Pelton, Jason M (DEC)

From: Bill Lais <wlais@hsweng.com>
Sent: Wednesday, October 14, 2020 5:18 PM
To: Pelton, Jason M (DEC); Hesler, Donald (DEC)
Cc: edward.hannon@ngc.com; Joel Balmat; Jose Sananes
Subject: ISTR Liquid Effluent Discharge Planned for Thursday Oct 15
Attachments: FRAC2-A4272 jd14200.pdf

Importance: High

PRIVILEGED AND CONFIDENTIAL ATTORNEY/CLIENT COMMUNICATION
AND/OR ATTORNEY WORK PRODUCT SUBJECT TO ATTORNEY-CLIENT PRIVILEGE

Jason,

Attached are analytical results of the next batch of ISTR treated liquid effluent that we plan to purge through the OU3 air stripper per the RAWP. This batch consist of about 15,000-18,000 gallons.

All SPDES and TOGS parameters measured in the frac tank sample (FRAC2-A4272) are within acceptable limits, including pH, measured as 7.32.

We plan to process this batch Thursday October 15, 2020. Please let us know if you need further information.

Thank you.

Bill Lais, PE | Senior Technical Consultant
HSW Engineering, Inc.
(813) 363-1451

Connect with us!

Report of Analysis

Client Sample ID:	FRAC2-A4272-20201006		
Lab Sample ID:	JD14200-3	**Date Sampled:**	10/06/20
Matrix:	AQ - Water	**Date Received:**	10/06/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	OU3 ISTR Monitoring, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B179075.D	1	10/08/20 17:09	EH	n/a	n/a	V2B8134
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-45-6	Chlorodifluoromethane	ND	5.0	2.9	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FRAC2-A4272-20201006		
Lab Sample ID:	JD14200-3	**Date Sampled:**	10/06/20
Matrix:	AQ - Water	**Date Received:**	10/06/20
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	OU3 ISTR Monitoring, Bethpage, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

(a) Associated CCV outside of control limits low.

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FRAC2-A4272-20201006		
Lab Sample ID:	JD14200-3	**Date Sampled:**	10/06/20
Matrix:	AQ - Water	**Date Received:**	10/06/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	OU3 ISTR Monitoring, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z145923.D	1	10/08/20 20:00	HSS	10/07/20 07:00	OP29863	EZ7210
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol [a]	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FRAC2-A4272-20201006
Lab Sample ID: JD14200-3
Matrix: AQ - Water
Method: SW846 8270E SW846 3510C
Project: OU3 ISTR Monitoring, Bethpage, NY

Date Sampled: 10/06/20
Date Received: 10/06/20
Percent Solids: n/a

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate [a]	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate [a]	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene [b]	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline [a]	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine [a]	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	71%		10-73%

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Report of Analysis

Client Sample ID:	FRAC2-A4272-20201006		
Lab Sample ID:	JD14200-3	**Date Sampled:**	10/06/20
Matrix:	AQ - Water	**Date Received:**	10/06/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	OU3 ISTR Monitoring, Bethpage, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	76% [c]		10-64%
118-79-6	2,4,6-Tribromophenol	82%		31-130%
4165-60-0	Nitrobenzene-d5	78%		28-126%
321-60-8	2-Fluorobiphenyl	72%		26-114%
1718-51-0	Terphenyl-d14	83%		16-122%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(c) Outside of in house control limits, but within reasonable method recovery limits.

Report of Analysis

Client Sample ID: FRAC2-A4272-20201006
Lab Sample ID: JD14200-3
Matrix: AQ - Water
Method: SW846 8270E BY SIM SW846 3510C
Project: OU3 ISTR Monitoring, Bethpage, NY

Date Sampled: 10/06/20
Date Received: 10/06/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M95750.D	1	10/07/20 23:13	HSS	10/07/20 07:00	OP29863A	E4M4428
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.10	0.050	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		29-124%
321-60-8	2-Fluorobiphenyl	63%		23-122%
1718-51-0	Terphenyl-d14	72%		22-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FRAC2-A4272-20201006		
Lab Sample ID:	JD14200-3	**Date Sampled:**	10/06/20
Matrix:	AQ - Water	**Date Received:**	10/06/20
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	n/a
Project:	OU3 ISTR Monitoring, Bethpage, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G99988.D	1	10/08/20 22:14	VDT	10/08/20 07:00	OP29909	G5G2488
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.097	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.062	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.20	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.075	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.086	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	51%		10-155%
877-09-8	Tetrachloro-m-xylene	61%		10-155%
2051-24-3	Decachlorobiphenyl	56%		10-151%
2051-24-3	Decachlorobiphenyl	66%		10-151%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FRAC2-A4272-20201006
Lab Sample ID: JD14200-3
Matrix: AQ - Water
Project: OU3 ISTR Monitoring, Bethpage, NY

Date Sampled: 10/06/20
Date Received: 10/06/20
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Cadmium	< 3.0	3.0	ug/l	1	10/08/20	10/08/20	ND	SW846 6010D [2]	SW846 3010A [5]
Chromium	< 10	10	ug/l	1	10/08/20	10/09/20	ND	SW846 6010D [3]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	10/07/20	10/08/20	LL	SW846 7470A [1]	SW846 7470A [4]

(1) Instrument QC Batch: MA49424
(2) Instrument QC Batch: MA49437
(3) Instrument QC Batch: MA49443
(4) Prep QC Batch: MP23182
(5) Prep QC Batch: MP23192

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FRAC2-A4272-20201006		
Lab Sample ID:	JD14200-3	**Date Sampled:**	10/06/20
Matrix:	AQ - Water	**Date Received:**	10/06/20
		Percent Solids:	n/a
Project:	OU3 ISTR Monitoring, Bethpage, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	0.16	0.11	mg/l	1	10/08/20 15:53	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.16	0.10	mg/l	1	10/08/20 15:53	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	10/06/20 23:20	JOO	SM4500NO2 B-11
Nitrogen, Total Kjeldahl	0.86	0.20	mg/l	1	10/09/20 11:20	BM	EPA 351.2/LACHAT

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FRAC2-A4272-20201006		
Lab Sample ID:	JD14200-3A	**Date Sampled:**	10/06/20
Matrix:	AQ - Water	**Date Received:**	10/06/20
		Percent Solids:	n/a
Project:	OU3 ISTR Monitoring, Bethpage, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	392	100	ug/l	1	10/08/20	10/08/20	ND	EPA 200.7 [1]	EPA 200.7 [2]
Manganese	310	15	ug/l	1	10/08/20	10/08/20	ND	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA49436
(2) Prep QC Batch: MP23193

RL = Reporting Limit