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June 1, 2015

Ms. Kiera Thompson,
Engineering Geologist
NYSDEC-Division of Environmental Remediation
625 Broadway - 11th Floor
Albany, NY 12233-7014

Re: Final GW Monitoring Report -RCRA Closure
Danskammer, LLC, Newburgh, NY

Chazen Job # 41440.00

Dear Ms. Thompson:

Chazen Engineering, Land Survey & Landscape Architecture Co. D.P.C., (Chazen) has completed two rounds of groundwater sampling at the Danskammer Point Generating Station, Hazardous Waste Treatment and Storage Facility, (the "Site") located in Town of Newburgh, Orange County, New York. The sampling and analysis was performed in conformance with the NYSDEC approved work plan dated December 10, 2014. A Site Location Map is included as **Figure 1**.

Investigation Work

The first set of groundwater samples were collected on December 17, 2014 from on-site monitoring wells MW-2, MW-4S, and MW-6. Well locations are shown on **Figure 2**.

Prior to sampling, the depth to water and depth to bottom were measured in each well with an electronic interface probe and the volumes of water determined for each well. The wells had been unused for over 10 years since the last sampling events so the wells were briefly redeveloped with a downhole submersible pump to remove stagnant waters and residual silts and improve the representativeness of the samples to actual current groundwater conditions at each location.

Chazen completed a level run to establish relative elevations of the measuring points on the well risers so that groundwater flow directions could be determined. The measuring points were surveyed relative to an assumed site datum of +10 feet AMSL. The DTW measurements and associated relative water table elevations are included in the table below.

Table 1. Groundwater Elevations

Monitoring Well ID	Measuring Point (ft AMSL)		Water Level		Water Level		Water Level		AVG
			11/7/2014		12/17/2014		1/5/2015*		
	dh	Elev.	DTW (ft)	Elev. (ft AMSL)	DTW (ft)	Elev. (ft AMSL)	DTW (ft)	Elev. (ft AMSL)	**Elev. (ft AMSL)**
MW-2S	-7.92	92.08	7.79	84.29	6.73	85.35	6.82	85.26	**84.97**
MW-4S	-8.49	91.51	6.46	85.05	6.82	84.69	5.16	86.35	**85.36**
MW-6	-6.76	93.24	8.19	85.05	5.10	88.14	7.05	86.19	**86.46**

MP surveyed 1/5/2015 and used to back calculate WT elevations

Instrument Height = 100 ft assumed

As shown on **Figure 2**, monitoring well MW-6 is up gradient of MW-2S and MW-4S. Well MW-6 is also directly between the study area and a nearby closed coal ash landfill, so serves as an appropriate well distinguishing between and identifying any impacts which might be transmitted between the two areas. The MW-4S/D well couplet and well MW-2S are each down gradient of the former sludge-drying bed; the relationship between the water levels in the wells is variable based on tidal cycles but based on the average of three measurements, MW-2S and MW-4S alternate between being slightly cross gradient to directly down gradient of the former sludge beds. The groundwater elevation data reasonably confirm that groundwater flows north-northeast toward the nearest shoreline of the Hudson River.

The second groundwater sampling event occurred on February 17, 2015, which included sampling MW-4D (the deeper couplet pair to MW-4S) with the consent of NYSDEC to assess potential vertical gradients in the groundwater quality. MW-4D allows groundwater evaluation approximately 30 feet below MW-4S and was sampled to assess whether the former SMU has any influence on deeper groundwater quality.

The groundwater samples were collected from approximately the middle of the saturated screen intervals (based on historical construction logs) in each well using a peristaltic pump and low-flow sampling techniques documented in the attached and previously-submitted field data sheets. Samples were placed directly in laboratory supplied containers, stored on ice, and submitted via courier to the laboratory. The samples were analyzed for chemical and physical properties as specified in the sampling and analysis plan included in the approved work plan. The raw analytical laboratory reports and third party data usability summary report are attached.

Discussion

The groundwater quality results are summarized in **Table 2** (attached) and are compared to historic data and the applicable standards. Highlighted data exceed groundwater standards. At the time of sampling MW-4S/D was directly down gradient from former soil boring BOR-1 in the southern half of the SMU.

MW-6: No analytes or physical parameters were reported in MW-6 at concentrations that exceed the applicable standards. The concentration of sulfate and sodium which previously (1988) exceeded the standards have reduced to less than the applicable standards in both recent sampling rounds. The pH in

MW- 6 reported at 6.7 in 1988 was measured at 6.85 and 7.26 in the December 2014 and February 2015 sampling events, respectively.

