Table 3: Hanson Aggregates – Durham Quarry – Asphalt Plant Remedial Investigation
Surface Water and Soil Analysis Results – October/November 2021

	Sample # (interval)	Analytical Methods	Date Collected	Media	Acetone	Bromo-dichloromethane	Chloroform	1,1-Dichlorothane	1,1-Dichlorothene	Cis-1,2-Dichlorothene	Methyl Ethyl Ketone	Naphthalene	1,1,1-Trichloroethane	1,2,4-trichlorobenzene	Vinyl Chloride	1,4-Dioxane By 8260 SIM
Surface Water (µg/l)	SW-1	8260/8270 8260 SIM	11/09/21	Pit Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	SW-2	8260/8270 8260 SIM	11/09/21	Pit Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Soil (mg/kg)	MW-51 (10'-12')	8260/8270 8260 SIM	10/28/21	Drill Cuttings	0.0518j	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW-54 (16'-18')	8260/8270 8260 SIM	11/02/21	Drill Cuttings	0.0212j	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00218
	MW-56 (16'-18')	8260/8270 8260 SIM	10/28/21	Drill Cuttings	0.0306J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 4A: Hanson Aggregates – Durham Quarry Asphalt Plant Remedial Investigation

Shallow Zone Groundwater Analysis Results (µg/l) – November 2021

Aquifer Zone	Sample #	Analytical Methods	Date Collected	Media	Acetone	Benzene	n-Butylbenzene	Chloroform	1,1-Dichlorothane	1,1-Dichlorothene	Cis-1,2-Dichlorothene	1,2-Dichloroethene (total)	Styrene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	1,4-Dioxane By 8260 SIM	Acetiphenone
Shallow Zone Wells	MW-7	8260/ 8270	11/10/21	Ground Water	**87.8**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.83J**
	MW-17	8260/ 8270	11/16/21	Ground Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.447 J**	ND
	MW-18	8260/ 8270	11/15/21	Ground Water	ND	**1.34**	ND	ND	**0.427 J**	ND	**0.646 J**	**0.646 J**	ND	ND	ND	ND	**3.78**	ND
	MW-25	8260/ 8270	11/18/21	Ground Water	**20**	ND	ND	ND	**3.55**	**7.49**	**11.3**	**11.3**	**0.726 J**	**3.63**	**1.84**	**0.568 J**	**11.8**	ND
	MW-26	8260/ 8270	11/16/21	Ground Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.58**	ND
	MW-29	8260/ 8270	11/04/21	Ground Water	ND	ND	ND	ND	**0.905 J**	**3.22**	**4.23**	**4.23**	ND	ND	ND	ND	**8.81**	ND
	MW-43	8260/ 8270	11/11/21	Ground Water	ND	ND	ND	**5.47**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW-44	8260/ 8270	11/10/21	Ground Water	ND	ND	**0.734 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW-49	8260/ 8270	11/09/21	Ground Water	**214**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NC Groundwater Standard					6000	1	70	70	6	350	70	170	70	200	3	0.03	3	700

ND – Not Detected NR – Not Reported J – Estimated Value Yellow Highlight indicates exceedance of GW Standards

Table 4B: Hanson Aggregates – Durham Quarry
Asphalt Plant Remedial Investigation
Intermediate Zone Groundwater Analysis Results (µg/l) – November 2021

