

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Edison 777 New Durham Road Edison, NJ 08817 Tel: (732)549-3900

TestAmerica Job ID: 460-148984-1 Client Project/Site: Rock Hill Quarry

For:

Hanson Aggregates PA LLC 7660 Imperial Way Allentown, Pennsylvania 18195

Attn: Andrew Gutshall

Japine Mappe

Authorized for release by: 1/26/2018 1:41:48 PM Sapna Nayyar, Project Manager I sapna.nayyar@testamericainc.com

Designee for Jill Miller, Project Manager II (732)549-3900 jill.miller@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-148984-1

Case Narrative

Comments

No additional comments.

Receipt

The sample was received on 1/24/2018 12:01 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: NPDES001 Lab Sample ID: 460-148984-1 Date Collected: 01/22/18 08:00 Matrix: Water Date Received: 01/24/18 12:01 **General Chemistry** Analyte **Result Qualifier** RL Unit D Prepared Analyzed Dil Fac **Total Suspended Solids** 1.3 mg/L 01/26/18 08:17 24 1 SU 01/25/18 12:52 7.7 HF 1 рΗ

Lab Sample ID: 460-148984-1

Matrix: Water

Client Sample ID: NPDES001 Date Collected: 01/22/18 08:00 Date Received: 01/24/18 12:01

		2.01						
_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1 _	492921	01/26/18 08:17	PLS	TAL EDI
Total/NA	Analysis	SM 4500 H+ B		1	492727	01/25/18 12:52	YAH	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client: Hanson Aggregates PA LLC Project/Site: Rock Hill Quarry TestAmerica Job ID: 460-148984-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-18
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-18
Pennsylvania	NELAP	3	68-00522	02-28-18
Rhode Island	State Program	1	LAO00132	12-30-17 *
USDA	Federal		NJCA-003-08	06-13-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Hanson Aggregates PA LLC Project/Site: Rock Hill Quarry

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Protocol References:

Laboratory References:

Method Description

Solids, Total Suspended (TSS)

SM = "Standard Methods For The Examination Of Water And Wastewater",

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Method

SM 2540D

SM 4500 H+ B

Laboratory

TAL EDI TAL EDI

Protocol

SM

SM

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5
8
9

Sample Summary

TestAmerica Job ID: 460-148984-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-148984-1	NPDES001	Water	01/22/18 08:00	01/24/18 12:01

Massachusetts (M-NJ312), North Carolina (No. 578)	7	Relinguished by		Relinquished by Compan	Heilinguisned by	tructions	6 = Other, 7 = Other	Preservation Used: $1 = ICE$, $2 = HCI$, $3 = H_2SO_4$,					NPES OOI	Sample Identification	610-306-4819		City State	TLOO INPERM WAY	Address	HANSON AGGREGATES	Name (for report and invoice)	THE LEADER IN ENVIRONMENTAL TESTING	TestAmerica	
io), ivew Io. 578)		Ň	KOV	y ,	umpany 44NS M		ther	, 4 = HNO ₃ ,	i.				122/18	Date								CH/		
TUIK (1140			T h	2	>) ₃ , 5 = NaOH					0800	Time I	Other	1 Week	Rush Charges	Standard	Analysis Turr	P. O. #	Samplers			
oz), Perinsyiva	1-24-18	Date / Time	1214-18 1800	Date / Time	Date / Time) - -	Water:	Soil:					۲ ۲	Matrix Cont.	No. of.	I L I L	Rush Charges Authorized For:		Time		Samplers Name (Printed)	CHAIN OF CUSTODY / ANALYSIS REQUES		
1111a (08-52	3) <			_		7					 				PA TS	¥ 5			ANALY		TSHAW	ANALY		
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JZUU), Hr		\smile			\bigvee	5					 									am:	Lification	ص)	
loge Island	Comme C	ηγ	ASK	Company	Company	Water Metals Filtered (Yes/No)				460-148984 Chain of Custody									4	NX:	Der Hi	37001	Phone: (732)	77 New Durt
(132).	Cari	- 1,		-	11 JE	Filtered ()			•	hain of Cu										DKOP:	1	Page	Jersey 088 549-3900	nam Road
TAL - 0016 (0715)	مركد	Doc halia			2112	s/No)?				stody		i i i i		Numbers	Sample	42984	loh Nn - 1	Project No:			QUAREN	Je l of	Edison, New Jersey 08817 Phone: (732) 549-3900 Fax: (732) 549-3679	

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1/26/2018

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Client: Hanson Aggregates PA LLC

Login Number: 148984 List Number: 1 Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 3.5
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

List Source: TestAmerica Edison