MW-4S: Arsenic and Vanadium were reported in the samples collected from MW-4S at concentrations the exceed the applicable ambient water quality standards. Since no historical data is available for these compounds at this location it cannot be determined if these concentrations represent an increasing, decreasing, or static condition. However, given the age of the SMU and the flow rates of the on-site soils it is reasonable to assume that the reported concentrations represent an equilibrium between the SNU soils and are not likely to increase over time. MW-4S continues to demonstrate elevated pH comparable to 1988 conditions

Sodium, pH, TSS, sulfate, and specific conductance were all significantly higher in 1988 than in 2014/15, providing a reasonable line of evidence that groundwater quality has improved in MW-4S since 1988 in this vicinity.

MW-4D: No analytes were detected in the samples collected from MW-4D at concentrations that exceed the groundwater standards in 6 NYCRR Part 703. Both Arsenic and Vanadium were non-detect in MW-4D suggesting that there is no significant vertical migration of theses analytes.

MW-2S: Sample results from well MW-2S were compared to June 17, 1986 data as no 1988 data from this well was available in the records provided by NYSDEC. Elevated Sodium and sulfate, and low pH were reported at this location in 1986. The same general relationships were detected in 2014/15 although sulfate was detected above its standard only in the 2014 sample. The results suggest little overall groundwater quality change at this location since 1986.

QA/QC

Data Validation Services was provided by Environmental Data Validators, Inc. for the two rounds of groundwater samples collected from the site. Copies of the Data Usability Summary Reports for the two Sample Delivery Groups are attached. No issues were reported with the sampling or analytical methods or procedures requiring modification/adjustment of any data or rendering any results “suspect”. The data is considered valid and useable as reported.

Conclusions and Recommendations

The results from the 2014-2015 events and review of the 1988/86 data suggest the following:

- Upgradient well MW-6 revealed no significant impacts to the groundwater from the former coal ash landfill.

- The on-site water quality up gradient and down gradient from the closed SMU have generally remained unchanged or have improved since 1988.

- It appears that the former sludge beds have exerted very minor influence on local groundwater quality since closure of the SMU.

- Comparison of MW-4S to MW-4D indicates that there is no evidence of a plunging concentration gradient distributed SMU impacts into deeper groundwater.

- The relative consistency between the two recent sampling rounds suggests there is no need for continued monitoring of the SMU.

- Comparison of the historical to recent data indicates that potential impacts from the SMU are relatively minor and either decreasing or relative constant. No evidence of an increasing and uncontrolled plume associated with the SMU is evident in the data.

Based on the data collected in these two rounds of sampling and Chazen's analysis presented in this report, Chazen concludes that the RCRA Corrective Action Environmental Indicator: Form "CA750; Migration of Contaminated Groundwater Under Control" may be completed for the SMU.

Per our recent conversation, we understand that evaluation of the groundwater around the closed coal-ash landfill must also be completed to complete the EI to EPA's satisfaction.

If you have any comments or concerns, please contact me at your convenience at kmcgrath@chazencomplanies.com or call me at (518) 266-7370. Please carbon copy Ed Smith at Danskammer, LLC, (esmith@danskammerenergy.com) on any e-mails or written correspondences.

Thank you.

Sincerely,

Kevin P. McGrath, PG, CPG

Digitally signed by Kevin P. McGrath, PG, CPG
DN: cn=Kevin P. McGrath, PG, CPG, o=The Chazen Companies, ou, email=kmcgrath@chazencompanies.com, c=US
Date: 2015.06.02 14:41:38 -04'00'

Kevin P. McGrath, PG, CPG
Senior Scientist

Attachments: Figures, Table, Field logs, Lab Reports, Data Usability Summary Report

cc: ED Smith, Danskammer, LLC.

