          |

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

Client: S & S Environmental Project: MOUNT HOPE Lab Case No.: E20-02898

|                                       | Lab ID:      |          | 02898-001 |       |
|---------------------------------------|--------------|----------|-----------|-------|
|                                       | Client ID:   |          | 20-049    |       |
|                                       | Matrix:      |          | Soil      |       |
| 5                                     | Sampled Date |          | 4/28/20   |       |
| PARAMETER(Units)                      | , P          | Conc     | Q         | MDL   |
| Semivolatiles (Units)                 |              |          | (mg/Kg)   |       |
| 4-Chloro-3-methylphenol               |              | ND       |           | 0.023 |
| 2-Methylnaphthalene                   |              | ND       |           | 0.023 |
| Hexachlorocyclopentadiene             |              | ND       |           | 0.021 |
| 2,4,6-Trichlorophenol                 |              | ND       |           | 0.026 |
| 2,4,5-Trichlorophenol                 |              | ND<br>ND |           | 0.028 |
| 1,1'-Biphenyl                         |              | ND<br>ND |           | 0.028 |
| 2-Chloronaphthalene                   |              | ND<br>ND |           | 0.028 |
| 2-Nitroaniline                        |              | ND<br>ND |           | 0.025 |
|                                       |              | ND<br>ND |           | 0.023 |
| Dimethyl phthalate 2,6-Dinitrotoluene |              | ND<br>ND |           | 0.024 |
| Acenaphthylene                        |              | ND<br>ND |           | 0.032 |
| 3-Nitroaniline                        |              | ND<br>ND |           | 0.026 |
|                                       |              | ND<br>ND |           |       |
| Acenaphthene                          |              |          |           | 0.027 |
| 2,4-Dinitrophenol                     |              | ND       |           | 0.031 |
| 4-Nitrophenol                         |              | ND       |           | 0.030 |
| 2,4-Dinitrotoluene                    |              | ND       |           | 0.029 |
| Dibenzofuran                          |              | ND       |           | 0.025 |
| Diethyl phthalate                     |              | ND       |           | 0.020 |
| Fluorene                              |              | ND       |           | 0.028 |
| 4-Chlorophenyl phenyl ether           |              | ND       |           | 0.027 |
| 4-Nitroaniline                        |              | ND       |           | 0.021 |
| 1,2,4,5-Tetrachlorobenzene            |              | ND       |           | 0.023 |
| 2,3,4,6-Tetrachlorophenol             |              | ND       |           | 0.028 |
| 4,6-Dinitro-2-methylphenol            |              | ND       |           | 0.032 |
| N-Nitrosodiphenylamine                |              | ND       |           | 0.031 |
| 1,2-Diphenylhydrazine                 |              | ND       |           | 0.032 |
| 4-Bromophenyl phenyl ether            |              | ND       |           | 0.023 |
| Hexachlorobenzene                     |              | ND       |           | 0.023 |
| Atrazine                              |              | ND       |           | 0.025 |
| Pentachlorophenol                     |              | ND       |           | 0.022 |
| Phenanthrene                          |              | ND       |           | 0.031 |
| Anthracene                            |              | ND       |           | 0.032 |
| Carbazole                             |              | ND       |           | 0.029 |
| Di-n-butyl phthalate                  |              | ND       |           | 0.028 |
| Fluoranthene                          |              | ND       |           | 0.032 |
| Benzidine                             |              | ND       |           | 0.025 |
| Pyrene                                |              | ND       |           | 0.030 |
| Butyl benzyl phthalate                |              | ND       |           | 0.031 |
| 3,3'-Dichlorobenzidine                |              | ND       |           | 0.029 |
| Benzo[a]anthracene                    |              | ND       |           | 0.020 |
| Chrysene                              |              | ND       |           | 0.031 |
| Bis(2-ethylhexyl) phthalate           |              | ND       |           | 0.030 |
| Di-n-octyl phthalate                  |              | ND       |           | 0.031 |
| Benzo[b]fluoranthene                  |              | ND       |           | 0.032 |
| Benzo[k]fluoranthene                  |              | ND       |           | 0.028 |

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

Client: S & S Environmental Project: MOUNT HOPE Lab Case No.: E20-02898

| Lab Case No.: E20              |      | 02000 001 |
|--------------------------------|------|-----------|
| Lab ID:                        |      | 02898-001 |
| Client ID:                     |      | 20-049    |
| Matrix:                        |      | Soil      |
| Sampled Date                   | Come | 4/28/20   |
| PARAMETER(Units)               | Conc | Q MDL     |
| Semivolatiles (Units)          |      | (mg/Kg)   |
| Benzo[a]pyrene                 | ND   | 0.029     |
| Indeno[1,2,3-cd]pyrene         | ND   | 0.032     |
| Dibenz[a,h]anthracene          | ND   | 0.030     |
| Benzo[g,h,i]perylene           | ND   | 0.032     |
| Dinitrotoluene (2,4- and 2,6-) | ND   | 0.032     |
| TOTAL TIC's:                   | ND   |           |
| PCB's (Units)                  |      | (mg/Kg)   |
| Aroclor-1016                   | ND   | 0.00131   |
| Aroclor-1221                   | ND   | 0.00131   |
| Aroclor-1232                   | ND   | 0.00131   |
| Aroclor-1242                   | ND   | 0.00131   |
| Aroclor-1248                   | ND   | 0.00131   |
| Aroclor-1254                   | ND   | 0.00131   |
| Aroclor-1260                   | ND   | 0.00131   |
| Aroclor-1262                   | ND   | 0.00131   |
| Aroclor-1268                   | ND   | 0.00131   |
| PCBs                           | ND   | 0.00131   |
| Pesticides (Units)             |      | (mg/Kg)   |
| alpha-BHC                      | ND   | 0.000327  |
| beta-BHC                       | ND   | 0.000327  |
| gamma-BHC (Lindane)            | ND   | 0.000327  |
| delta-BHC                      | ND   | 0.000327  |
| Heptachlor                     | ND   | 0.000327  |
| Aldrin                         | ND   | 0.000327  |
| Heptachlor epoxide             | ND   | 0.000327  |
| Endosulfan I                   | ND   | 0.000327  |
| 4,4'-DDE                       | ND   | 0.000327  |
| Dieldrin                       | ND   | 0.000327  |
| Endrin                         | ND   | 0.000327  |
| Endosulfan II                  | ND   | 0.000327  |
| 4,4'-DDD                       | ND   | 0.000327  |
| Endrin aldehyde                | ND   | 0.000327  |
| Endosulfan sulfate             | ND   | 0.000327  |
| 4,4'-DDT                       | ND   | 0.000327  |
| Endrin ketone                  | ND   | 0.000327  |
| Methoxychlor                   | ND   | 0.000327  |
| alpha-Chlordane                | ND   | 0.000327  |
| gamma-Chlordane                | ND   | 0.000327  |
| Toxaphene                      | ND   | 0.00392   |
| Endosulfan (I and II)          | ND   | 0.000327  |
| Chlordane (alpha and gamma)    | ND   | 0.000327  |

Chlordane (alpha and gamma)

ND = Analyzed for but Not Detected at the MDL

Client: S & S Environmental Project: MOUNT HOPE Lab Case No.: E20-02898

| Lab                | Case No.: E20-02 |       |       |        |
|--------------------|------------------|-------|-------|--------|
|                    | Lab ID:          | 0     | 2898- | -001   |
|                    | Client ID:       |       | 20-0  | 49     |
|                    | Matrix:          |       | Soi   |        |
|                    | Sampled Date     |       | 4/28/ |        |
| PARAMETER(Units)   |                  | Conc  | Q     | MDL    |
| Herbicides (Units) |                  |       | (mg/k | (g)    |
| Dalapon            |                  | ND    |       | 0.0066 |
| Dicamba            |                  | ND    |       | 0.0066 |
| 2,4-D              |                  | ND    |       | 0.0066 |
| 2,4,5-TP (Silvex)  |                  | ND    |       | 0.0066 |
| 2,4,5-T            |                  | ND    |       | 0.0066 |
| 2,4-DB             |                  | ND    |       | 0.0066 |
| Dinoseb            |                  | ND    |       | 0.0066 |
| NJ-EPH-C40 (Units) |                  |       | (mg/K | (g)    |
| C9-C40             |                  | ND    |       | 19.5   |
| Alcohols (Units)   |                  |       | (mg/K | (g)    |
| Methanol           |                  | ND    |       | 1.91   |
| Metals (Units)     |                  |       | (mg/K | (g)    |
| Aluminum           |                  | 2040  |       | 2.08   |
| Antimony           |                  | 0.360 | J     | 0.208  |
| Arsenic            |                  | 1.14  |       | 0.156  |
| Barium             |                  | 8.52  |       | 0.260  |
| Beryllium          |                  | 0.674 |       | 0.156  |
| Cadmium            |                  | ND    |       | 0.313  |
| Calcium            |                  | 3740  |       | 15.6   |
| Chromium           |                  | 3.72  |       | 0.260  |
| Cobalt             |                  | 3.70  |       | 0.156  |
| Copper             |                  | 9.66  |       | 0.365  |
| Iron               |                  | 9670  |       | 15.6   |
| Lead               |                  | 2.02  |       | 0.260  |
| Magnesium          |                  | 2260  |       | 15.6   |
| Manganese          |                  | 65.7  |       | 0.365  |
| Mercury            |                  | ND    |       | 0.010  |
| Nickel             |                  | 4.31  |       | 0.365  |
| Potassium          |                  | 1240  |       | 20.8   |
| Selenium           | 5                | 4.01  |       | 1.56   |
| Silver             |                  | ND    |       | 0.313  |
| Sodium             |                  | 161   |       | 20.8   |
| Thallium           |                  | 0.455 | J     | 0.260  |
| Vanadium           |                  | 7.69  |       | 0.260  |
| Zinc               |                  | 10.6  |       | 1.04   |

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

Client: S & S Environmental Project: MOUNT HOPE Lab Case No.: E20-02898

| Lab ID:                         | ]    | 2898-         |       |
|---------------------------------|------|---------------|-------|
| Client ID:                      |      | <b>20-0</b> 4 | 19    |
| Matrix:                         |      | Soil          |       |
| Sampled Date                    |      | 4/28/2        | 20    |
| PARAMETER(Units)                | Conc | Q             | MDL   |
| General Analytical (Units)      |      |               | 96    |
| Hexavalent Chromium(mg/Kg)      | ND   |               | 0.379 |
| pH/Corrosivity(SU)              | 8.47 |               | NA    |
| Trivalent (III) Chromium(mg/Kg) | 3.72 |               | 0.379 |
| Subcontracted Data (Units)      |      | (mg/K         | g)    |
|                                 | *    |               | *     |

ND = Analyzed for but Not Detected at the MDL

<sup>\*</sup>Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section

TestAmerica Laboratories, Inc.

Eurofins TestAmerica, Edison

SUMMARY OF ANALYTICAL RESULTS: 460-208555-1 Job Description: E20-02898 For:

Integrated Analytical Laboratories LLC PO BOX 8026 Parsippany, New Jersey 07054

| Client ID              | NJ SRS7_26D_Tbl1A | NJ SRS7 26D Tbi1B | NJDEP         | E20-02898-001       |
|------------------------|-------------------|-------------------|---------------|---------------------|
| Lab Sample ID          | Residential       | Non-Residential   | IGW Screening | 460-208555-1        |
| Sampling Date          | Sept_2017         | Sept_2017         | Nov 2013      | 04/28/2020 09:00:00 |
| Matrix                 |                   |                   |               | SoS                 |
|                        |                   |                   |               |                     |
|                        |                   |                   |               |                     |
|                        |                   |                   |               | Result Q MD         |
| SOIL BY 9012B          |                   |                   |               |                     |
| Cyanide, Total (mg/kg) | 47                | 089               | 20            | 0.12 U F1 0.12      |

 $F1:\mbox{MS}$  and/or MSD recovery exceeds control limits.  $U:\mbox{Indicates}$  the analyte was analyzed for but not detected.