Aquifer Zone	Sample #	Analytical Methods	Date Collected	Media	Acetone	Cis-1,2-Dichloroethene	1,1-Dichlorothane	1,1-Dichlorothene	1,2-Dichloroethene (total)	Trichloroethene	Vinyl Chloride	1,4-Dioxane By 8260 SIM	Acetophenone	Dibenzofuran	Fluoranthene	Fluorene	Hexachlorobenzene	Naphthalene	Phenanthrene
Intermediate Zone Wells	MW-1	8260/ 8270	11/10/21	Ground Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.45 J	3.25 J	3.87 J	ND	13.1	5.95 J
	MW-11	8260/ 8270	11/22/21	Ground Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW-25i	8260/ 8270	11/18/21	Ground Water	ND	10.3	1.83	9.70	ND	0.373 J	2.31	17.8	ND	ND	ND	ND	ND	ND	ND
	MW-29i	8260/ 8270	11/17/21	Ground Water	ND	4.77	0.505 J	3.83	4.77	ND	ND	10.9	ND	ND	ND	ND	ND	ND	ND
	MW-45	8260/ 8270	11/11/21	Ground Water	ND	3.07	1.32	3.54	3.07	0.629 J	ND	3.38	3.17 J	ND	ND	ND	ND	ND	ND
	MW-46	8260/ 8270	11/19/21	Ground Water	46.6	2.60	0.395 J	1.95	2.60	ND	ND	11.7	ND	ND	ND	ND	ND	ND	ND
	MW-47	8260/ 8270	11/15/21	Ground Water	13.8	0.403 J	0.467 J	ND	0.403 J	ND	ND	4.19	ND	ND	ND	ND	ND	ND	ND
	MW-50	8260/ 8270	11/18/21	Ground Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW-51	8260/ 8270	11/11/21	Ground Water	16.7	ND	ND	ND	ND	ND	ND	ND	ND	1.84 J	1.55 J	ND	1.51 J	ND	ND
	MW-52	8260/ 8270	11/09/21	Ground Water	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.74 J	ND	ND	ND	ND
NC Groundwater Standard					6000	70	6	350	170	3	0.03	3	700	28	300	300	0.02	6	200

ND – Not Detected NR – Not Reported J – Estimated Value Yellow Highlight indicates exceedance of GW Standards

Table 4C: Hanson Aggregates – Durham Quarry
Asphalt Plant Remedial Investigation
Deep Zone Groundwater Analysis Results (µg/l) – November 2021

Aquifer Zone	Sample #	Analytical Methods	Date Collected	Media	Acetone	Bromo-dichloromethane	Chloroform	Cis-1,2-Dichloroethene	1,1-Dichlorothane	1,1-Dichlorothene	1,2-Dichlorothene (ztotal)	Trichlorothene	1,4-Dioxane By 8260 SIM	Acetophenone	Bis(2-ethylhexyl) phthalate	Dibenzofuran	Flouranthene	2-Methylnaphthlene	Naphthalene
Deep Zone Wells	MW-37	8260/ 8270	11/16/21	Ground Water	**8.81 J**	ND	ND	**0.523 J**	ND	ND	**0.523 J**	ND	**2.14**	ND	ND	ND	ND	ND	ND
	MW-38	8260/ 8270	11/18/21	Ground Water	**20.8**	ND	ND	**0.537 J**	**0.610 J**	**0.364 J**	**0.537 J**	ND	**7.19**	ND	**3.39 J**	**1.89 J**	**1.58 J**	**171**	**271**
	MW-48	8260/ 8270	11/15/21	Ground Water	**51.8**	ND	ND	**0.367 J**	ND	ND	ND	ND	**2.42**	**3.34 J**	ND	ND	ND	ND	ND
	MW-53	8260/ 8270	11/22/21	Ground Water	**79.0**	**0.359 J**	**1.67**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	MW-54	8260/ 8270	11/19/21	Ground Water	ND	ND	**1.14**	**0.864 J**	ND	**0.770 J**	**0.864 J**	**0.209 J**	**1.33**	ND	ND	ND	ND	ND	ND
	MW-55	8260/ 8270	11/23/21	Ground Water	ND	ND	ND	ND	ND	**0.788 J**	ND	ND	**1.10**	ND	ND	ND	ND	ND	**4.48 J**
	MW-56	8260/ 8270	11/23/21	Ground Water	ND	ND	**1.57**	ND	ND	ND	ND	ND	**5.80**	ND	ND	ND	ND	ND	ND
NC Groundwater Standard (µg/l)					6000	0.6	70	70	6	350	170	0.70	3	700	3	28	300	30	6