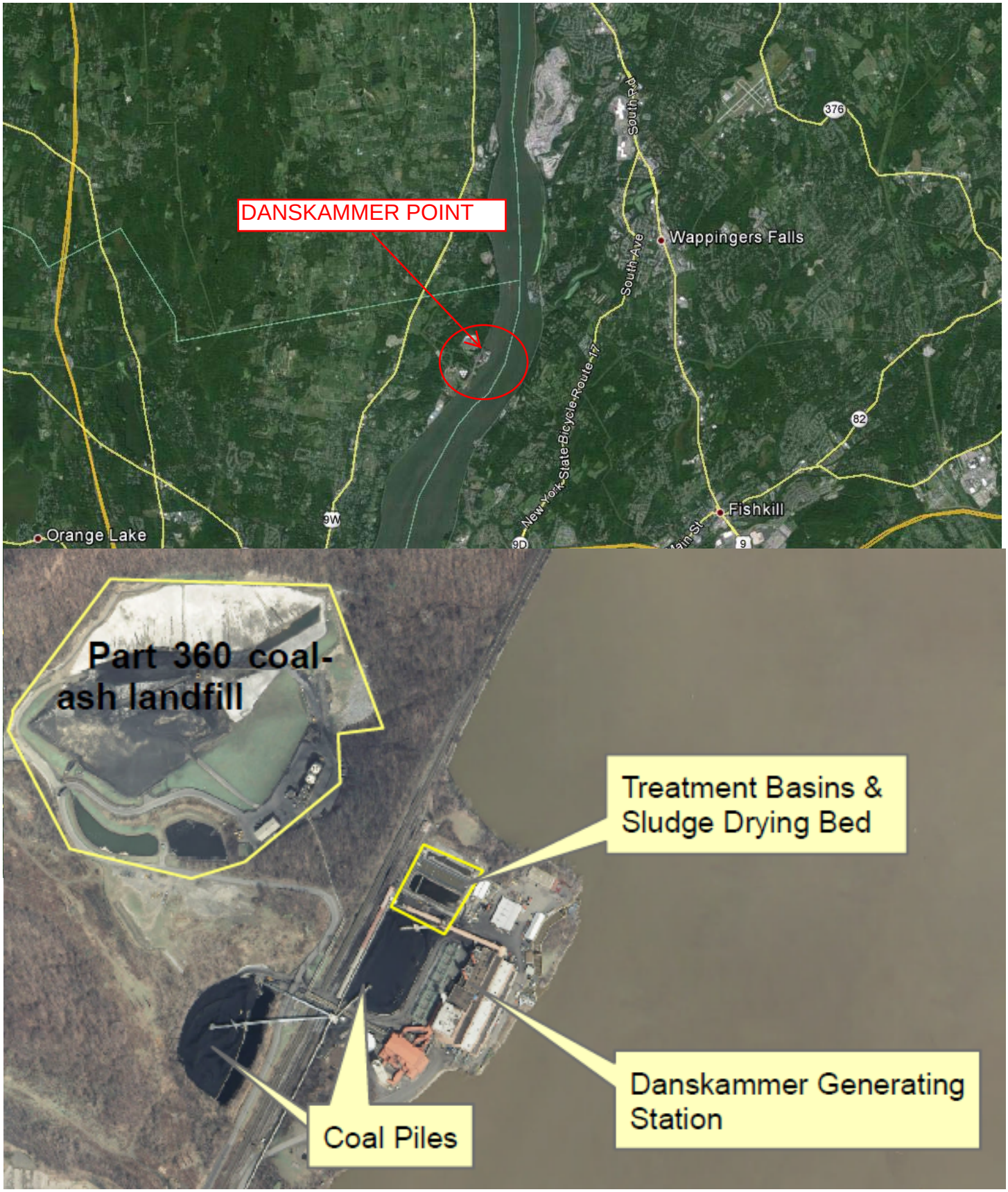
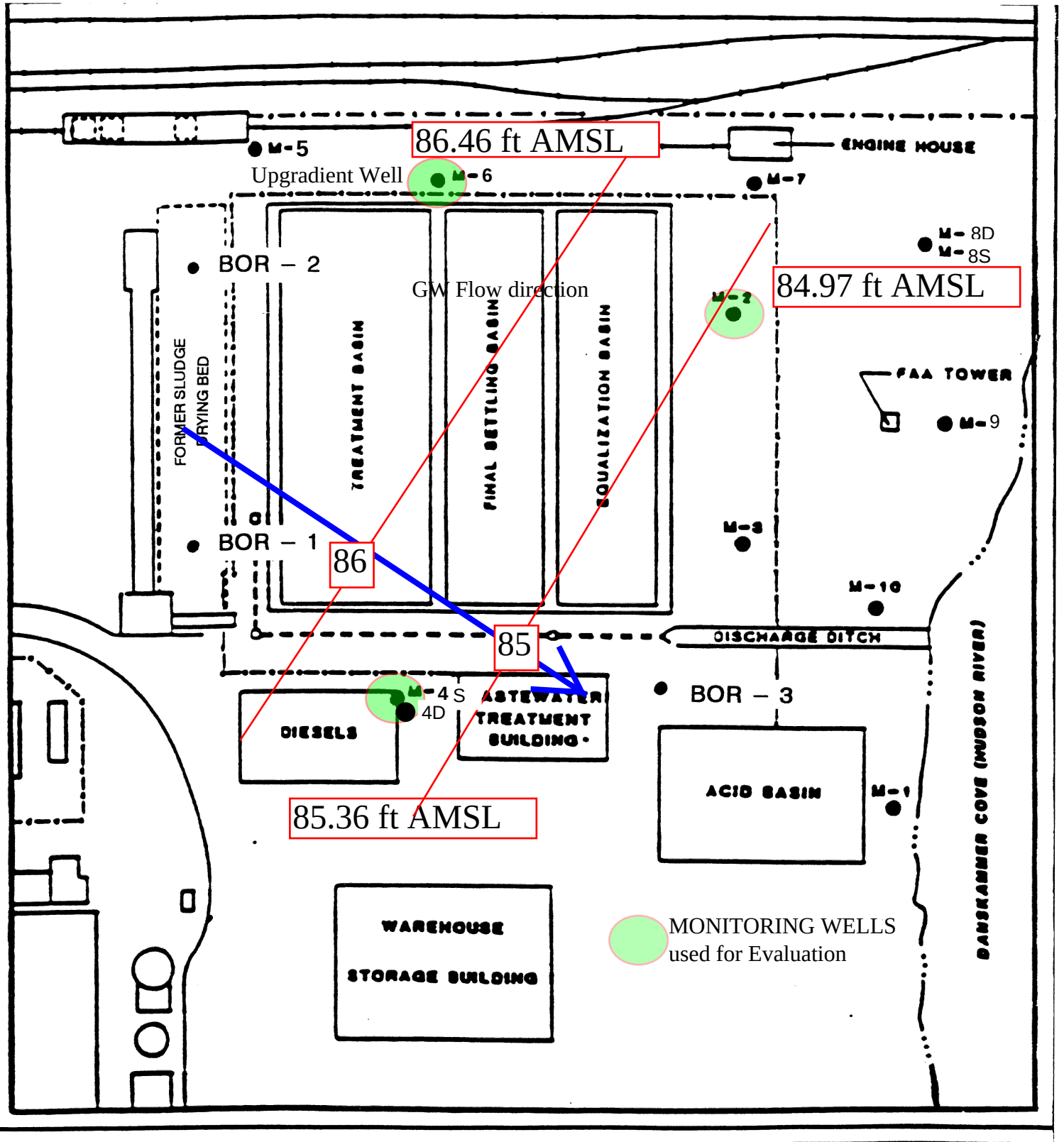