Senior Project Manager (484)685-0871

Lab Contact: Jill Miller

S S Environmental Project Name: MOUNT HOPE IAL SDG No:E20-02898

| Sample #:                      |            | QCN         | NJDEP SOIL REMEDIATION | NOIL             |      | 20-049     |          |  |
|--------------------------------|------------|-------------|------------------------|------------------|------|------------|----------|--|
| Field ID:                      |            |             | STANDARDS              |                  |      |            |          |  |
| Lab ID:                        |            | Residential | Non-Res                | Default IGW      |      | 02898-001  |          |  |
| Date Sampled:                  |            | SRS         | SRS                    | Screening        |      | 04/28/2020 |          |  |
| Deptn(ft);                     | CAS        | (mg/Kg)     | (mg/Kg)                | Level<br>(mg/Kg) |      |            |          |  |
| Volatiles (mg/Kg)              |            |             |                        |                  | Conc | Q<br>4     | MDL      |  |
| Dichlorodifluoromethane        | 75-71-8    | 490         | 230000                 | 39               | QN   | 0.00108    | 0.000419 |  |
| Chloromethane                  | 74-87-3    | 4           | 12                     | SN               | Q    | 0.00108    | 0.00046  |  |
| Vinyl chloride                 | 75-01-4    | 0.7         | 2                      | 0.005            | Q    | 0.00108    | 0.000458 |  |
| Bromomethane                   | 74-83-9    | 25          | 59                     | 0.04             | QN   | 0.00108    | 0.000646 |  |
| Chloroethane                   | 75-00-3    | 220         | 1100                   | SN               | Q    | 0.00108    | 0.000514 |  |
| Trichlorofluoromethane         | 75-69-4    | 23000       | 340000                 | 34               | Q    | 0.00108    | 0.000434 |  |
| Acrolein                       | 107-02-8   | 0.5         | ,                      | 0.5              | QN   | 0.022      | 0.00524  |  |
| 1,1-Dichloroethene             | 75-35-4    | 11          | 150                    | 0.008            | Q    | 0.00108    | 0.000441 |  |
| Acetone                        | 67-64-1    | 70000       | NS                     | 19               | QN   | 0.011      | 0.00276  |  |
| Carbon disulfide               | 75-15-0    | 7800        | 110000                 | 9                | QN   | 0.00108    | 0.000273 |  |
| Methylene chloride             | 75-09-2    | 46          | 230                    | 0.01             | QN   | 0.00216    | 0.0021   |  |
| Acrylonitrile                  | 107-13-1   | 6:0         | ო                      | 0.5              | Q    | 0.022      | 0.00464  |  |
| tert-Butyl alcohol (TBA)       | 75-65-0    | 1400        | 11000                  | 0.3              | Q    | 0.00432    | 0.0011   |  |
| trans-1,2-Dichloroethene       | 156-60-5   | 300         | 720                    | 9.0              | Q    | 0.00108    | 0.000432 |  |
| Methyl tert-butyl ether (MTBE) | 1634-04-4  | 110         | 320                    | 0.2              | QN   | 0.00108    | 0.000321 |  |
| 1,1-Dichloroethane             | 75-34-3    | 80          | 24                     | 0.2              | Q    | 0.00108    | 0.000394 |  |
| cis-1,2-Dichloroethene         | 156-59-2   | 230         | 260                    | 0.3              | Q    | 0.00108    | 0.000374 |  |
| 2-Butanone (MEK)               | 78-93-3    | 3100        | 44000                  | 6.0              | Q    | 0.00432    | 0.00103  |  |
| Bromochloromethane             | 74-97-5    | SN          | SN                     | SN               | Q    | 0.00108    | 0.000314 |  |
| Chloroform                     | 67-66-3    | 9.0         | 2                      | 0.4              | Q    | 0.00108    | 0.000608 |  |
| 1,1,1-Trichloroethane          | 71-55-6    | 160000      | SN                     | 0.3              | QN   | 0.00108    | 0.000306 |  |
| Carbon tetrachloride           | 56-23-5    | 2           | 4                      | 0.005            | Q    | 0.00108    | 0.000298 |  |
| 1,2-Dichloroethane (EDC)       | 107-06-2   | 6.0         | က                      | 0.005            | Q    | 0.00108    | 0.000409 |  |
| Benzene                        | 71-43-2    | 2           | ß                      | 0.005            | 2    | 0.00108    | 0.000234 |  |
| Trichloroethene                | 79-01-6    | က           | 10                     | 0.01             | 2    | 0.00108    | 0.000315 |  |
| 1,2-Dichloropropane            | 78-87-5    | 2           | ເດ                     | 0.005            | 2    | 0.00108    | 0.000253 |  |
| 1,4-Dioxane                    | 123-91-1   | NS          | SN                     | SN               | 2    | 0.216      | 0.039    |  |
| Bromodichloromethane           | 75-27-4    | -           | က                      | 0.005            | Q    | 0.00108    | 0.000216 |  |
| cis-1,3-Dichloropropene        | 10061-01-5 | SN          | SN                     | SN               | Q    | 0.00108    | 0.000232 |  |
| 4-Methyl-2-pentanone (MIBK)    | 108-10-1   | SN          | SN                     | SN               | Q    | 0.00216    | 0.000793 |  |
| Toluene                        | 108-88-3   | 6300        | 91000                  | 7                | Q    | 0.00108    | 0.000247 |  |
| trans-1,3-Dichloropropene      | 10061-02-6 | SN          | SN                     | SN               | Q    | 0.00108    | 0.00028  |  |
| 1,1,2-Trichloroethane          | 2-00-62    | 2           | 9                      | 0.02             | Q    | 0.00108    | 0.000332 |  |
| Tetrachloroethene              | 127-18-4   | 43          | 1500                   | 0.005            | Q    | 0.00108    | 0.000404 |  |
| 2-Hexanone                     | 591-78-6   | SN          | SN                     | SN               | Q    | 0.00216    | 0.00166  |  |
| Dibromochloromethane           | 124-48-1   | က           | œ                      | 0.005            | 2    | 0.00108    | 0.000297 |  |
| 1,2-Dibromoethane (EDB)        | 106-93-4   | 0.008       | 0.04                   | 0.005            | Q    | 0.00108    | 0.000214 |  |
| Chlorobenzene                  | 108-90-7   | 510         | 7400                   | 0.6              | 2    | 0.00108    | 0.000246 |  |

S S Environmental Project Name: MOUNT HOPE IAL SDG No:E20-02898

| Ethylbenzene                          | 100-41-4  | 7800  | 110000 | 13    | Q  | 0.00108 | 0.000298 |
|---------------------------------------|-----------|-------|--------|-------|----|---------|----------|
| Total Xylenes                         | 1330-20-7 | 12000 | 170000 | 19    | 9  | 0.00216 | 0.00116  |
| Styrene                               | 100-42-5  | 06    | 260    | က     | 2  | 0.00108 | 0.00036  |
| Bromoform                             | 75-25-2   | 81    | 280    | 0.03  | Q  | 0.00108 | 0.000375 |
| Isopropylbenzene                      | 98-82-8   | NS    | SN     | SN    | Q  | 0.00108 | 0.000367 |
| 1,1,2,2-Tetrachloroethane             | 79-34-5   | 1     | က      | 0.007 | Q  | 0.00108 | 0.000473 |
| n-Propylbenzene                       | 103-65-1  | NS    | SN     | SN    | Q  | 0.00108 | 0.0003   |
| 1,3,5-Trimethylbenzene                | 108-67-8  | NS    | SN     | SN    | 9  | 0.00108 | 0.000488 |
| tert-Butylbenzene                     | 9-90-86   | NS    | SN     | SN    | 2  | 0.00108 | 0.000345 |
| 1,2,4-Trimethylbenzene                | 95-63-6   | NS    | SN     | SN    | 2  | 0.00108 | 0.000558 |
| sec-Butylbenzene                      | 135-98-8  | NS    | SN     | SN    | 2  | 0.00108 | 0.000359 |
| 1,3-Dichlorobenzene                   | 541-73-1  | 5300  | 29000  | 19    | 2  | 0.00108 | 0.000319 |
| 4-Isopropyltoluene                    | 9-28-66   | SN    | SN     | SN    | 2  | 0.00108 | 0.000415 |
| 1,4-Dichlorobenzene                   | 106-46-7  | ro.   | 13     | 2     | Q  | 0.00108 | 0.000319 |
| n-Butylbenzene                        | 104-51-8  | NS    | SN     | SN    | Q  | 0.00108 | 0.000446 |
| 1,2-Dichlorobenzene                   | 95-50-1   | 5300  | 29000  | 17    | Q  | 0.00108 | 0.0003   |
| 1,2-Dibromo-3-chloropropane           | 96-12-8   | 90.0  | 0.2    | 0.005 | 2  | 0.00108 | 0.000596 |
| 1,2,4-Trichlorobenzene                | 120-82-1  | 73    | 820    | 0.7   | Q  | 0.00108 | 0.000423 |
| 1,2,3-Trichlorobenzene                | 87-61-6   | NS    | SN     | SN    | Q  | 0.00108 | 0.000427 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1   | SN    | SN     | SN    | 2  | 0.00108 | 0.000477 |
| Methyl acetate                        | 79-20-9   | 78000 | SN     | 22    | Q  | 0.00216 | 0.000332 |
| Cyclohexane                           | 110-82-7  | NS    | SN     | SN    | Q  | 0.00108 | 0.000491 |
| Methylcyclohexane                     | 108-87-2  | NS    | NS     | NS    | Q  | 0.00108 | 0.000314 |
| 1,3-Dichloropropene (cis- and trans-) | 542-75-6  | 2     | 7      | 0.005 | Q  | 0.00108 | 0.00028  |
| TOTAL TIC'S:                          |           | NS    | SN     | NS    | QV |         |          |

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| Semivolatiles (mg/Kg)        |           |       |        |     | Conc | ď  | 占     | MDL   |  |
|------------------------------|-----------|-------|--------|-----|------|----|-------|-------|--|
| N-Nitrosodimethylamine       | 65-75-9   | 0.7   | 0.7    | 0.7 | 2    | o. | 0.033 | 0.028 |  |
| Benzaldehyde                 | 100-52-7  | 6100  | 68000  | SN  | Q    | 0  | 0.033 | 0.027 |  |
| Phenol                       | 108-95-2  | 18000 | 210000 | ∞   | Q    | o  | 0.033 | 0.032 |  |
| Aniline                      | 62-53-3   | NS    | NS     | SN  | Q    | o. | 0.033 | 0.021 |  |
| Bis(2-chloroethyl) ether     | 111-44-4  | 0.4   | 2      | 0.2 | 2    | Ö  | 0.033 | 0.026 |  |
| 2-Chlorophenol               | 95-57-8   | 310   | 2200   | 0.8 | QV   | 0  | 0.033 | 0.026 |  |
| Benzyl alcohol               | 100-51-6  | NS    | SN     | SN  | Q    | 0  | 0.033 | 0.032 |  |
| 2-Methylphenol               | 95-48-7   | 310   | 3400   | SN  | 9    | O. | 0.033 | 0.020 |  |
| 2,2'-Oxybis(1-Chloropropane) | 108-60-1  | 23    | 29     | r.  | Q    | o  | 0.033 | 0.032 |  |
| 4-Methylphenol **            | 106-44-5  | 31    | 340    | SN  | Q    | o. | 0.033 | 0.023 |  |
| N-Nitrosodi-n-propylamine    | 621-64-7  | 0.2   | 0.3    | 0.2 | Q    | 0  | 0.033 | 0.023 |  |
| Acetophenone                 | 98-86-2   | 2     | S      | က   | Q    | 0  | 0.033 | 0.028 |  |
| Hexachloroethane             | 67-72-1   | 12    | 48     | 0.2 | 9    | 0  | 0.033 | 0.027 |  |
| Nitrobenzene                 | 98-95-3   | വ     | 14     | 0.2 | Q    | O  | 0.033 | 0.022 |  |
| Isophorone                   | 78-59-1   | 510   | 2000   | 0.2 | Q    | 0  | 0.033 | 0.024 |  |
| 2-Nitrophenol                | 88-75-5   | NS    | NS     | NS  | Q    | o  | 0.033 | 0.030 |  |
| 2,4-Dimethylphenol           | 105-67-9  | 1200  | 14000  |     | Q    | Ö  | 0.033 | 0.020 |  |
| Bis(2-chloroethoxy) methane  | 111-91-1  | NS    | NS     | SN  | Q    | o  | 0.033 | 0.027 |  |
| Benzoic acid                 | 65-85-0   | NS    | SN     | NS  | 9    | o  | 0.328 | 0.028 |  |
| 2,4-Dichlorophenol           | 120-83-2  | 180   | 2100   | 0.2 | Q    | 0  | 0.033 | 0.026 |  |
| Naphthalene                  | 91-20-3   | 9     | 17     | 25  | 2    | ō  | 0.033 | 0.026 |  |
| 4-Chloroaniline              | 106-47-8  | NS    | SN     | NS  | Q    | 0  | 0.033 | 0.023 |  |
| Hexachlorobutadiene          | 87-68-3   | 9     | 25     | 6.0 | 2    | 0  | 0.033 | 0.021 |  |
| Caprolactam                  | 105-60-2  | 31000 | 340000 | 12  | 2    | 0  | 0.033 | 0.025 |  |
| 4-Chloro-3-methylphenol      | 29-50-7   | NS    | NS     | SN  | 2    | 0  | 0.033 | 0.023 |  |
| 2-Methylnaphthalene          | 91-57-6   | 230   | 2400   | 80  | 2    | Ö  | 0.033 | 0.021 |  |
| Hexachlorocyclopentadiene    | 77-47-4   | 45    | 110    | 320 | 2    | Ö  | 0.033 | 0.028 |  |
| 2,4,6-Trichlorophenol        | 88-06-2   | 19    | 74     | 0.2 | 2    | o  | 0.033 | 0.026 |  |
| 2,4,5-Trichlorophenol        | 95-95-4   | 6100  | 00089  | 89  | 2    | Ö  | 0.033 | 0.028 |  |
| 1,1'-Biphenyl                | 92-52-4   | 61    | 240    | 140 | Q    | o  | 0.033 | 0.028 |  |
| 2-Chloronaphthalene          | 91-58-7   | NS    | SN     | SN  | Q    | o  | 0.033 | 0.025 |  |
| 2-Nitroaniline               | 88-74-4   | 39    | 23000  | SN  | Q    | o  | 0.033 | 0.025 |  |
| Dimethyl phthalate           | 131-11-3  | NS    | NS     | SN  | Q    | Ö  | 0.033 | 0.024 |  |
| 2,6-Dinitrotoluene           | 606-20-2  | 0.7   | က      | SN  | Q    | 0  | 0.033 | 0.032 |  |
| Acenaphthylene               | 208-96-8  | SN    | 300000 | SN  | 2    | Ö  | 0.033 | 0.026 |  |
| 3-Nitroaniline               | 89-09-2   | NS    | SN     | SN  | Q    | ö  | 0.033 | 0.025 |  |
| Acenaphthene                 | 83-32-9   | 3400  | 37000  | 110 | Q    | ö  | 0.033 | 0.027 |  |
| 2,4-Dinitrophenol            | 51-28-5   | 120   | 1400   | 0.3 | Q    | Ö  | 0.033 | 0.031 |  |
| 4-Nitrophenol                | 100-02-7  | NS    | NS     | NS  | Q    | ō  | 0.033 | 0.030 |  |
| 2,4-Dinitrotoluene           | 121-14-2  | 0.7   | ო      | NS  | Q    | Ö  | 0.033 | 0.029 |  |
| Dibenzofuran                 | 132-64-9  | NS    | NS     | SN  | 2    | Ö  | 0.033 | 0.025 |  |
| Diethyl phthalate            | 84-66-2   | 49000 | 550000 | 88  | Q    | 0  | 0.033 | 0.020 |  |
| Fluorene                     | 86-73-7   | 2300  | 24000  | 170 | 2    | ö  | 0.033 | 0.028 |  |
| 4-Chlorophenyl phenyl ether  | 7005-72-3 | NS    | SN     | SN  | 2    | Ö  | 0.033 | 0.027 |  |
| 4-Nitroaniline               | 100-01-6  | NS    | SN     | NS  | QN   | ō  | 0.033 | 0.021 |  |