ND – Not Detected NR – Not Reported J – Estimated Value Yellow Highlight indicates exceedance of GW Standards

Table 5: Natural Attenuation Parameters - Laboratory Analysis Results (µg/l)
Hanson Aggregates – Durham Quarry - November 2021
Asphalt Plant Remedial Investigation

Sample #	Date Collected	Media	Zone	Alkalinity (mg/l)	BOD (mg/l)	COD (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)
MW-29	11/17/21	Groundwater	Shallow	248	ND	17.5	ND	5.55
MW-29i	11/17/21	Groundwater	Intermediate	307	ND	9.27 J	ND	5.05
MW-37	11/17/21	Groundwater	Deep	382	14.6 b	40.1	ND	12.0

ND – Not Detected NR – Not Reported J – Estimated Value b - Result Detected in the Unseeded Control blank

Table 7A Comparison of Groundwater Laboratory Analytical Results

Asphalt Plant Shallow Zone Monitoring Wells – November 2021 - November 2020 – August 2019 – May 2017
Hanson Aggregates - Former Durham Quarry - 5103 Denfield Street, Durham, North Carolina

Well ID	Month/Year Sampled	Acetone	Benzene	n-Butylbenzene	Chloroform	1,1-Dichlorothane	1,1-Dichlorothene	Cis-1,2-Dichlorothene	Styrene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	1,4-Dioxane By 8260 SIM
MW-17	11/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.447 J
	11/20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/19	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR
MW-18	11/21	ND	1.34	ND	ND	0.427 J	ND	0.646 J	0.726 J	ND	ND	ND	3.78
	11/20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2
	08/19	ND	ND	ND	ND	0.90	ND	0.35	ND	ND	ND	0.55	ND
	05/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR
MW-25	11/21	20	ND	ND	ND	3.55	7.49	11.3	ND	3.63	1.84	0.586 J	11.8
	11/20	ND	ND	ND	ND	4.3	7.5	8.4	ND	1.7	ND	1.0	16.8
	08/19	ND	ND	ND	ND	6.80	3.60	3.90	ND	1.6	0.97	9.50	ND
	05/17	ND	ND	ND	ND	2.60	2.00	1.70	ND	2.5	0.82	ND	NR
MW-26	11/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.58
	11/20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR
MW-29	11/21	ND	ND	ND	ND	0.905 J	3.22	4.23	ND	ND	ND	ND	8.81
	11/20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/19	4.70	ND	ND	ND	22.00	12.00	11.00	ND	3.7	2.9	0.58	26.0
	05/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NR
MW-43	11/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20	35.1	1.8	ND	12.2	ND	ND	ND	ND	ND	ND	ND	ND
MW-44	11/21	ND	ND	0.734 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NC GW Standard		6000	1	70	70	6	350	70	70	200	3	0.03	3

ND – Not Detected NR – Not Reported Yellow Highlight indicates exceedance of GW Standards

Table 7B Comparison of Groundwater Laboratory Analytical Results

Asphalt Plant Intermediate Zone Monitoring Wells – November 2020 – August 2019 – May 2017
Hanson Aggregates - Former Durham Quarry - 5103 Denfield Street, Durham, North Carolina