FIGURE 1
SITE LOCATION MAP



Approximate Scale

FIGURE 2

TABLE 2

Groundwater Sampling Results Summary

Danskammer Facility

Analyte	6 NYCRR Part 703 Groundwater Standard	Units	MW-6			MW-4S**			MW-4D	MW-2S*		
			Upgradient			Down Gradient						
			12/19/1988	12/17/2014	2/17/2015	12/19/1988	12/17/2014	2/17/2015	2/17/2015	6/17/1986	12/17/2014	2/17/2015
Arsenic	0.025	mg/L	na	ND	ND	na	**0.0276**	**0.0252**	ND	na	0.00978	0.00863
Barium	1	mg/L	na	0.424	0.428	na	0.117	0.148	0.0655	na	0.025	0.0207
Cadmium	0.005	mg/L	na	ND	ND	na	ND	ND	ND	na	ND	ND
Chloride	250	mg/L	5	13.5	30.8	13	14.2	106	22.7	18	27.9	26.9
Chromium	0.05	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoride	1.5	mg/L	0.1	0.203	0.43	0.1	0.229	0.293	0.298	ND	ND	0.161
Lead	0.025	mg/L	ND	ND	ND	ND	0.0127	0.00358	0.00857	ND	ND	ND
Mercury	0.0007	mg/L	na	ND	ND	na	ND	ND	ND	na	ND	ND
Sodium	20	mg/L	**90**	11.5	13.3	**89**	17.1	**40.4**	14.6	**62.5**	**177**	**144**
Vanadium	0.014	mg/L	na	ND	ND	na	**0.0329**	**0.0256**	ND	na	ND	ND
pH	6.5-8.5		6.7	6.85	7.26	**9.5**	**8.55**	**9.38**	7.44	**4.57**	**5.04**	**4.79**
Specific Conductance	ns	uS/cm	1,926	859	1,051	1,198	433	562	1,051	2,373	2,358	2,456
Sulfate	250	mg/L	**1,000**	188	122	**600**	146	197	241	**1,844**	**1,340**	ND
TSS	ns	mg/L	228	61.6	17	49	37.2	13	ND	126	13	21

Notes:

ND - not detected ns - no published standard in NYSDEC Part 703 na - not analyzed

Cells highlighted yellow and bold font values indicate analyte exceeds standard.

* - June 1986 Data used for comparison, well not sampled in 1988.