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| 1,2,4,5-Tetrachlorobenzene     | 95-94-3    | SN     | SN     | NS   | QN | 0.033 | 0.023 |  |
|--------------------------------|------------|--------|--------|------|----|-------|-------|--|
| 2,3,4,6-Tetrachlorophenol      | 58-90-2    | NS     | NS     | SN   | Q  | 0.033 | 0.028 |  |
| 4,6-Dinitro-2-methylphenol     | 534-52-1   | ဖ      | 89     | 0.3  | Q  | 0.033 | 0.032 |  |
| N-Nitrosodiphenylamine         | 86-30-6    | 66     | 390    | 9.0  | 2  | 0.033 | 0.031 |  |
| 1,2-Diphenylhydrazine          | 122-66-7   | 0.7    | 2      | 0.7  | Q  | 0.033 | 0.032 |  |
| 4-Bromophenyl phenyl ether     | 101-55-3   | NS     | NS     | NS   | Q  | 0.033 | 0.023 |  |
| Hexachlorobenzene              | 118-74-1   | 0.3    | 1      | 0.2  | Q  | 0.033 | 0.023 |  |
| Atrazine                       | 1912-24-9  | 210    | 2400   | 0.2  | 2  | 0.033 | 0.025 |  |
| Pentachlorophenol              | 87-86-5    | 6.0    | က      | 0.3  | 2  | 0.033 | 0.022 |  |
| Phenanthrene                   | 85-01-8    | NS     | 300000 | SN   | 2  | 0.033 | 0.031 |  |
| Anthracene                     | 120-12-7   | 17000  | 30000  | 2400 | 2  | 0.033 | 0.032 |  |
| Carbazole                      | 86-74-8    | 24     | 96     | SN   | 2  | 0.033 | 0.029 |  |
| Di-n-butyl phthalate           | 84-74-2    | 6100   | 68000  | 260  | 2  | 0.033 | 0.028 |  |
| Fluoranthene                   | 206-44-0   | 2300   | 24000  | 1300 | 2  | 0.033 | 0.032 |  |
| Benzidine                      | 92-87-5    | 0.7    | 0.7    | 0.7  | 9  | 0.033 | 0.025 |  |
| Pyrene                         | 129-00-0   | 1700   | 18000  | 840  | 2  | 0,033 | 0:030 |  |
| Butyl benzyl phthalate         | 85-68-7    | 1200   | 14000  | 230  | 2  | 0.033 | 0.031 |  |
| 3,3'-Dichlorobenzidine         | 91-94-1    | -      | 4      | 0.2  | Q  | 0.033 | 0.029 |  |
| Benzo[a]anthracene             | 56-55-3    | ro.    | 17     | 8.0  | 9  | 0.033 | 0.020 |  |
| Chrysene                       | 218-01-9   | 450    | 1700   | 80   | 2  | 0.033 | 0.031 |  |
| Bis(2-ethylhexyl) phthalate    | 117-81-7   | 35     | 140    | 1200 | 2  | 0.033 | 0:030 |  |
| Di-n-octyl phthalate           | 117-84-0   | 2400   | 27000  | 3300 | 9  | 0.033 | 0.031 |  |
| Benzo[b]fluoranthene           | 205-99-2   | ß      | 17     | 2    | 2  | 0.033 | 0.032 |  |
| Benzo[k]fluoranthene           | 207-08-9   | 45     | 170    | 25   | 9  | 0.033 | 0.028 |  |
| Benzo[a]pyrene                 | 50-32-8    | 0.5    | 2      | 0.2  | 2  | 0.033 | 0.029 |  |
| Indeno[1,2,3-cd]pyrene         | 193-39-5   | co.    | 17     | 7    | 2  | 0.033 | 0.032 |  |
| Dibenz[a,h]anthracene          | 53-70-3    | 0.5    | 2      | 0.8  | 2  | 0.033 | 0:030 |  |
| Benzo[g,h,i]perylene           | 191-24-2   | 380000 | 30000  | SN   | 2  | 0.033 | 0.032 |  |
| Dinitrotoluene (2,4- and 2,6-) | 25321-14-6 | 0.7    | 3      | 0.2  | 2  | 0.033 | 0.032 |  |
| TOTAL TIC'S:                   |            | NS     | NS     | SN   | 2  |       | ¥.    |  |

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| Aroclor-1016         12674-11-2         NS         NS         NS         ND           Aroclor-1221         11104-28-2         NS         NS         NS         ND           Aroclor-1232         11141-16-5         NS         NS         NS         ND           Aroclor-1242         53469-21-9         NS         NS         NS         ND           Aroclor-1248         12672-29-6         NS         NS         NS         ND           Aroclor-1254         11096-82-5         NS         NS         NS         ND           Aroclor-1260         37324-23-5         NS         NS         NS         ND           Aroclor-1262         NS         NS         NS         ND           Aroclor-1263         11100-14-4         NS         NS         ND           Aroclor-1268         1136-36-3         0.2         1         0.2         ND | PCB's (mg/Kg) |            |     |       |     | Conc | a | R       | MDL     |
|---|---------------|------------|-----|-------|-----|------|---|---------|---------|
| 11104-28-2       NS       NS       NS       NS         11141-16-5       NS       NS       NS       NS         12672-29-6       NS       NS       NS       NS         11097-69-1       NS       NS       NS         11096-82-5       NS       NS       NS         37324-23-5       NS       NS       NS         11100-14-4       NS       NS       NS         1336-36-3       0.2       1       0.2  | Aroclor-1016  | 12674-11-2 | NS  | NS    | SN  | Q    |   | 0.00327 | 0.00131 |
| 11141-16-5 NS NS NS NS NS S3469-21-9 NS NS NS NS NS NS NS NS 12672-29-6 NS NS NS NS NS 11096-82-5 NS NS NS NS NS NS NS 11100-14-4 NS NS 1336-36-3 0.2 1 0.2   | Aroclor-1221  | 11104-28-2 | NS  | NS    | NS  | Q    |   | 0.00327 | 0.00131 |
| 53469-21-9       NS       NS       NS         12672-29-6       NS       NS       NS         11097-69-1       NS       NS       NS         11096-82-5       NS       NS       NS         37324-23-5       NS       NS       NS         11100-14-4       NS       NS       NS         1336-36-3       0.2       1       0.2   | Aroclor-1232  | 11141-16-5 | SN  | NS    | NS  | Q    |   | 0.00327 | 0.00131 |
| 12672-29-6 NS NS NS NS 11097-69-1 NS NS 11096-82-5 NS NS NS NS 111096-82-5 NS NS 11100-14-4 NS NS 1136-36-3 0.2 1 0.2   | Aroclor-1242  | 53469-21-9 | SN  | NS    | NS  | Q    |   | 0.00327 | 0.00131 |
| 11097-69-1       NS       NS       NS         11096-82-5       NS       NS       NS         37324-23-5       NS       NS       NS         11100-14-4       NS       NS       NS         1336-36-3       0.2       1       0.2   | Aroclor-1248  | 12672-29-6 | NS  | NS    | NS  | QN   |   | 0.00327 | 0.00131 |
| 11096-82-5 NS NS NS NS 37324-23-5 NS NS NS 11100-14-4 NS NS NS 1336-36-3 0.2 1 0.2  | Aroclor-1254  | 11097-69-1 | NS  | NS    | NS  | 2    |   | 0.00327 | 0.00131 |
| 37324-23-5 NS NS NS NS 11100-14-4 NS NS 1336-36-3 0.2 1 0.2   | Aroclor-1260  | 11096-82-5 | NS  | NS    | NS  | Q    |   | 0.00327 | 0.00131 |
| 11100-14-4 NS NS NS NS 1336-36-3 0.2 1 0.2  | Aroclor-1262  | 37324-23-5 | NS  | NS    | NS  | Q    |   | 0.00327 | 0.00131 |
| 1336-36-3 0.2 1 0.2   | Aroclor-1268  | 11100-14-4 | NS  | NS    | SN  | Q    |   | 0.00327 | 0.00131 |
|   | PCBs          | 1336-36-3  | 0.2 | -gan- | 0.2 | Q    |   | 0.00327 | 0.00131 |

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| Pesticides (mg/Kg)          |            |      |      |       | Conc | Q<br>RL  | MDL      |  |
|-----------------------------|------------|------|------|-------|------|----------|----------|--|
| alpha-BHC                   | 319-84-6   | 0.1  | 0.5  | 0.002 | Q    | 0.000654 | 0.000327 |  |
| beta-BHC                    | 319-85-7   | 0.4  | 2    | 0.002 | Q    | 0.000654 | 0.000327 |  |
| gamma-BHC (Lindane)         | 58-89-9    | 0.4  | 2    | 0.002 | Q    | 0.000654 | 0.000327 |  |
| delta-BHC                   | 319-86-8   | NS   | NS   | SN    | Q    | 0.000654 | 0.000327 |  |
| Heptachlor                  | 76-44-8    | 0.1  | 0.7  | 0.5   | Q    | 0.000654 | 0.000327 |  |
| Aldrin                      | 309-00-2   | 0.04 | 0.2  | 0.2   | Q    | 0.000654 | 0.000327 |  |
| Heptachlor epoxide          | 1024-57-3  | 0.07 | 0.3  | 0.01  | Q    | 0.000654 | 0.000327 |  |
| Endosulfan I                | 9-86-656   | NS   | NS   | NS    | 2    | 0.000654 | 0.000327 |  |
| 4,4'-DDE                    | 72-55-9    | 2    | 6    | 18    | Q    | 0.000654 | 0.000327 |  |
| Dieldrin                    | 60-57-1    | 0.04 | 0.2  | 0.003 | Q    | 0.000654 | 0.000327 |  |
| Endrin                      | 72-20-8    | 23   | 340  | -     | Q    | 0.000654 | 0.000327 |  |
| Endosulfan II               | 33213-65-9 | NS   | SN   | NS    | 9    | 0.000654 | 0.000327 |  |
| 4,4'-DDD                    | 72-54-8    | က    | 13   | 4     | 2    | 0.000654 | 0.000327 |  |
| Endrin aldehyde             | 7421-93-4  | NS   | NS   | SN    | 2    | 0.000654 | 0.000327 |  |
| Endosulfan sulfate          | 1031-07-8  | 470  | 0089 | 2     | 9    | 0.000654 | 0.000327 |  |
| 4,4'-DDT                    | 50-29-3    | 2    | 80   | 11    | 2    | 0.000654 | 0.000327 |  |
| Endrin ketone               | 53494-70-5 | NS   | NS   | SN    | g    | 0.000654 | 0.000327 |  |
| Methoxychlor                | 72-43-5    | 390  | 5700 | 160   | 2    | 0.000654 | 0.000327 |  |
| alpha-Chlordane             | 5103-71-9  | NS   | NS   | SN    | 2    | 0.000654 | 0.000327 |  |
| gamma-Chlordane             | 5103-74-2  | NS   | NS   | SN    | 9    | 0.000654 | 0.000327 |  |
| Toxaphene                   | 8001-35-2  | 9.0  | က    | 0.3   | 2    | 0.00818  | 0.00392  |  |
| Endosulfan (I and II)       | 115-29-7   | 470  | 0089 | 4     | Q    | 0.000654 | 0.000327 |  |
| Chlordane (alpha and gamma) | 57-74-9    | 0.2  | -    | 0.05  | 2    | 0.000654 | 0.000327 |  |

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| NJ-EPH-C40 (mg/Kg) |           |      |     |     | Conc | a  | W   | MDL |
|--------------------|-----------|------|-----|-----|------|----|-----|-----|
| 9-040              | IAI COCAN | UN N | ON. | OIA | 2    | 07 | 1.4 | 7   |

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| Metals (mg/Kg) |            |           |           |       | Conc  | o<br>R  | <br>  | MDL   |  |
|----------------|------------|-----------|-----------|-------|-------|---------|-------|-------|--|
| Aluminum       | 7429-90-5  | 78000     | NS        | 0009  | 2040  | 5.3     | 21    | 2.08  |  |
| Antimony       | 7440-36-0  | 31        | 450       | 9     | 0.360 | J 0.521 | 121   | 0.208 |  |
| Arsenic        | 7440-38-2  | 19        | 19        | 19    | 1.14  | 0.5     | 521   | 0.156 |  |
| Barium         | 7440-39-3  | 16000     | 29000     | 2100  | 8.52  | 0.5     | 521   | 0.260 |  |
| Beryllium      | 7440-41-7  | 16        | 140       | 0.7   | 0.674 | 0.5     | 121   | 0.156 |  |
| Cadmium        | 7440-43-9  | 78        | 78        | 2     | Q     | 0.5     | 521   | 0.313 |  |
| Calcium        | 7440-70-2  | NS        | NS        | NS    | 3740  | 52      | 7:    | 15.6  |  |
| Chromium       | 7440-47-3  | SN        | NS        | NS    | 3.72  | 0.5     | 521   | 0.260 |  |
| Cobalt         | 7440-48-4  | 1600      | 590       | 06    | 3.70  | 0.5     | 121   | 0.156 |  |
| Copper         | 7440-50-8  | 3100      | 45000     | 11000 | 99.6  | 0.5     | 121   | 0.365 |  |
| Iron           | 7439-89-6  | SN        | SN        | NS    | 9670  | 52      | Σ     | 15.6  |  |
| Lead           | 7439-92-1  | 400       | 800       | 06    | 2.02  | 0.5     | 21    | 0.260 |  |
| Magnesium      | 7439-95-4  | NS        | NS        | SN    | 2260  | 52.1    | _     | 15.6  |  |
| Manganese      | 7439-96-5  | 11000     | 2900      | 65    | 65.7  | 0.521   | 121   | 0.365 |  |
| Mercury        | 7439-97-6  | 23        | 65        | 0.1   | Q.    | 0.0     | 0.025 | 0.010 |  |
| Nickel         | 7440-02-0  | 1600      | 23000     | 48    | 4.31  | 0.521   | 121   | 0.365 |  |
| Potassium      | 7440-09-7' | SN        | SN        | NS    | 1240  | 52      | _     | 20.8  |  |
| Selenium       | 7782-49-2  | 390       | 5700      | 11    | 4.01  | 3.6     | 95    | 1.56  |  |
| Silver         | 7440-22-4  | 390       | 5700      | -     | 2     | 0.5     | 121   | 0.313 |  |
| Sodium         | 7440-23-5  | NS        | NS        | SN    | 161   | 52      | 7.    | 20,8  |  |
| Thallium       | 7440-28-0  | withdrawn | withdrawn | က     | 0.455 | J 0.5   | 121   | 0.260 |  |
| Vanadium       | 7440-62-2  | 78        | 1100      | SN    | 7.69  | 0.5     | 21    | 0.260 |  |
| Zinc           | 7440-66-6  | 23000     | 110000    | 930   | 10.6  | 5.21    | 21    | 1 04  |  |