Well ID	Month/Year Sampled	Acetone	Acetophenone	2-Chlorotoluene	Dibenzofuran	1,1-Dichlorothane	1,1-Dichlorothene	Cis-1,2-Dichlorothene	Fluoranthene	Fluorene	Methyl-tert-Butyl Ether	Naphthalene	Phenanthrene	Trichloroethene	Vinyl Chloride	1,4-Dioxane By 8260 SIM
MW-11	11/21	ND	ND	ND	3.45J	ND	ND	ND	3.25J	3.87J	ND	13.1	5.95J	ND	ND	ND
	11/20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34	ND	ND	ND	ND	ND
	05/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62	ND	ND	ND	ND	NR
MW-25i	11/21	ND	ND	ND	ND	1.83	9.70	10.3	ND	ND	ND	ND	ND	0.373J	2.31	17.8
	11/20	ND	ND	ND	ND	4.6	10.1	11.5	ND	ND	ND	ND	ND	ND	3.6	21.2
	08/19	ND	ND	ND	ND	10.0	11.0	11.0	ND	ND	ND	ND	ND	1.4	16.0	ND
	05/17	ND	ND	0.58	ND	4.2	5.9	5.4	ND	ND	ND	ND	ND	0.8	2.2	NR
MW-29i	11/21	ND	ND	ND	ND	0.505J	3.83	4.77	ND	ND	ND	ND	ND	ND	ND	10.9
	11/20	ND	ND	ND	ND	1.4	5.1	6.4	ND	ND	ND	ND	ND	ND	ND	14.3
	08/19	6.8	ND	1.4	ND	5.0	5.1	6.6	ND	ND	ND	ND	ND	0.7	1.6	ND
	05/17	ND	ND	0.55	ND	1.8	2.4	2.6	ND	ND	ND	ND	ND	ND	0.72	NR
MW-45	11/21	ND	3.17J	ND	ND	1.32	3.54	3.07	ND	ND	ND	ND	ND	0.629J	ND	3.38
	11/20	ND	ND	ND	ND	ND	1.8	1.5	ND	ND	ND	ND	ND	ND	ND	4.8
MW-46	11/21	46.6	ND	ND	ND	0.395J	1.95	2.60	ND	ND	ND	ND	ND	ND	ND	11.7
	11/20	66.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.9
MW-47	11/21	13.8	ND	ND	ND	0.467J	ND	0.403J	ND	ND	ND	ND	ND	ND	ND	4.19
	11/20	55.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6
NC GW Standard		6000	700	100	28	6	350	70	28	300	20	6	200	0.70	0.03	3

ND – Not Detected NR – Not Reported Yellow Highlight indicates exceedance of GW Standards

Table 7C Comparison of Groundwater Laboratory Analytical Results

Asphalt Plant Deep Zone Monitoring Wells – November 2020 – August 2019 – May 2017
Hanson Aggregates - Former Durham Quarry - 5103 Denfield Street, Durham, North Carolina

Well ID	Month/Year Sampled	Acetone	Acetophenone	Bromo-dichloromethane	Bis(2-Ethylhexyl) Phthalate	1,1-Dichlorothane	1,1-Dichlorothene	Cis-1,2-Dichlorothene	Diisopropyl Ether	Methyl-tert-Butyl Ether	2-Methylnaphthalene	Naphthalene	1,1,1-Trichloroethane	1,2,4-trichlorobenzene	Trichloroethene	Vinyl Chloride	1,4-Dioxane By 8260 SIM
MW-37	11/21	8.81J	ND	ND	ND	ND	ND	0.523J	ND	ND	ND	ND	ND	ND	ND	ND	2.14
	11/20	552	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0
	08/19	24.00	ND	ND	ND	0.40	ND	0.32	0.52	0.25	ND	ND	ND	ND	ND	ND	ND
	05/17	14.00	ND	ND	ND	0.63	ND	ND	0.69	ND	ND	ND	ND	ND	ND	ND	NR
MW-38	11/21	20.8	ND	ND	3.39J	0.610J	0.364J	0.537J	ND	ND	171	271	ND	ND	ND	ND	7.19
	11/20	57.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.5
	08/19	4.20	ND	ND	ND	0.72	0.36	0.37	0.32	ND	ND	ND	ND	ND	ND	ND	ND
	05/17	93.00	ND	ND	ND	1.40	0.97	1.00	0.73	ND	ND	ND	ND	ND	ND	ND	NR
MW-48	11/21	51.8	3.34J	ND	ND	ND	ND	0.367J	ND	ND	ND	ND	ND	ND	ND	ND	2.42
	11/20	231	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3
NC GW Standard		6000	700	0.6	3	6	350	70	70	20	30	6	200	70	0.70	0.03	3

ND – Not Detected NR – Not Reported Yellow Highlight indicates exceedance of GW Standards