**- Tidally influenced water level may appear up gradient cross gradient or down gradient based on tide cycle.

1988 Data taken from *"Post-Operation Groundwater Monitoring Report, LMS, 1989" provided by NYSDEC*

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6/2/2015

WELL DEVELOPMENT FIELD SHEET

PROJECT NAME: Danskammer
WELL ID: MW-25
PROJECT NUMBER and TASK: 4144000/0300
FIELD DATE: 12-17-14
PROJECT LOCATION: Newburgh, NY
TECHNICIAN: WO
PROJECT MANAGER: Kevin McGrath

Depth to Bottom:	16.55	feet
Depth to Water:	6.73	feet
Length of Water Column: =	9.82	feet
Gallons of Water/Foot of Depth: x	0.163	gal/ft
Well Volume: =	1.60	gallons
# of well volumes to be purged: x	3	
Total volume to be purged: =	4.80	gallons

Pipe Diameter	Gallons/ Foot
1.0"	0.041
1.25"	0.064
2.0"	0.163
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method:
Water Level Reference Point:

Well Volume	Water Level	Temperature	pH	~~Conductivity~~ S.C.	Turbidity (NTU)	Other (Visual Turb.)
0	6.73	14.01	6.12	2.565	>1,000	White-grey
1	10.79	14.23	5.13	2.645	36.80	Sl. Turbid
2	10.84	14.22	5.18	2.593	20.70	Clear
3	11.40	14.36	5.03	2.477	12.31	Clear

NOTES:

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FIELD DATA SHEET

SAMPLE INFORMATION:

Sample ID: DSK-MW-2S
Well ID: MW-2S
Project Name: Danskammer
Sample Location: Newburgh, NY

Sample Time: 14:10
Sample Date: 12-17-14
Sample Tech(s): WO
Project and Task #: 41440.00/0300
Project Manager: Kevin McGrath

Sample Matrix *(circle)*: **Groundwater** Soil / Surface Water Air / Drinking Water Other:

WELL INFORMATION:

Well Condition: GOOD

Lock Type: MASTER Key #: 3303

PURGE DATA:

Measuring Point: T.O. PVC
Depth to Bottom: 16.55
Depth to Water: 6.73
Water Column Height: *(A)*
(depth to bottom - depth to water)
# of Volumes to be Purged: *(C)*
Gal. to be Purged: *(AxBxC)*

Pipe Width	Gal/Foot *(B)*
1.0"	0.037
1.5"	0.092
2.0"	0.163
2.5"	0.255
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method: Peristaltic - Low-Flow
Start Date: 12-17-14
Start Time: 13:55
Stop Time: 14:10
Purge Rate (gpm):
Elapsed Time (min):
Well Vol. Purged (#):
Purge Vol. (gal): ≈1.5
Well went dry? No Yes
Conditions: No Odor Odor / Clear Slightly-Turbid Turbid

FIELD RESULTS:

~~Gal purged~~ gal	Date & Time	Depth to Water ft	Temp deg C	SpCond mS/cm°	Cond. mS/cm		TDS g/L	TURB. NTU	DO mg/L	pH	ORP mV	Odor
Time	13:55	9.18	13.11	2.263	1.748		1.469	12.31	6.88	5.09	163.2	None
	14:00	8.60	13.59	2.160	1.689		1.405	15.65	3.48	5.08	172.4	None
	14:05	8.40	13.64	2.215	1.735		1.440	9.91	3.08	5.03	177.5	None
	14:10	8.55	13.52	2358	1.844		1.532	6.60	3.20	5.07	181.0	None
	14:15											

SAMPLE INFORMATION:

Sample Method: Peristaltic *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*
Sample Type: **Grab** Composite
Weather: Cold, Overcast
Sample Depth: ≈11'
Barometric Pres.:
Air Temp.(°F): 30s
Wind: Breezy
Notes: Three well volumes purged prior to low-flow.

LAB REQUESTS:

Laboratory Name: YORK
Analysis/Method: See C.O.C.
Turn Around Time: Norm.

QA/QC: Duplicate Equip. Blank Field Blank Trip Blank MS/MSD

WELL DEVELOPMENT FIELD SHEET

PROJECT NAME: DWSKAMMER
WELL ID: MW-6
PROJECT NUMBER and TASK: 41440.00
FIELD DATE: 12-17-14
PROJECT LOCATION: Newburgh, NY
TECHNICIAN: WJ
PROJECT MANAGER: K. McGrath

Depth to Bottom:	12.83	feet
Depth to Water:	6.82	feet
Length of Water Column: =	6.01	feet
Gallons of Water/Foot of Depth: x	0.163	gal/ft
Well Volume: =	0.979	gallons
# of well volumes to be purged: x	3	
Total volume to be purged: =	2.94	gallons

Pipe Diameter	Gallons/ Foot
1.0"	0.041
1.25"	0.064
2.0"	0.163
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method:
Water Level Reference Point:

Well Volume	Water Level	Temperature	pH	Conductivity (S.C.)	Turbidity	Other ( )
0	6.82	12.64	7.06	0.945	> 1000 NTU	black sediment
1	12.83	12.24	7.01	0.919		
2						
3						
	Well went dry after 1 volume; very slow recovery					