S S Environmental Project Name: MOUNT HOPE IAL SDG No:E20-02898

| General Analytical             |            |        |    |    | Conc | a | ح    | MDL    |  |
|--------------------------------|------------|--------|----|----|------|---|------|--------|--|
| Hexavalent Chromium-mg/Kg      | 18540-29-9 | 240    | 20 | NS | 2    |   | 1.00 | 0.379  |  |
| pH/Corrosivity-SU              | SRP 6      | NS     | NS | NS | 8.47 |   | ¥    | ¥<br>X |  |
| Trivalent (III) Chromium-mg/Kg | 16065-83-1 | 120000 | SN | SN | 3.72 |   | 1.00 | 0.379  |  |

S S Environmental Project Name: MOUNT HOPE IAL SDG No:E20-02898

| Subcontracted Data  |                        |  |  |                   | Conc              | a           | ͳ          | MDL               |
|---|------------------------|--|--|-------------------|-------------------|-------------|------------|-------------------|
|   |                        | SN   | SN   | SN                | <i>د</i>          |             | ۰.         | <br>V             |
| NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017                       | mediation Standards N. | J.A.C. 7:26D, May 20                                       | 12; Amended Sept 20  |                   |                   |             |            |                   |
| BOLD Conc   | Indicates a concent    | ndicates a concentration that exceeds applicable criteria. | oplicable criteria.  |                   |                   |             |            |                   |
| BOLD RL   | Indicates RL that ex   | Indicates RL that exceeds applicable criteria,             | aria.  |                   |                   |             |            |                   |
| BOLD MDL  | Indicates MDL that     | exceeds applicable criteria.                               | iteria.  |                   |                   |             |            |                   |
| NS = No Standard Available  |                        |  |  |                   |                   |             |            |                   |
| ~ = Sample not analyzed for   |                        |  |  |                   |                   |             |            |                   |
| ND = Analyzed for but Not Detected at the MDL   | ie MDL                 |  |  |                   |                   |             |            |                   |
| J = Concentration detected at a value below the RL and above t  | RL and above t         | he MDL for target com                                      | he MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations. | et compounds (i.e | . TICs), qualifie | er indicate | es estimat | ed concentrations |
| ? = Results not available   |                        |  |  |                   |                   |             |            |                   |
| Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section | (9012B) by Test Ameri  | ca -Edison are availab                                     | ole in the Subcontracte  | d Report section  |                   |             |            | _                 |

# S & S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Road, Cedar Grove, NJ 07009 Tel (973) 857-7188 Fax (973) 239-8380

> Kamil Sor, Ph.D. Orhun Sor, P.E. Atilla Sencar, P.E.

This report is the confidential property of the Client, and information contained may not be published or reproduced without our written permission.

| Client:  | Tilcon New Y  | ork, Inc.            |              |           |           |
|----------|---------------|----------------------|--------------|-----------|-----------|
| Project: | Pompton Lak   | es, NJ (NJDEP-SRS    | 5)           |           |           |
| Subject: | Laboratory Ar | nalysis of Aggregate | Sample (Quar | ry Fines) |           |
| Job No.: | 06E41         | Report Number:       | 20-E-62      | Date:     | 5/21/2020 |

We present herewith the laboratory test results of an aggregate sample (identified as Quarry Fines) delivered to our laboratory on April 28, 2020. The sample was collected by a representative of Tilcon NY, on the same day.

As requested, the aggregate sample was analyzed for the U.S. EPA Target Compound List (TCL)+30/Target Analyte List (TAL) parameters, Extractable Petroleum Hydrocarbons (EPH), pH, and Hexavalent Chromium. The analyses were performed by Integrated Analytical Laboratories, LLC (IAL) (NJDEP Lab ID No. 14751). The copies of the IAL/S&S sample chain-of-custody forms, the preliminary IAL laboratory summary report and NJDEP-SRS comparison tables are attached.

Review of the laboratory data and comparison of the sample test results to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) indicated that the aggregate sample **meet** the **NJDEP-RDCSRS**.

If there are any questions or if we can be of further assistance in this matter, please contact us.

Very truly yours

S & S ENVIRONMENTAL SCIENCES, INC.

Kamil Sor, Ph.D.

President

KS/ag

Attachments:

(1) Sample Chain-of-Custody Forms, Laboratory Summary Reports, and NJDEP-SRS Comparison Tables

cc: (1) Client

Steve O'Reilly

email: soreilly@tilconny.com

# S&S ENVIRONMENTAL SCIENCES, INC.

Environmental Engineering, Testing and Consultation

98 Sand Park Rad, Cedar Grove, NJ 07009 Tel (973) 857-7188 Fax (973) 239-6380

NJDEP Lab Certification No. 07073

1L(on

CLIENT:

## SAMPLE CHAIN OF CUSTODY

DATE:

|   |                  |  |                |                   | -1       |           | A STATE OF THE STA |
|---|------------------|--|----------------|-------------------|----------|-----------|--|
| ADDRESS:                                      |                  |  |                |                   | SSES JOE | NO.       |  |
| CONTACT:                                      |                  |  |                |                   | TEL. #:  |           |  |
| PROJECT:                                      | Pompt            | on Lale                                    | CL. NT         |                   | PROJECT  | LAB ID #: | 20.048   |
|   |                  |  |                |                   |          |           |  |
| SAMPLE<br>NUMBER                              | SAMPLING<br>DATE | SAMPLING<br>TIME                           | SAMPLE<br>TYPE | NO. OF<br>BOTTLES | AN       | ALYSES RE | QUESTED  |
| 20.048  | 4-28:20          | 10:05                                      | Cral           | BOTTELO           | 1074. N  | T Cle.    | 2 1011   |
| 10 0 10                                       |                  | 1977                                       | 1              |                   | 1011     | 7 6 11    | 711  |
|   |                  |  |                |                   |          |           |  |
|   |                  | -10-3-00-00-00-00-00-00-00-00-00-00-00-00- |                |                   |          |           |  |
|   |                  |  |                |                   |          |           |  |
|   |                  |  |                |                   |          |           |  |
|   |                  |  |                |                   |          |           |  |
|   |                  |  |                |                   |          |           |  |
|   |                  |  |                |                   |          |           |  |
|   |                  |  |                |                   |          |           |  |
| Comments:                                     |                  |  |                |                   |          |           |  |
| oomments.                                     |                  |  |                |                   |          |           |  |
| PRESER  | RVATIVE          |  |                |                   |          |           |  |
| Cooled at 4°C?                                | d                |  | pH Meter       |                   |          |           | I  |
| +CI   |                  |  | No.:           | Reading           | T°C      | Time      | Analyst  |
| INO <sub>3</sub>                              |                  |  | рН             |                   |          |           |  |
| 12804   |                  |  | pH Dup.        |                   |          |           |  |
| IzOH  |                  |  |                |                   |          |           |  |
| la <sub>2</sub> S <sub>2</sub> O <sub>3</sub> |                  |  |                |                   |          |           |  |
| Other   |                  |  |                |                   |          |           |  |
| Sampled By:                                   | S. O.            |  |                |                   |          |           |  |
|   |                  |  |                |                   |          |           |  |
| RELINQUIS                                     | SHED BY:         |  | RECEIVE        | D BY:             |          | DATE      | AND TIME:  |
| Ac  |                  |  | 1116           |                   | 1        | 17900     | 11:10  |
| Po  | 40               | 100  | 1 17           |                   | _        | 10000     | 11:10  |
|   |                  | 14   |                |                   | 7_       |           |  |
|   |                  |  |                |                   |          |           |  |
|   |                  | _  |                |                   |          |           |  |

Chain of

Contact Us: 973-361-4252 Fax: 973-989-5288 Web: www.ialonline.com

# Chain of Custody Record

Concentrations Expected High Part 375-6.8(a) - Unrestricted CP-51 Table 2 or Thelection OTHER Regulatory Requirements specify in comments 2 Part 375-6.8(b) - Restricted ☐ CT RCSA 22a-133k1-k3 Sample Specific Notes: AWGS (TOGS Table 1) GWEL (TOGS Table 5) Other States / Criteria ☐ Pennsylvania Act 2 Known Hazard: FOR LAB USE ONLY Regulatory Requirement New York ō Med Cooler Temp: TSCA PCBs □ YES Describe SDG #: PAGE: Low ☐ lab approved custom EDD NO EDD REQ'D NYSDEC EQuIS ☐ Ecological こうとうし New Jersey GWQS NJ SRP □ SPLP SRS MS4-TE Ma □ **EDDs** ANALYTICAL PARAMETERS (please note if contingent Other - call for price Petroleum Hydrocarbons - Selection is REQUIRED りるーアン ASP Category A ☐ ASP Category ☐ DRO-8915 CT ETPH ⋛ Turn-Around Time (TAT) Deliverables Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773). Standard (10 business days) Verbal Regulatory/ Full\* (Level IV) THE EPH-Fractionated - Cat 2 NJ, CT, PA Reduced (Level IIIII) □ NJ EPH-DRO - Category 1 □ NJ EPH-C40 - Catggory 2 (Level I) Para meters Hard Copy: Std 3 week Rush/date needed (only if pre-approved)\*\* 72 hr - 50%.... 96 hr - 35%.... 48 hr - 75%.... 6-9 day - 10% 24 hr - 100%. 5 day - 25%. Special Instructions/QC Requirements & Comments: フクト 1741 Preservative (use code) Container Type (use code) AL. 585 containers SED - Sediment SOL - Salid (specify) SL - Sludge Reporting Information ANC Sample Matrix 0 Matrix ò M - Wine S - Soil <u>o</u> . 0 3:00 Time 0 LIQ - Liquid (specify) GW - Groundwater SW - Surface Water DW - Drinking Wate WW - Waste Water Sampling 22.4 A = Amber Glass REPORT TO: INVOICE TO: D = Glass E = EnCore T = Terracore Container Code: B = Plastic C = Vial Date Address: Address Quote # FAX# # Od ☐ FedEx/UPS\*\*\* Attn: ☐ Client Courier Attn: Carrier (check one) ☐ IAL Courier Preservative Code: Depth (ft only) A CE racking F. 5 = NaOH 6 = H2SO4 **Equipment Rental** 2 = HCl 3 = HNO3 4 = MeOH 600 LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK Report to"/"Invoice To" same as above SAMPLE INFORMATION Customer Information Pomorin ١ Samples previously analyzed by IAL? processed and the turnaround time BY IAL'S TERMS & CONDITIONS completely. Samples cannot be ambiguities have been resolved. Please print legibly and fill out TAT starts the following day if 977-239 THE CLIENT HAS READ AND (TAT) will not start until any (found on rear of pink copy) samples rec'd at lab  $\geq 5PM$ . BY EXECUTING THIS COC, AGREES TO BE BOUND 0 COMPLETED BY IAL: Project Location (State): Field Sampling 70 Project Manager: Project Name: Bottle Order #: EMAIL Address Sampled by: Telephone #: Client ID 20 Company: Address

Integrated Analytical Labs 273 Franklin Road

Randolph, NJ 07869

# SAMPLE RECEIPT VERIFICATION

| CASE NO: <b>E 20</b> 028                                    | 97 CLIENT: 5+5   |
|---|--|
| COOLER TEMPERATURE: 2°                                      | - 6°C:✓ ( See Chain of Custody)  |
| COC: COMPLETE)/ INCOM                                       | Comments PLETE   |
| KEY  ✓ = YES/NA   | VOA received: Encore IGW - Methanol  |
| ⇒ = NO  | (check one) Terra Core No Preservative   |
| ✓ Bottles Intact  |  |
| ✓ no-Missing Bottles ✓ no-Extra Bottles                     |  |
| ✓ Sufficient Sample Volur                                   | me   |
| ✓ no-headspace/bubbles ✓ Labels intact/correct              | in VOs   |
| ✓ pH Check (exclude VOs                                     |  |
| ✓ Correct bottles/preserva ✓ Sufficient Holding/Prep        |  |
| Multiphasic Sample  |  |
| Sample to be Subcontra  Chain of Custody is C               |  |
| <sup>1</sup> All samples with "Analyze Immediately" holding | g times will be analyzed by this laboratory past the holding time. This includes but is not limited to |
|   | sidual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.                                   |
| ADDITIONAL COMMENTS:  |  |
|   |  |
| SAMPLE(S) VERIFIED BY:  CORRECTIVE ACTION REQ               | UIRED: YES SEE BELOW) DATE 428/20  |
| If COC is <b>NOT</b> clear, <b>STOP</b> unti                | il you get client to authorize/clarify work.   |
| CLIENT NOTIFIED:  | YES Date/ Time: NO NO  |
| PROJECT CONTACT: SUBCONTRACTED LAB:                         |  |
| DATE SHIPPED:   |  |
| ADDITIONAL COMMENTS:  |  |
|   |  |
|   |  |
|   |  |
| VERIFIED/TAKEN BY:  | INITIAL MA DATE 4/29/20  |

REV 10/2019

777 New Durham Rd., Edison, NJ 08817

708 228

| CLIENT & PROJECT  | REPOR              | REPORTING & BILLING         | <sub>S</sub>                                      | l             |  |                                       |                |              |                  |            |                         |                 |      | c 9.07   | 3               | 0    |
|---|--------------------|-----------------------------|---|---------------|--|---------------------------------------|----------------|--------------|------------------|------------|-------------------------|-----------------|------|--|-----------------|------|
| Name: Integrated Analytical Laboratories LLC  | Contact:           | Thomas Malanga              |   |               |  |                                       |                | urnaro       | Turnaround Time  | e          |                         |                 |      | Repor  | Report Format   |      |
|   | Fax #:             |                             |   | Ve            | Verbal/Fax   |                                       |                |              |                  |            |                         |                 | Red  | Reduced / Level III                                      | el III          |      |
| Address: 273 Franklin Road  | EMail to:          | <u>imalanga@ialonline.</u>  | COM   | 24            | 24 hr* 48  | 48 hr* 72 hr*                         | ır* 1 wk*      |              | 2 wk             | Other:     | 6 Busine                | 6 Business Days |      |  |                 |      |
| Randolph, NJ 07869  | Report to:         | Thomas Malanga              |   | Ha            | Hard Copy  |                                       |                |              |                  |            |                         |                 | 91   | Special Requirements                                     | equirem         | ents |
|   | Address:           |                             |   | 72            | 72 hr* 1 wk*   | /k* 2 wk*                             | k* 3 wk        | ٧k           | 0                | Other:     |                         |                 |      |  |                 |      |
| Telephone #: 973-361-4252   |                    |                             |   | *             | *Prior to sample arrival, Lab notification is required | ample a                               | rrival, L      | ab notii     | fication i       | s requir   | ed.                     |                 |      |  |                 |      |
| Fax #: 973-989-5288   |                    |                             |   |               |  |                                       |                |              |                  |            |                         |                 | ď.   | Preservative   | 1 - 2 - 1 O - 5 |      |
| Project Name: E20-02897   | Invoice to:        | Thomas Malanga              |   |               | ANAL   | ANALYTICAL PARAMETERS / PRESERVATIVES | PARA           | HETER        | S/PRE.           | SERVAT     | IVES                    |                 | - 47 | 4 = H <sub>2</sub> SO <sub>4</sub> ; 5 = MeOH; 6 = Other | MeOH; 6 = (     | Ther |
| Project Location (State): NJ  | Address:           |                             |   | 123 1         | 123 13   | 123 123<br>456 456                    | 3 123<br>6 456 | 3 12<br>6 45 | 23   12<br>56 45 | 23 12      | 9 1 2                   | 6 456           | 123  | 123  | 123             | 123  |
| Project Manager:  |                    |                             |   |               |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
| Reference ID#: PO#  |                    |                             |   | 5B)           |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
| SAMPLE INFORMATION  |                    |                             |   | 106) əpinek   |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
| Sample 10 Sample Depth (in Feet) Date   | Sampling Time      | Matrix                      | # of  | O latoT       |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
| Φ E20-02897-001   | _                  | Soil                        | _   | Run           | _  |                                       | _              |              | _                |            |                         |                 |      | _  |                 |      |
| S5 of   |                    |                             |   |               |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
| 37  |                    |                             |   |               |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
|   |                    | _                           |   |               |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
|   |                    |                             |   | _             |  |                                       |                |              | -                |            |                         |                 |      |  |                 |      |
|   |                    |                             |   | _             |  |                                       |                | +            |                  | +          | -                       |                 |      |  |                 |      |
|   | - 460-208556       | 460-208556 Chain of Custody |   |               | -  | +                                     | +              |              | +                | +          | +                       | -               |      |  |                 |      |
|   | _                  |                             |   |               | +  |                                       | +              | -            |                  |            | +                       |                 |      |  |                 |      |
|   |                    |                             |   | -             |  |                                       |                |              |                  |            |                         |                 |      |  |                 |      |
| Please print legibly and fill out completely. Samples cannot be processed and the turnaround ti-resolved. | annot be processed | and the turnaround ti       | me will not start until any ambiguities have been | tart until ar | ıy ambiguit  | ies have be                           | _              | COOLER TEMP  | ΜΡ               | Сопсепиани | Concentrations Expected |                 | .5   | Known Hazard: yes  | yes no          |      |
| O NOITANGIANOO HAMA   | NEIDM              |                             |   | תיזים         |  |                                       | Г              |              | J.               | LOW MI     | MED HIGH                | Describe        | äi   |  |                 |      |
| EMAIL CO  | INFIRM             |                             | EQUINED   | NED<br>N      |  |                                       | Note           |              |                  |            |                         |                 |      |  |                 |      |

CUSTODY LOG

| Signature/Company | Date   | Time | Signature/Company                    |            |       |             |
|-------------------|--------|------|--------------------------------------|------------|-------|-------------|
| Binquished by my  | 02/1/5 | 1136 | Received by Clyn of Freh 578 it 1856 | 3871 75    |       |             |
| Nonquished by:    |        |      | Received by:                         | Lab Case # |       |             |
| Relinquished by:  |        |      | Received by:                         |            | PAGE: | OF          |
| 100-1001-001      |        |      | 49°C IRII Arcs                       |            |       | REV Feb 201 |

### Client: S & S Environmental Project: POMPTON LAKES Lab Case No.: E20-02897

|                                | Lab ID:      |          | 02897-001 |
|--------------------------------|--------------|----------|-----------|
|                                | Client ID:   |          | 20-048    |
|                                | Matrix:      |          | Soil      |
|                                | Sampled Date |          | 4/28/20   |
| PARAMETER(Units)               |              | Conc     | Q MDL     |
| Volatiles (Units)              |              |          | (mg/Kg)   |
| Dichlorodifluoromethane        |              | ND       | 0.000369  |
| Chloromethane                  |              | ND       | 0.000405  |
| Vinyl chloride                 |              | ND       | 0.000403  |
| Bromomethane                   |              | ND       | 0.000568  |
| Chloroethane                   |              | ND       | 0.000452  |
| Trichlorofluoromethane         |              | ND       | 0.000382  |
| Acrolein                       |              | ND       | 0.00461   |
| 1,1-Dichloroethene             |              | ND       | 0.000388  |
| Acetone                        |              | ND       | 0.00242   |
| Carbon disulfide               |              | 0.00198  | 0.00024   |
| Methylene chloride             |              | ND       | 0.00184   |
| Acrylonitrile                  |              | ND       | 0.00408   |
| tert-Butyl alcohol (TBA)       |              | ND       | 0.000968  |
| trans-1,2-Dichloroethene       |              | ND       | 0.00038   |
| Methyl tert-butyl ether (MTBE) |              | ND       | 0.000282  |
| 1,1-Dichloroethane             |              | ND       | 0.000347  |
| cis-1,2-Dichloroethene         |              | ND       | 0.000329  |
| 2-Butanone (MEK)               |              | ND       | 0.000903  |
| Bromochloromethane             |              | ND       | 0.000276  |
| Chloroform                     |              | ND       | 0.000535  |
| 1,1,1-Trichloroethane          |              | ND       | 0.000269  |
| Carbon tetrachloride           |              | ND       | 0.000262  |
| 1,2-Dichloroethane (EDC)       |              | ND       | 0.00036   |
| Benzene                        |              | ND       | 0.000206  |
| Trichloroethene                |              | ND       | 0.000277  |
| 1,2-Dichloropropane            |              | ND       | 0.000222  |
| 1,4-Dioxane                    |              | ND       | 0.035     |
| Bromodichloromethane           |              | ND       | 0.00019   |
| cis-1,3-Dichloropropene        |              | ND       | 0.000204  |
| 4-Methyl-2-pentanone (MIBK)    |              | ND       | 0.000697  |
| Toluene                        |              | ND       | 0.000218  |
| trans-1,3-Dichloropropene      |              | ND       | 0.000246  |
| 1,1,2-Trichloroethane          |              | ND       | 0.000292  |
| Tetrachloroethene              |              | ND       | 0.000355  |
| 2-Hexanone                     |              | ND       | 0.00146   |
| Dibromochloromethane           |              | ND       | 0.000261  |
| 1,2-Dibromoethane (EDB)        |              | ND       | 0.000281  |
| Chlorobenzene                  |              | ND       | 0.000133  |
| Ethylbenzene                   |              | ND       | 0.000217  |
| Total Xylenes                  |              | ND       | 0.000202  |
| Styrene                        |              | ND<br>ND | 0.00102   |
| Styrene<br>Bromoform           |              | ND<br>ND | 0.000318  |
| Isopropylbenzene               |              | ND<br>ND | 0.00033   |
| 1,1,2,2-Tetrachloroethane      |              | ND<br>ND | 0.000323  |
| n- <b>Propy</b> lbenzene       |              | ND       | 0.000418  |

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

Client: S & S Environmental Project: POMPTON LAKES Lab Case No.: E20-02897

| Lab ID                                | :        | 02897-001 |
|---------------------------------------|----------|-----------|
| Client ID                             | :        | 20-048    |
| Matrix                                | :        | Soil      |
| Sampled Date                          | e        | 4/28/20   |
| PARAMETER(Units)                      | Conc     | Q MDL     |
| Volatiles (Units)                     |          | (mg/Kg)   |
| 1,3,5-Trimethylbenzene                | ND       | 0.000429  |
| tert-Butylbenzene                     | ND       | 0.000303  |
| 1,2,4-Trimethylbenzene                | ND       | 0.000491  |
| sec-Butylbenzene                      | ND       | 0.000315  |
| 1,3-Dichlorobenzene                   | ND       | 0.00028   |
| 4-Isopropyltoluene                    | ND       | 0.000365  |
| 1,4-Dichlorobenzene                   | ND       | 0.00028   |
| n-Butylbenzene                        | ND       | 0.000392  |
| 1,2-Dichlorobenzene                   | ND       | 0.000352  |
| 1,2-Dibromo-3-chloropropane           | ND       | 0.000524  |
| 1,2,4-Trichlorobenzene                | ND<br>ND | 0.000324  |
| 1,2,3-Trichlorobenzene                | ND<br>ND | 0.000372  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND       | 0.000373  |
|                                       |          |           |
| Methyl acetate                        | ND       | 0.000292  |
| Cyclohexane                           | ND       | 0.000432  |
| Methylcyclohexane                     | ND       | 0.000276  |
| 1,3-Dichloropropene (cis- and trans-) | ND       | 0.000246  |
| TOTAL TIC's:                          | ND       |           |
| Semivolatiles (Units)                 |          | (mg/Kg)   |
| N-Nitrosodimethylamine                | ND       | 0.028     |
| Benzaldehyde                          | ND       | 0.026     |
| Phenol                                | ND       | 0.032     |
| Aniline                               | ND       | 0.021     |
| Bis(2-chloroethyl) ether              | ND       | 0.026     |
| 2-Chlorophenol                        | ND       | 0.026     |
| Benzyl alcohol                        | ND       | 0.031     |
| 2-Methylphenol                        | ND       | 0.019     |
| 2,2'-Oxybis(1-Chloropropane)          | ND       | 0.031     |
| 4-Methylphenol **                     | ND       | 0.023     |
| N-Nitrosodi-n-propylamine             | ND       | 0.023     |
| Acetophenone                          | ND       | 0.023     |
| Hexachloroethane                      | ND<br>ND |           |
|                                       |          | 0.026     |
| Nitrobenzene                          | ND       | 0.021     |
| Isophorone                            | ND       | 0.024     |
| 2-Nitrophenol                         | ND       | 0.030     |
| 2,4-Dimethylphenol                    | ND       | 0.019     |
| Bis(2-chloroethoxy) methane           | ND       | 0.026     |
| Benzoic acid                          | ND       | 0.027     |
| 2,4-Dichlorophenol                    | ND       | 0.026     |
| Naphthalene                           | ND       | 0.026     |
| 4-Chloroaniline                       | ND       | 0.023     |
|                                       |          |           |
| Hexachlorobutadiene                   | ND       | 0.021     |

ND = Analyzed for but Not Detected at the MDL Continued on next page.