NOTES:

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FIELD DATA SHEET

SAMPLE INFORMATION:

Sample ID: DSK-MW-6
Well ID: MW-6
Project Name: Dan Kammer
Sample Location: Newburgh, NY

Sample Time: 14:56
Sample Date: 12-17-14
Sample Tech(s): WO
Project and Task #: 41440.00/0300
Project Manager: Kevin McGrath

Sample Matrix *(circle)*: **Groundwater** Soil Surface Water Air Drinking Water Other:

WELL INFORMATION:

Well Condition: FAIR - Casing + Guard pipe bent.
Lock Type: MASTER Key #: 3303

PURGE DATA:

Measuring Point: T.O. PVC
Depth to Bottom: 17.83
Depth to Water: 6.84
Water Column Height: *(A)*
(depth to bottom - depth to water)
# of Volumes to be Purged: *(C)*
Gal. to be Purged: *(AxBxC)*

Pipe Width	Gal/Foot *(B)*
1.0"	0.037
1.5"	0.092
2.0"	0.163
2.5"	0.255
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method: Peristaltic - Low Flow
Start Date: 12-17-14
Start Time: 14:31
Stop Time: 14:56
Purge Rate (gpm):
Elapsed Time (min):
Well Vol. Purged (#):
Purge Vol. (gal): ≈ 1.5
Well went dry? No Yes
Conditions: No Odor **Odor** **Clear** Slightly-Turbid Turbid

FIELD RESULTS:

Gal purged	Date & Time	Depth to Water	Temp	SpCond	Cond.		TDS	TURB.	DO	pH	ORP	ODOR
gal		ft	deg C	mS/cm^c	mS/cm		g/L	NTU	mg/L		mV	
	14:31	6.84	11.95	0.955	0.716		0.619	52.27	5.74	6.06	31.4	Sl. Petro.
	14:36	8.33	11.91	0.919	0.689		0.597	64.29	3.63	6.28	-32.5	" "
	14:41	9.06	11.62	0.898	0.663		0.584	53.04	2.77	6.37	-47.2	" "
	14:46	9.36	11.51	0.883	0.657		0.575	28.40	2.46	6.38	-44.3	" "
	14:51	9.65	11.49	0.867	0.643		0.564	15.73	2.34	6.46	-56.3	" "
	14:56	9.91	11.41	0.859	0.636		0.558	5.79	2.41	6.50	-58.2	" "

SAMPLE INFORMATION:

Sample Method: Peristaltic *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*
Sample Type: **Grab** Composite
Weather: Cold, Overcast
Notes: Well was purged 1 volume prior to low-flow.
Sample Depth: ≈ 10'
Barometric Pres.:
Air Temp.(°F): 30s
Wind: Breezy

LAB REQUESTS:

Laboratory Name: YORK
Analysis/Method: see C.O.C.
Turn Around Time: Norm

QA/QC: Duplicate Equip. Blank Field Blank Trip Blank

WELL DEVELOPMENT FIELD SHEET

PROJECT NAME: Danskammer
WELL ID: MW-45
PROJECT NUMBER and TASK: 41440.00 / 0300
FIELD DATE: 12-17-14
PROJECT LOCATION: Newburgh, NY
TECHNICIAN: WO
PROJECT MANAGER: Kevin McGrath

Depth to Bottom:	16.20	feet
Depth to Water:	5.10	feet
Length of Water Column: =	11.10	feet
Gallons of Water/Foot of Depth: x	0.163	gal/ft
Well Volume: =	1.81	gallons
# of well volumes to be purged: x	~~5~~ 3	
Total volume to be purged: =	5.43	gallons

Pipe Diameter	Gallons/ Foot
1.0"	0.041
1.25"	0.064
2.0"	0.163
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method:
Water Level Reference Point:

Well Volume	Water Level	Temperature	pH	Conductivity (S.C.)	Turbidity (NTU)	Other (Odor)
0	5.10	14.19	6.93	0.223	>1,000	None
1	7.77	13.31	7.44	0.285	238.6	None
2	7.75	12.18	7.83	0.363	93.43	None
3	7.76	13.45	8.11	0.399	42.29	None

NOTES:

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FIELD DATA SHEET

SAMPLE INFORMATION:

Sample ID: DSK-MW-4S
Well ID: MW-4S
Project Name: Danskammer
Sample Location: Newburgh, NY

Sample Time: 16:13
Sample Date: 12-17-14
Sample Tech(s): WO
Project and Task #: 41440.00/0300
Project Manager: Kevin McGrath

Sample Matrix *(circle)*: **Groundwater** Soil / Surface Water Air / Drinking Water Other:

WELL INFORMATION:

Well Condition: FAIR - casing bent, guard pipe bent + not lockable
Lock Type:
Key #:

PURGE DATA:

Measuring Point: T.O.PVC
Depth to Bottom: 16.20
Depth to Water: 5.10
Water Column Height: *(A)*
(depth to bottom - depth to water)
# of Volumes to be Purged: *(C)*
Gal. to be Purged: *(AxBxC)*

Pipe Width	Gal/Foot *(B)*
1.0"	0.037
1.5"	0.092
2.0"	0.163
2.5"	0.255
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method: Peristaltic - Low-Flow
Start Date: 12-17-14
Start Time: 15:53
Stop Time: 16:13
Purge Rate (gpm):
Elapsed Time (min):
Well Vol. Purged (#):
Purge Vol. (gal): ≈ 1.5
Well went dry? (No) Yes
Conditions: (No Odor) Odor
(Clear) Slightly-Turbid Turbid

FIELD RESULTS:

Gal purged	Date & Time	Depth to Water	Temp	SpCond	Cond.		TDS	TURB.	DO	pH	ORP	ODOR
gal		ft	deg C	mS/cm^c	mS/cm		g/L		mg/L		mV	
	15:53	6.10	12.81	0.411	0.315		0.267	42.29	4.15	8.28	-27.8	None
	16:58	5.97	12.71	0.420	0.322		0.272	50.90	2.26	8.39	-33.4	None
	16:03	5.92	13.12	0.425	0.328		0.276	50.05	1.70	8.50	-38.2	None
	16:08	5.90	13.19	0.429	0.333		0.279	44.03	1.85	8.53	-41.6	None
	16:13	5.89	13.21	0.433	0.335		0.281	32.04	1.57	8.55	-32.9	None

SAMPLE INFORMATION:

Sample Method: Peristaltic *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*
Sample Type: (Grab) Composite
Weather: Cold, Overcast
Sample Depth: ≈ 11
Barometric Pres.:
Air Temp.(°F): 30s
Wind: Breezy
Notes: Prior to low-flow, well was purged 3 volumes, W.L. still recovering at start of low-flow purge.

LAB REQUESTS:

Laboratory Name: YORK
Analysis/Method: See C.O.C.
Turn Around Time: Normal

QA/QC: Duplicate Equip. Blank Field Blank Trip Blank

Technical Report

prepared for:

Chazen Environmental Services (Poughkeepsie)
21 Fox Street
Poughkeepsie NY, 12601
Attention: Kevin McGrath

Report Date: 12/26/2014
Client Project ID: Danskammer WQ Evaluation / PN 41440
York Project (SDG) No.: 14L0720

Report Date: 12/26/2014
Client Project ID: Danskammer WQ Evaluation / PN 41440
York Project (SDG) No.: 14L0720

Chazen Environmental Services (Poughkeepsie)
21 Fox Street
Poughkeepsie NY, 12601
Attention: Kevin McGrath

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on December 18, 2014 and listed below. The project was identified as your project: **Danskammer WQ Evaluation / PN 41440**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
14L0720-01	DSK-MW-2S	Water	12/17/2014	12/18/2014
14L0720-02	DSK-MW-4S	Water	12/17/2014	12/18/2014
14L0720-03	DSK-MW-6	Water	12/17/2014	12/18/2014
14L0720-04	DSK-FD-01	Water	12/17/2014	12/18/2014

General Notes for York Project (SDG) No.: 14L0720

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 12/26/2014

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: **DSK-MW-2S** **York Sample ID:** **14L0720-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 2:10 pm	12/18/2014

Arsenic by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.00978**		mg/L	0.00400	0.00400	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:02	MW

Barium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.0250**		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:02	MW

Cadmium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:02	MW

Chromium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00500	0.00500	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:02	MW

Lead by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:02	MW

Sodium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**177**		mg/L	0.100	0.100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:02	MW

Vanadium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	ND		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:02	MW

Mercury by 7473

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	12/19/2014 06:54	12/19/2014 11:58	ALD

Sample Information

Client Sample ID: DSK-MW-2S **York Sample ID:** 14L0720-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 2:10 pm	12/18/2014

Total Suspended Solids

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Suspended Solids	**13.0**		mg/L	10.0	10.0	1	SM 2540D	12/22/2014 10:25	12/23/2014 15:40	AA

Chloride

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**27.9**		mg/L	0.0690	0.500	1	EPA 300.0	12/24/2014 09:46	12/24/2014 09:46	KK

Fluoride

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16984-48-8	Fluoride	ND		mg/L	0.0280	0.100	1	EPA 300.0	12/24/2014 09:46	12/24/2014 09:46	KK