Client: S & S Environmental Project: POMPTON LAKES Lab Case No.: E20-02897

| <u> </u>                                     | Lab ID:      |          | 02897-00 | 1              |
|--|--------------|----------|----------|----------------|
|  | Client ID:   |          | 20-048   |                |
|  | Matrix:      |          | Soil     |                |
|  | Sampled Date |          | 4/28/20  |                |
| PARAMETER(Units)                             |              | Conc     | Q        | MDL            |
| Semivolatiles (Units)                        |              |          | (mg/Kg)  |                |
| 4-Chloro-3-methylphenol                      |              | ND       |          | 0.022          |
| 2-Methylnaphthalene                          |              | ND       |          | 0.021          |
| Hexachlorocyclopentadiene                    |              | ND       |          | 0.028          |
| 2,4,6-Trichlorophenol                        |              | ND       |          | 0.026          |
| 2,4,5-Trichlorophenol                        |              | ND       |          | 0.028          |
| 1,1'-Biphenyl                                |              | ND       |          | 0.027          |
| 2-Chloronaphthalene                          |              | ND       |          | 0.025          |
| 2-Nitroaniline                               |              | ND       |          | 0.025          |
| Dimethyl phthalate                           | 7.           | ND       |          | 0.024          |
| 2,6-Dinitrotoluene                           |              | ND       |          | 0.031          |
| Acenaphthylene                               |              | ND       |          | 0.026          |
| 3-Nitroaniline                               |              | ND       |          | 0.024          |
| Acenaphthene                                 |              | ND       |          | 0.027          |
| 2,4-Dinitrophenol                            |              | ND       |          | 0.031          |
| 4-Nitrophenol                                |              | ND       |          | 0.030          |
| 2,4-Dinitrotoluene                           |              | ND       |          | 0.029          |
| Dibenzofuran                                 |              | ND       |          | 0.024          |
| Diethyl phthalate                            |              | ND       |          | 0.019          |
| Fluorene                                     |              | ND       |          | 0.028          |
| 4-Chlorophenyl phenyl ether                  |              | ND       |          | 0.027          |
| 4-Nitroaniline                               |              | ND       |          | 0.020          |
| 1,2,4,5-Tetrachlorobenzene                   |              | ND       |          | 0.023          |
| 2,3,4,6-Tetrachlorophenol                    |              | ND       |          | 0.028          |
| 4,6-Dinitro-2-methylphenol                   |              | ND       |          | 0.031          |
| N-Nitrosodiphenylamine                       |              | ND       |          | 0.031          |
| 1,2-Diphenylhydrazine                        |              | ND       |          | 0.032          |
| 4-Bromophenyl phenyl ether                   |              | ND       |          | 0.023          |
| Hexachlorobenzene                            |              | ND       |          | 0.023          |
| Atrazine                                     |              | ND       |          | 0.025          |
| Pentachlorophenol                            |              | ND       |          | 0.022          |
| Phenanthrene                                 |              | ND       |          | 0.031          |
| Anthracene                                   |              | ND       |          | 0.032          |
| Carbazole                                    |              | ND       |          | 0.029          |
| Di-n-butyl phthalate                         |              | ND       |          | 0.027          |
| Fluoranthene                                 |              | ND       |          | 0.031          |
| Benzidine                                    |              | ND       |          | 0.025          |
| Pyrene                                       |              | ND       |          | 0.029          |
| Butyl benzyl phthalate                       |              | ND       |          | 0.029          |
| 3,3'-Dichlorobenzidine                       |              | ND<br>ND |          | 0.030          |
| Benzo[a]anthracene                           |              | ND       |          | 0.029          |
| Chrysene                                     |              | ND<br>ND |          | 0.019          |
| Bis(2-ethylhexyl) phthalate                  |              | ND<br>ND |          | 0.030          |
|  |              | ND<br>ND |          | 0.029          |
| Di-n-octyl phthalate                         |              |          |          |                |
| Benzo[b]fluoranthene<br>Benzo[k]fluoranthene |              | ND<br>ND |          | 0.031<br>0.027 |

ND = Analyzed for but Not Detected at the MDL

Continued on next page.

Client: S & S Environmental Project: POMPTON LAKES Lab Case No.: E20-02897

|                                | Case No.: E20-02 |      | 02897-001        |
|--------------------------------|------------------|------|------------------|
|                                | Client ID:       |      | 20-048           |
|                                | Matrix:          |      | Soil             |
|                                |                  |      | 4/28/20          |
| PARAMETER(Units)               | Sampled Date     | Conc | 4/28/20<br>Q MDL |
| Semivolatiles (Units)          |                  |      | (mg/Kg)          |
|                                |                  |      | ,                |
| Benzo[a]pyrene                 |                  | ND   | 0.028            |
| Indeno[1,2,3-cd]pyrene         |                  | ND   | 0.031            |
| Dibenz[a,h]anthracene          |                  | ND   | 0.030            |
| Benzo[g,h,i]perylene           |                  | ND   | 0.031            |
| Dinitrotoluene (2,4- and 2,6-) |                  | ND   | 0.031            |
| TOTAL TIC's:                   |                  | ND   |                  |
| PCB's (Units)                  |                  |      | (mg/Kg)          |
| Aroclor-1016                   |                  | ND   | 0.00132          |
| Aroclor-1221                   |                  | ND   | 0.00132          |
| Aroclor-1232                   |                  | ND   | 0.00132          |
| Aroclor-1242                   |                  | ND   | 0.00132          |
| Aroclor-1248                   |                  | ND   | 0.00132          |
| Aroclor-1254                   |                  | ND   | 0.00132          |
| Aroclor-1260                   |                  | ND   | 0.00132          |
| Aroclor-1262                   |                  | ND   | 0.00132          |
| Aroclor-1268                   |                  | ND   | 0.00132          |
| PCBs                           |                  | ND   | 0.00132          |
| Pesticides (Units)             |                  |      | (mg/Kg)          |
| alpha-BHC                      |                  | ND   | 0.000329         |
| beta-BHC                       |                  | ND   | 0.000329         |
| gamma-BHC (Lindane)            |                  | ND   | 0.000329         |
| delta-BHC                      |                  | ND   | 0.000329         |
| Heptachlor                     |                  | ND   | 0.000329         |
| Aldrin                         |                  | ND   | 0.000329         |
| Heptachlor epoxide             |                  | ND   | 0.000329         |
| Endosulfan I                   |                  | ND   | 0.000329         |
| 4,4'-DDE                       |                  | ND   | 0.000329         |
| Dieldrin                       |                  | ND   | 0.000329         |
| Endrin                         |                  | ND   | 0.000329         |
| Endosulfan II                  |                  | ND   | 0.000329         |
| 4,4'-DDD                       |                  | ND   | 0.000329         |
| Endrin aldehyde                |                  | ND   | 0.000329         |
| Endosulfan sulfate             |                  | ND   | 0.000329         |
| 4,4'-DDT                       |                  | ND   | 0.000329         |
| Endrin ketone                  |                  | ND   | 0.000329         |
| Methoxychlor                   |                  | ND   | 0.000329         |
| alpha-Chlordane                |                  | ND   | 0.000329         |
| gamma-Chlordane                |                  | ND   | 0.000329         |
| Toxaphene                      |                  | ND   | 0.00395          |
| Endosulfan (I and II)          |                  | ND   | 0.000329         |
| Chlordane (alpha and gamma)    | 1                | ND   | 0.000329         |

ND = Analyzed for but Not Detected at the MDL

Client: S & S Environmental Project: POMPTON LAKES Lab Case No.: E20-02897

| Lab Case No.: E20-028 |       | 2007  | 001     |
|-----------------------|-------|-------|---------|
| Lab ID:               | U.    | 2897- |         |
| Client ID:            |       | 20-04 |         |
| Matrix:               |       | Soi   |         |
| Sampled Date          | Conc  | 4/28/ |         |
| PARAMETER(Units)      |       | Q     | MDL     |
| Herbicides (Units)    |       | (mg/K | (g)     |
| Dalapon               | ND    |       | 0.00658 |
| Dicamba               | ND    |       | 0.00658 |
| 2,4-D                 | ND    |       | 0.00658 |
| 2,4,5-TP (Silvex)     | ND    |       | 0.00658 |
| 2,4,5-T               | ND    |       | 0.00658 |
| 2,4-DB                | ND    |       | 0.00658 |
| Dinoseb               | ND    |       | 0.00658 |
| NJ-EPH-C40 (Units)    |       | (mg/K | (g)     |
| C9-C40                | 21.1  | J     | 19.9    |
| Alcohols (Units)      |       | (mg/K | (g)     |
| Methanol              | ND    |       | 1.97    |
| Metals (Units)        |       | (mg/K | g)      |
| Aluminum              | 4640  |       | 2.17    |
| Antimony              | ND    |       | 0.217   |
| Arsenic               | 0.687 |       | 0.163   |
| Barium                | 41.1  |       | 0.272   |
| Beryllium             | 0.316 | J     | 0.163   |
| Cadmium               | ND    |       | 0.326   |
| Calcium               | 3920  |       | 16.3    |
| Chromium              | 16.3  |       | 0.272   |
| Cobalt                | 8.86  |       | 0.163   |
| Copper                | 50.4  |       | 0.380   |
| Iron                  | 13500 |       | 16.3    |
| Lead                  | 3.21  |       | 0.272   |
| Magnesium             | 4030  |       | 16.3    |
| Manganese             | 94.9  |       | 0.380   |
| Mercury               | ND    |       | 0.013   |
| Nickel                | 23.0  |       | 0.380   |
| Potassium             | 3050  |       | 21.7    |
| Selenium              | 3.37  | J     | 1.63    |
| Silver                | ND    |       | 0.326   |
| Sodium                | 116   |       | 21.7    |
| Thallium              | ND    |       | 0.272   |
| Vanadium              | 23.6  |       | 0.272   |
| Zinc                  | 19.4  |       | 1.09    |

ND = Analyzed for but Not Detected at the MDL

J= Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

Client: S & S Environmental Project: POMPTON LAKES Lab Case No.: E20-02897

| Lab ID:<br>Client ID:<br>Matrix:<br>Sampled Date |      | 2897-0<br>20-04<br>Soil<br>4/28/2 | 8     |
|--|------|-----------------------------------|-------|
| PARAMETER(Units)                                 | Conc | Q                                 | MDL   |
| General Analytical (Units)                       |      |                                   |       |
| Hexavalent Chromium(mg/Kg)                       | ND   |                                   | 0.380 |
| pH/Corrosivity(SU)                               | 8.38 |                                   | NA    |
| Trivalent (III) Chromium(mg/Kg)                  | 16.3 |                                   | 0.380 |
| Subcontracted Data (Units)                       | (    | mg/Kg                             | ;)    |
|  | *    |                                   | *     |

ND = Analyzed for but Not Detected at the MDL

<sup>\*</sup>Subcontracted Results for Total Cyanide (9012B) by Test America - Edison are available in the Subcontracted Report section

TestAmerica Laboratories, Inc.

SUMMARY OF ANALYTICAL RESULTS: 460-208556-1 Job Description: E20-02897 For: Edrofins TestAmerica, Edison

Integrated Analytical Laboratories LLC PO BOX 8026

Parsippany, New Jersey 07054

| Client ID              | NJ SRS7 26D Tbl1A | NJ SRS7 26D Tbl1B | NJDEP         | E20-02897-001    |
|------------------------|-------------------|-------------------|---------------|------------------|
| Lab Sample ID          | Residential       | Non-Residential   | IGW Screening | 460-208556-1     |
| Sampling Date          | Sept_2017         | Sept_2017         | Nov 2013      | 04/28/2020 10:05 |
| Matrix                 |                   |                   |               |                  |
|                        |                   |                   |               |                  |
| 1                      |                   |                   |               |                  |
|                        |                   |                   |               | Result Q MD      |
| SOIL BY 9012B          | 14 15 No. 18      |                   |               |                  |
| Cyanide, Total (mg/kg) | 47                | 089               | 20            | 0.12 U 0.12      |

U : Indicates the analyte was analyzed for but not detected.

Lab Contact: Jill Miller

Senior Project Manager (484)685-0871

S S Environmental Project Name: POMPTON LAKES IAL SDG No:E20-02897

| Sample #:                               | #:         | acn<br>NJD  | NJDEP SOIL REMEDIATION | NOL         |         | 20-048     |          |
|---|------------|-------------|------------------------|-------------|---------|------------|----------|
| Field ID:                               | Ö          |             | STANDARDS              |             |         |            | _        |
| Lab ID:                                 | <u>Ö</u> : | Residential | Non-Res                | Default IGW |         | 02897-001  |          |
| Date Sampled:                           | ed:        | SRS         | SRS                    | Screening   |         | 04/28/2020 |          |
| Depth(ft):                              | (#):       | ( - ) ( )   | 7 7111                 | Level       |         |            |          |
| ( - 11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | CAO        | (gr)gin)    | (gv/gm)                | (mg/kg)     |         | 1          |          |
| Volatiles (mg/kg)                       |            |             |                        |             | Conc    | o<br>R     | MDL      |
| Dichlorodifluoromethane                 | 75-71-8    | 490         | 230000                 | 39          | 2       | 0.00095    | 0.000369 |
| Chloromethane                           | 74-87-3    | 4           | 12                     | NS          | Q       | 0.00095    | 0.000405 |
| Vinyl chloride                          | 75-01-4    | 0.7         | 2                      | 0.005       | Q       | 0.00095    | 0.000403 |
| Bromomethane                            | 74-83-9    | 25          | 59                     | 0.04        | Q       | 0.00095    | 0.000568 |
| Chloroethane                            | 75-00-3    | 220         | 1100                   | NS          | Q       | 0.00095    | 0.000452 |
| Trichlorofluoromethane                  | 75-69-4    | 23000       | 340000                 | 34          | QN      | 0.00095    | 0.000382 |
| Acrolein                                | 107-02-8   | 0.5         |                        | 0.5         | Q       | 0.019      | 0.00461  |
| 1,1-Dichloroethene                      | 75-35-4    | 11          | 150                    | 0.008       | Q       | 0.00095    | 0.000388 |
| Acetone                                 | 67-64-1    | 70000       | SN                     | 19          | Q       | 0.0095     | 0.00242  |
| Carbon disulfide                        | 75-15-0    | 7800        | 110000                 | 9           | 0.00198 | 0.00095    | 0.00024  |
| Methylene chloride                      | 75-09-2    | 46          | 230                    | 0.01        | Q       | 0.0019     | 0.00184  |
| Acrylonitrile                           | 107-13-1   | 6.0         | 3                      | 0.5         | Q       | 0.019      | 0.00408  |
| tert-Butyl alcohol (TBA)                | 75-65-0    | 1400        | 11000                  | 0.3         | Q       | 0.0038     | 0.000968 |
| trans-1,2-Dichloroethene                | 156-60-5   | 300         | 720                    | 9.0         | 2       | 0.00095    | 0.00038  |
| Methyl tert-butyl ether (MTBE)          | 1634-04-4  | 110         | 320                    | 0.2         | Q       | 0.00095    | 0.000282 |
| 1,1-Dichloroethane                      | 75-34-3    | 00          | 24                     | 0.2         | Q       | 0.00095    | 0.000347 |
| cis-1,2-Dichloroethene                  | 156-59-2   | 230         | 260                    | 0.3         | Q       | 0.00095    | 0.000329 |
| 2-Butanone (MEK)                        | 78-93-3    | 3100        | 44000                  | 6.0         | Q       | 0.0038     | 0.000903 |
| Bromochloromethane                      | 74-97-5    | SN          | SN                     | NS          | Q       | 0,00095    | 0.000276 |
| Chloroform                              | 67-66-3    | 9.0         | 2                      | 0.4         | Q       | 0.00095    | 0.000535 |
| 1,1,1-Trichloroethane                   | 71-55-6    | 160000      | SN                     | 0.3         | g       | 0,00095    | 0.000269 |
| Carbon tetrachloride                    | 56-23-5    | 2           | 4                      | 0.005       | Q       | 0.00095    | 0.000262 |
| 1,2-Dichloroethane (EDC)                | 107-06-2   | 6.0         | က                      | 0.005       | Q       | 0.00095    | 0.00036  |
| Benzene                                 | 71-43-2    | 2           | S                      | 0.005       | Q       | 0.00095    | 0.000206 |
| Trichloroethene                         | 79-01-6    | က           | 10                     | 0.01        | Q       | 0.00095    | 0.000277 |
| 1,2-Dichloropropane                     | 78-87-5    | 2           | S                      | 0.005       | Q       | 0.00095    | 0.000222 |
| 1,4-Dioxane                             | 123-91-1   | SN          | SN                     | SN          | 2       | 0.190      | 0.035    |
| Bromodichloromethane                    | 75-27-4    | _           | ო                      | 0.005       | 2       | 0.00095    | 0.00019  |
| cis-1,3-Dichloropropene                 | 10061-01-5 | SN          | SN                     | SN          | 2       | 0.00095    | 0.000204 |
| 4-Methyl-2-pentanone (MIBK)             | 108-10-1   | SN          | NS                     | SN          | 2       | 0.0019     | 0.000697 |
| Toluene                                 | 108-88-3   | 6300        | 91000                  | 7           | Q       | 0.00095    | 0.000218 |
| trans-1,3-Dichloropropene               | 10061-02-6 | SN          | NS                     | NS          | Q       | 0.00095    | 0.000246 |
| 1,1,2-Trichtoroethane                   | 2-00-62    | 2           | ဖ                      | 0.02        | Q       | 0.00095    | 0.000292 |
| Tetrachloroethene                       | 127-18-4   | 43          | 1500                   | 0.005       | Q       | 0.00095    | 0.000355 |
| 2-Hexanone                              | 591-78-6   | NS          | NS                     | NS          | Q       | 0.0019     | 0.00146  |
| Dibromochloromethane                    | 124-48-1   | က           | 8                      | 0.005       | S       | 0.00095    | 0.000261 |
| 1,2-Dibromoethane (EDB)                 | 106-93-4   | 0.008       | 0.04                   | 0.005       | Q       | 0.00095    | 0.000188 |
| Chlorobenzene                           | 108-90-7   | 510         | 7400                   | 9.0         | 2       | 0.00095    | 0.000217 |

S S Environmental Project Name: POMPTON LAKES IAL SDG No:E20-02897

| Ethylbenzene                          | 100-41-4  | 7800  | 110000 | 13    | QN | 0.00095 | 0.000262 |
|---------------------------------------|-----------|-------|--------|-------|----|---------|----------|
| Total Xylenes                         | 1330-20-7 | 12000 | 170000 | 19    | Q  | 0.0019  | 0.00102  |
| Styrene                               | 100-42-5  | 06    | 260    | က     | Q  | 0.00095 | 0.000316 |
| Bromoform                             | 75-25-2   | 81    | 280    | 0.03  | g  | 0.00095 | 0.00033  |
| Isopropylbenzene                      | 98-82-8   | NS    | NS     | SN    | 9  | 0.00095 | 0.000323 |
| 1,1,2,2-Tetrachloroethane             | 79-34-5   | -     | က      | 0.007 | Q  | 0.00095 | 0.000416 |
| n-Propylbenzene                       | 103-65-1  | NS    | NS     | SN    | 2  | 0.00095 | 0.000264 |
| 1,3,5-Trimethylbenzene                | 108-67-8  | NS    | NS     | SN    | 2  | 0.00095 | 0.000429 |
| tert-Butylbenzene                     | 9-90-86   | NS    | NS     | SN    | 2  | 0.00095 | 0.000303 |
| 1,2,4-Trimethylbenzene                | 95-63-6   | SN    | SN     | NS    | 9  | 0.00095 | 0.000491 |
| sec-Butylbenzene                      | 135-98-8  | SN    | SN     | SN    | 9  | 0.00095 | 0.000315 |
| 1,3-Dichlorobenzene                   | 541-73-1  | 5300  | 29000  | 19    | 2  | 0.00095 | 0.00028  |
| 4-Isopropyltoluene                    | 99-87-6   | SN    | NS     | NS    | 2  | 0.00095 | 0.000365 |
| 1,4-Dichlorobenzene                   | 106-46-7  | ഹ     | 13     | 2     | 9  | 0.00095 | 0.00028  |
| n-Butylbenzene                        | 104-51-8  | NS    | SN     | SN    | 9  | 0.00095 | 0.000392 |
| 1,2-Dichlorobenzene                   | 95-50-1   | 5300  | 29000  | 17    | Q  | 0.00095 | 0.000264 |
| 1,2-Dibromo-3-chloropropane           | 96-12-8   | 0.08  | 0.2    | 0.005 | Q  | 0.00095 | 0.000524 |
| 1,2,4-Trichlorobenzene                | 120-82-1  | 73    | 820    | 0.7   | 2  | 0.00095 | 0.000372 |
| 1,2,3-Trichlorobenzene                | 87-61-6   | NS    | NS     | SN    | Q  | 0.00095 | 0.000375 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1   | NS    | SN     | NS    | Q  | 0.00095 | 0.00042  |
| Methyl acetate                        | 79-20-9   | 78000 | NS     | 22    | Q  | 0.0019  | 0.000292 |
| Cyclohexane                           | 110-82-7  | NS    | SN     | NS    | Q  | 0.00095 | 0.000432 |
| Methylcyclohexane                     | 108-87-2  | NS    | SN     | NS    | S  | 0.00095 | 0.000276 |
| 1,3-Dichloropropene (cis- and trans-) | 542-75-6  | 2     | 7      | 0.005 | Q  | 0.00095 | 0.000246 |
| TOTAL TIC'S:                          |           | NS    | NS     | NS    | 2  |         | YA       |

| Semivolatiles (mg/Kg)        |           |       |        |     | Conc | ď   | RL    | MDL     |  |
|------------------------------|-----------|-------|--------|-----|------|-----|-------|---------|--|
| N-Nitrosodimethylamine       | 62-75-9   | 0.7   | 0.7    | 0.7 | 9    | L   | 0.032 | 0.028   |  |
| Benzaldehyde                 | 100-52-7  | 6100  | 00089  | NS  | Q    | o.  | 0.032 | 0.026   |  |
| Phenol                       | 108-95-2  | 18000 | 210000 | 00  | Q    | 0   | 0.032 | 0.032   |  |
| Aniline                      | 62-53-3   | SN    | SN     | SN  | Q    | o.  | 0.032 | 0.021   |  |
| Bis(2-chloroethyl) ether     | 111-44-4  | 0.4   | 2      | 0.2 | Q    | O.  | 0.032 | 0.026   |  |
| 2-Chlorophenot               | 95-57-8   | 310   | 2200   | 0.8 | Q    | 0.  | 0.032 | 0.026   |  |
| Benzyl alcohol               | 100-51-6  | SN    | SN     | SN  | Q    | Ö   | 0.032 | 0.031   |  |
| 2-Methylphenol               | 95-48-7   | 310   | 3400   | NS  | Q    | ō   | 0.032 | 0.019   |  |
| 2,2'-Oxybis(1-Chloropropane) | 108-60-1  | 23    | 29     | 2   | 2    | o   | 0.032 | 0.031   |  |
| 4-Methylphenol **            | 106-44-5  | 31    | 340    | SN  | 2    | O.  | 0.032 | 0.023   |  |
| N-Nitrosodi-n-propylamine    | 621-64-7  | 0.2   | 0.3    | 0.2 | 2    | 0   | 0.032 | 0.023   |  |
| Acetophenone                 | 98-86-2   | 2     | 2      | က   | 2    | 0   | 0.032 | 0.027   |  |
| Hexachloroethane             | 67-72-1   | 12    | 48     | 0.2 | Q    | 0.  | 0.032 | 0.026   |  |
| Nitrobenzene                 | 98-95-3   | co.   | 14     | 0.2 | Q    | 0.  | 0.032 | 0.021   |  |
| Isophorone                   | 78-59-1   | 510   | 2000   | 0.2 | Q    | 0   | 0.032 | 0.024   |  |
| 2-Nitrophenol                | 88-75-5   | SN    | SN     | NS  | 2    | 0   | 0.032 | 0:030   |  |
| 2,4-Dimethylphenol           | 105-67-9  | 1200  | 14000  | _   | Q    | 0   | 0.032 | 0.019   |  |
| Bis(2-chloroethoxy) methane  | 111-91-1  | SN    | SN     | SN  | 2    | 0   | 0.032 | 0.026   |  |
| Benzoic acid                 | 65-85-0   | SN    | SN     | SN  | Q    | o   | 0.322 | 0.027   |  |
| 2,4-Dichlorophenol           | 120-83-2  | 180   | 2100   | 0.2 | 2    | Ö   | 0.032 | 0.026   |  |
| Naphthalene                  | 91-20-3   | 9     | 17     | 25  | Q    | O.  | 0.032 | 0.026   |  |
| 4-Chloroaniline              | 106-47-8  | SN    | SN     | SN  | Q    | 0.  | 0.032 | 0.023   |  |
| Hexachlorobutadiene          | 87-68-3   | 9     | 25     | 6.0 | Q    | 0.  | 0.032 | 0.021   |  |
| Caprolactam                  | 105-60-2  | 31000 | 340000 | 12  | Q    | 0.  | 0.032 | 0.025   |  |
| 4-Chloro-3-methylphenol      | 29-20-7   | NS    | NS     | NS  | Q    | 0   | 0.032 | 0.022   |  |
| 2-Methylnaphthalene          | 91-57-6   | 230   | 2400   | 80  | QV   | 0.  | 0.032 | 0.021   |  |
| Hexachlorocyclopentadiene    | 77-47-4   | 45    | 110    | 320 | 2    | 0   | 0.032 | 0.028   |  |
| 2,4,6-Trichlorophenol        | 88-06-2   | 19    | 74     | 0.2 | 2    | o.  | 0.032 | 0.026 i |  |
| 2,4,5-Trichlorophenol        | 95-95-4   | 6100  | 00089  | 89  | Q    | 0   | 0.032 | 0.028   |  |
| 1,1'-Biphenyl                | 92-52-4   | 61    | 240    | 140 | Q    | o.  | 0.032 | 0.027   |  |
| 2-Chloronaphthalene          | 91-58-7   | NS    | NS     | SN  | Q    | 0.  | 0.032 | 0.025   |  |
| 2-Nitroaniline               | 88-74-4   | 39    | 23000  | SN  | Q    | 0   | 0.032 | 0.025   |  |
| Dimethyl phthalate           | 131-11-3  | NS    | SN     | SN  | R    | 0   | 0.032 | 0.024   |  |
| 2,6-Dinitrotoluene           | 606-20-2  | 0.7   | က      | NS  | Q    | 0   | 0.032 | 0.031   |  |
| Acenaphthylene               | 208-96-8  | NS    | 300000 | NS  | 2    | o o | 0.032 | 0.026   |  |
| 3-Nitroaniline               | 99-09-2   | NS    | NS     | SN  | Q    | 0.  | 0.032 | 0.024   |  |
| Acenaphthene                 | 83-32-9   | 3400  | 37000  | 110 | Q    | 0   | 0.032 | 0.027   |  |
| 2,4-Dinitrophenol            | 51-28-5   | 120   | 1400   | 0.3 | Q    | Ö   | 0.032 | 0.031   |  |
| 4-Nitrophenol                | 100-02-7  | NS    | SN     | SN  | 2    | 0   | 0.032 | 0:030   |  |
| 2,4-Dinitrotoluene           | 121-14-2  | 0.7   | က      | SN  | 2    | 0.  | 0.032 | 0.029   |  |
| Dibenzofuran                 | 132-64-9  | NS    | SN     | SN  | 2    | 0.  | 0.032 | 0.024   |  |
| Diethyl phthalate            | 84-66-2   | 49000 | 550000 | 88  | Q    | 0.  | 0.032 | 0.019   |  |
| Fluorene                     | 86-73-7   | 2300  | 24000  | 170 | 2    | 0   | 0.032 | 0.028   |  |
| 4-Chlorophenyl phenyl ether  | 7005-72-3 | SN    | SN     | SN  | Q    | 0   | 0.032 | 0.027   |  |
| 4-Nitroaniline               | 100-01-6  | NS    | NS     | NS  | Q    | 0   | 0.032 | 0.020   |  |

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| 1,2,4,5-Tetrachlorobenzene     | 95-94-3    | NS     | NS     | SN   | Q | 0.032 | 0.023 |
|--------------------------------|------------|--------|--------|------|---|-------|-------|
| 2,3,4,6-Tetrachlorophenol      | 58-90-2    | NS     | NS     | SN   | Q | 0.032 | 0.028 |
| 4,6-Dinitro-2-methylphenol     | 534-52-1   | 9      | 89     | 0.3  | Q | 0.032 | 0.031 |
| N-Nitrosodiphenylamine         | 86-30-6    | 66     | 390    | 0.4  | 2 | 0.032 | 0.031 |
| 1,2-Diphenylhydrazine          | 122-66-7   | 0.7    | 2      | 0.7  | 2 | 0.032 | 0.032 |
| 4-Bromophenyl phenyl ether     | 101-55-3   | NS     | NS     | SN   | S | 0.032 | 0.023 |
| Hexachlorobenzene              | 118-74-1   | 0.3    | -      | 0.2  | 2 | 0.032 | 0.023 |
| Atrazine                       | 1912-24-9  | 210    | 2400   | 0.2  | 2 | 0.032 | 0.025 |
| Pentachlorophenol              | 87-86-5    | 6.0    | က      | 0.3  | 2 | 0.032 | 0.022 |
| Phenanthrene                   | 85-01-8    | NS     | 300000 | SN   | 2 | 0.032 | 0.031 |
| Anthracene                     | 120-12-7   | 17000  | 30000  | 2400 | 2 | 0.032 | 0.032 |
| Carbazole                      | 86-74-8    | 24     | 96     | SN   | 2 | 0.032 | 0.029 |
| Di-n-butyl phthalate           | 84-74-2    | 6100   | 68000  | 760  | 2 | 0.032 | 0.027 |
| Fluoranthene                   | 206-44-0   | 2300   | 24000  | 1300 | 2 | 0.032 | 0.031 |
| Benzidine                      | 92-87-5    | 0.7    | 0.7    | 0.7  | 2 | 0.032 | 0.025 |
| Pyrene                         | 129-00-0   | 1700   | 18000  | 840  | 2 | 0.032 | 0.029 |
| Butyl benzyl phthalate         | 85-68-7    | 1200   | 14000  | 230  | 2 | 0.032 | 0:030 |
| 3,3'-Dichlorobenzidine         | 91-94-1    |        | 4      | 0.2  | 2 | 0.032 | 0.029 |
| Benzo[a]anthracene             | 56-55-3    | S)     | 17     | 8.0  | 2 | 0.032 | 0.019 |
| Chrysene                       | 218-01-9   | 450    | 1700   | 80   | 2 | 0.032 | 0:030 |
| Bis(2-ethylhexyl) phthalate    | 117-81-7   | 35     | 140    | 1200 | 2 | 0.032 | 0.029 |
| Di-n-octyl phthalate           | 117-84-0   | 2400   | 27000  | 3300 | 2 | 0.032 | 0:030 |
| Benzo[b]fluoranthene           | 205-99-2   | 2      | 17     | 7    | 2 | 0.032 | 0.031 |
| Benzo[k]fluoranthene           | 207-08-9   | 45     | 170    | 25   | 2 | 0.032 | 0.027 |
| Benzo[a]pyrene                 | 50-32-8    | 0.5    | 2      | 0.2  | 2 | 0.032 | 0.028 |
| Indeno[1,2,3-cd]pyrene         | 193-39-5   | ις.    | 17     | 7    | 2 | 0.032 | 0.031 |
| Dibenz[a,h]anthracene          | 53-70-3    | 0.5    | 2      | 8.0  | 2 | 0.032 | 0:030 |
| Benzo[g,h,i]perylene           | 191-24-2   | 380000 | 30000  | SN   | Q | 0.032 | 0.031 |
| Dinitrotoluene (2,4- and 2,6-) | 25321-14-6 | 0.7    | က      | 0.2  | Q | 0.032 | 0.031 |
| TOTAL TIC's:                   |            | SN     | NS     | NS   | 2 |       |       |

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| PCB's (mg/Kg) |            |     |    |     | Conc | a    | <u>ا</u> | MDL     |
|---------------|------------|-----|----|-----|------|------|----------|---------|
| Aroclor-1016  | 12674-11-2 | NS  | SN | SN  | QN   | 0.00 | 0329     | 0.00132 |
| Aroclor-1221  | 11104-28-2 | NS  | SN | SN  | Q    | 0.00 | 0329     | 0.00132 |
| Aroclor-1232  | 11141-16-5 | NS  | SN | SN  | Q    | 0.00 | 0329     | 0.00132 |
| Aroclor-1242  | 53469-21-9 | NS  | NS | NS  | Q    | 0.00 | 0329     | 0.00132 |
| Aroclor-1248  | 12672-29-6 | NS  | NS | NS  | Q    | 0.00 | 0.00329  | 0.00132 |
| Aroclor-1254  | 11097-69-1 | NS  | NS | NS  | QN   | 0.00 | 0329     | 0.00132 |
| Aroclor-1260  | 11096-82-5 | NS  | NS | NS  | Q    | 0.00 | 0329     | 0.00132 |
| Aroclor-1262  | 37324-23-5 | NS  | NS | NS  | QV   | 0.00 | 0329     | 0.00132 |
| Aroclor-1268  | 11100-14-4 | NS  | NS | NS  | QN   | 0.00 | 0329     | 0.00132 |
| PCBs          | 1336-36-3  | 0.2 | -  | 0.2 | Q    | 0.00 | 0329     | 0.00132 |

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| Pesticides (mg/Kg)          |            |      |      |       | Conc | Q<br>RL  | MDL        |       |
|-----------------------------|------------|------|------|-------|------|----------|------------|-------|
| alpha-BHC                   | 319-84-6   | 0.1  | 0.5  | 0.002 | Q    | 0.000658 | 8 0.000329 | _     |
| beta-BHC                    | 319-85-7   | 0.4  | 2    | 0.002 | Q    | 0.000658 | 8 0.000329 |       |
| gamma-BHC (Lindane)         | 58-89-9    | 9.0  | 2    | 0.002 | Q    | 0.000658 | 8 0.000329 | _     |
| delta-BHC                   | 319-86-8   | SN   | SN   | SN    | 2    | 0.000658 | 8 0.000329 |       |
| Heptachlor                  | 76-44-8    | 0.1  | 0.7  | 0.5   | Q    | 0.000658 | 8 0.000329 | · - · |
| Aldrin                      | 309-00-2   | 0.04 | 0.2  | 0.2   | Q    | 0.000658 | 8 0.000329 | _     |
| Heptachlor epoxide          | 1024-57-3  | 0.07 | 0.3  | 0.01  | Q    | 0.000658 | 8 0.000329 |       |
| Endosulfan I                | 8-86-656   | NS   | NS   | NS    | 2    | 0.000658 | 8 0.000329 | -     |
| 4,4'-DDE                    | 72-55-9    | 2    | တ    | 18    | Q    | 0.000658 | 8 0.000329 |       |
| Dieldrin                    | 60-57-1    | 0.04 | 0.2  | 0.003 | Q    | 0.000658 | 8 0.000329 |       |
| Endrin                      | 72-20-8    | 23   | 340  |       | Q    | 0.000658 | 8 0.000329 |       |
| Endosulfan II               | 33213-65-9 | SN   | SN   | SN    | Q    | 0.000658 | 8 0.000329 |       |
| 4,4'-DDD                    | 72-54-8    | m    | 13   | 4     | Q    | 0.000658 | 8 0.000329 |       |
| Endrin aldehyde             | 7421-93-4  | SN   | SN   | NS    | Q    | 0.000658 | 8 0.000329 |       |
| Endosulfan sulfate          | 1031-07-8  | 470  | 6800 | 2     | Q    | 0.000658 | 8 0.000329 | _     |
| 4,4'-DDT                    | 50-29-3    | 2    | 80   | +     | Q    | 0.000658 | 8 0,000329 | -74   |
| Endrin ketone               | 53494-70-5 | SN   | SN   | SN    | Q    | 0.000658 | 8 0.000329 |       |
| Methoxychlor                | 72-43-5    | 390  | 5700 | 160   | Q    | 0.000658 | 8 0.000329 |       |
| alpha-Chlordane             | 5103-71-9  | SN   | SN   | SN    | Q    | 0.000658 | 8 0.000329 |       |
| gamma-Chlordane             | 5103-74-2  | SN   | SN   | NS    | Q    | 0.000658 | 8 0.000329 | _     |
| Toxaphene                   | 8001-35-2  | 9.0  | က    | 0.3   | Q    | 0.00823  | 3 0.00395  |       |
| Endosulfan (I and II)       | 115-29-7   | 470  | 0089 | 4     | Q    | 0.000658 | 8 0.000329 |       |
| Chlordane (alpha and gamma) | 57-74-9    | 0.2  | -    | 0.05  | Q    | 0.000658 | 8 0.000329 |       |

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| NJ-EPH-C40 (mg/Kg) |          |    |         |    | Conc | ø | RL   | MDL |
|--------------------|----------|----|---------|----|------|---|------|-----|
| 9-C40              | IALC9C40 | NS | ν:<br>Z | S. | 21.1 | - | 49.9 | 199 |

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| Metals (mg/Kg) |            |           |           |       | Сопс  | Q<br>RL | MDL : |  |
|----------------|------------|-----------|-----------|-------|-------|---------|-------|--|
| Aluminum       | 7429-90-5  | 78000     | SN        | 0009  | 4640  | 5.43    | 2.17  |  |
| Antimony       | 7440-36-0  | 31        | 450       | မ     | S     | 0.543   | 0.217 |  |
| Arsenic        | 7440-38-2  | 19        | 19        | 19    | 0.687 | 0.543   | 0.163 |  |
| Barium         | 7440-39-3  | 16000     | 29000     | 2100  | 41.1  | 0.543   | 0.272 |  |
| Beryllium      | 7440-41-7  | 16        | 140       | 0.7   | 0.316 | J 0.543 | 0.163 |  |
| Cadmium        | 7440-43-9  | 78        | 78        | 7     | Q     | 0.543   | 0.326 |  |
| Calcium        | 7440-70-2  | SN        | SN        | NS    | 3920  | 54.3    | 16.3  |  |
| Chromium       | 7440-47-3  | SN        | SN        | NS    | 16.3  | 0.543   | 0.272 |  |
| Cobalt         | 7440-48-4  | 1600      | 290       | 06    | 8.86  | 0.543   | 0.163 |  |
| Copper         | 7440-50-8  | 3100      | 45000     | 11000 | 50.4  | 0.543   | 0.380 |  |
| Iron           | 7439-89-6  | SN        | SN        | SN    | 13500 | 54.3    | 16.3  |  |
| Lead           | 7439-92-1  | 400       | 800       | 06    | 3.21  | 0.543   | 0.272 |  |
| Magnesium      | 7439-95-4  | SN        | NS        | NS    | 4030  | 54.3    | 16.3  |  |
| Manganese      | 7439-96-5  | 11000     | 2900      | 99    | 94.9  | 0.543   | 0.380 |  |
| Mercury        | 7439-97-6  | 23        | 65        | 0.1   | Q     | 0.031   | 0.013 |  |
| Nickel         | 7440-02-0  | 1600      | 23000     | 48    | 23.0  | 0.543   | 0.380 |  |
| Potassium      | 7440-09-7' | SN        | SN        | SN    | 3050  | 54.3    | 21.7  |  |
| Selenium       | 7782-49-2  | 390       | 5700      | 11    | 3.37  | J 3.80  | 1.63  |  |
| Silver         | 7440-22-4  | 390       | 2200      | -     | Q     | 0.543   | 0.326 |  |
| Sodium         | 7440-23-5  | SN        | SN        | NS    | 116   | 54.3    | 21.7  |  |
| Thallium       | 7440-28-0  | withdrawn | withdrawn | m     | Q     | 0.543   | 0.272 |  |
| Vanadium       | 7440-62-2  | 78        | 1100      | SN    | 23.6  | 0.543   | 0.272 |  |
| Zinc           | 7440-66-6  | 23000     | 110000    | 930   | 19.4  | 5.43    | 1.09  |  |

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|                                |            |        |    |    |      |   |      | The second secon | 100 |
|--------------------------------|------------|--------|----|----|------|---|------|--|-----|
| General Analytical             |            |        |    |    | Conc | a | RL   | MDL  |     |
| Hexavalent Chromium-mg/Kg      | 18540-29-9 | 240    | 20 | NS | Q    |   | 1.00 | 0.380  |     |
| pH/Corrosivity-SU              | SRP 6      | NS     | SN | SN | 8.38 |   | Ą    | ¥  |     |
| Trivalent (III) Chromium-mg/Kg | 16065-83-1 | 120000 | NS | SN | 16.3 |   | 1.00 | 0.380  |     |

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| Subcontracted Data   |                          |  |                        |                    | Conc            | a          | R          | MDL                |
|--|--------------------------|--|------------------------|--------------------|-----------------|------------|------------|--------------------|
|  |                          | SN   | SN                     | SN                 | ċ               |            | <i>د</i> . | <br>&              |
| NJDEP Soil Remediation Standards: Remediation Standards N.J.A.C. 7:26D, May 2012; Amended Sept 2017  | Remediation Standards N  | J.A.C. 7:26D, May 20                           | 12; Amended Sept 201   | 7                  |                 |            |            |                    |
| BOLD Conc  | Indicates a concentr     | tration that exceeds applicable criteria       | plicable criteria.     |                    |                 |            |            |                    |
| BOLD RL  | Indicates RL that e      | indicates RL that exceeds applicable criteria. | iria.                  |                    |                 |            |            | _                  |
| BOLD MDL   | Indicates MDL that       | exceeds applicable criteria                    | lteria.                |                    |                 |            |            |                    |
| NS = No Standard Available   |                          |  |                        |                    |                 |            |            |                    |
| ~ = Sample not analyzed for  |                          |  |                        |                    |                 |            |            |                    |
| ND = Analyzed for but Not Detected at the MDL  | t the MDL                |  |                        |                    |                 | L          |            |                    |
| J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations. | below the RL and above t | the MDL for target com                         | pounds. For non-targ   | et compounds (i.e. | TICs), qualifie | er indicat | es estimat | ed concentrations. |
| ? = Results not available  |                          |  |                        |                    |                 |            |            | _                  |
| Subcontracted Results for Total Cyanide (9012B) by Test America -Edison are available in the Subcontracted Report section  | ide (9012B) by Test Amer | ica -Edison are availab                        | le in the Subcontracte | d Report section   |                 |            |            | _                  |