Sulfate as SO4

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**1340**		mg/L	8.60	100	100	EPA 300.0	12/24/2014 21:42	12/24/2014 21:42	KK

pH

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	*** pH**	**5.04**	HT-pH	pH units		0.500	1	SM 4500 H+B	12/22/2014 11:28	12/22/2014 14:02	SCA

Sample Information

Client Sample ID: DSK-MW-4S **York Sample ID:** 14L0720-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 4:13 pm	12/18/2014

Arsenic by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.0276**		mg/L	0.00400	0.00400	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:21	MW

Sample Information

Client Sample ID: DSK-MW-4S **York Sample ID:** 14L0720-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 4:13 pm	12/18/2014

Barium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.117**		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:21	MW

Cadmium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:21	MW

Chromium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00500	0.00500	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:21	MW

Lead by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**0.0127**		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:21	MW

Sodium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**17.1**		mg/L	0.100	0.100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:21	MW

Vanadium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	**Vanadium**	**0.0329**		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:21	MW

Mercury by 7473

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	12/19/2014 06:54	12/19/2014 11:58	ALD

Total Suspended Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Suspended Solids	**37.2**		mg/L	4.00	4.00	1	SM 2540D	12/22/2014 10:25	12/23/2014 15:40	AA

Sample Information

Client Sample ID: DSK-MW-4S **York Sample ID:** 14L0720-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 4:13 pm	12/18/2014

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**14.2**		mg/L	0.0690	0.500	1	EPA 300.0	12/24/2014 10:06	12/24/2014 10:06	KK

Fluoride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16984-48-8	**Fluoride**	**0.229**		mg/L	0.0280	0.100	1	EPA 300.0	12/24/2014 10:06	12/24/2014 10:06	KK

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**146**		mg/L	0.860	10.0	10	EPA 300.0	12/24/2014 22:44	12/24/2014 22:44	KK

pH

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	*** pH**	**8.55**	HT-pH	pH units		0.500	1	SM 4500 H+B	12/22/2014 11:28	12/22/2014 14:02	SCA

Sample Information

Client Sample ID: DSK-MW-6 **York Sample ID:** 14L0720-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 2:56 pm	12/18/2014

Arsenic by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.00400	0.00400	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:26	MW

Barium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.424**		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:26	MW

Cadmium by EPA 6010

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: DSK-MW-6 **York Sample ID:** 14L0720-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 2:56 pm	12/18/2014

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:26	MW

Chromium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00500	0.00500	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:26	MW

Lead by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:26	MW

Sodium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**11.5**		mg/L	0.100	0.100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:26	MW

Vanadium by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	ND		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:26	MW

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	12/19/2014 06:54	12/19/2014 11:58	ALD

Total Suspended Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Suspended Solids	**61.6**		mg/L	4.00	4.00	1	SM 2540D	12/22/2014 10:25	12/23/2014 15:40	AA

Chloride

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**13.5**		mg/L	0.0690	0.500	1	EPA 300.0	12/24/2014 10:26	12/24/2014 10:26	KK

Sample Information

Client Sample ID: DSK-MW-6 **York Sample ID:** 14L0720-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 2:56 pm	12/18/2014

Fluoride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16984-48-8	**Fluoride**	**0.203**		mg/L	0.0280	0.100	1	EPA 300.0	12/24/2014 10:26	12/24/2014 10:26	KK

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**188**		mg/L	0.860	10.0	10	EPA 300.0	12/24/2014 23:05	12/24/2014 23:05	KK

pH

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	*** pH**	**6.85**	HT-pH	pH units		0.500	1	SM 4500 H+B	12/22/2014 11:28	12/22/2014 14:02	SCA

Sample Information

Client Sample ID: DSK-FD-01 **York Sample ID:** 14L0720-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 12:00 am	12/18/2014

Arsenic by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.00931**		mg/L	0.00400	0.00400	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:31	MW

Barium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.0251**		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:31	MW

Cadmium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:31	MW

Chromium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

Sample Information

Client Sample ID: DSK-FD-01 **York Sample ID:** 14L0720-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
14L0720	Danskammer WQ Evaluation / PN 41440	Water	December 17, 2014 12:00 am	12/18/2014

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00500	0.00500	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:31	MW

Lead by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.00300	0.00300	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:31	MW

Sodium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**180**		mg/L	0.100	0.100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:31	MW

Vanadium by EPA 6010

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	ND		mg/L	0.0100	0.0100	1	EPA 6010C	12/19/2014 13:32	12/20/2014 00:31	MW

Mercury by 7473

Log-in Notes: PRES **Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473	12/19/2014 06:54	12/19/2014 11:58	ALD

Analytical Batch Summary

Batch ID: BL41010 **Preparation Method:** EPA 7473 water **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
14L0720-01	DSK-MW-2S	12/19/14
14L0720-02	DSK-MW-4S	12/19/14
14L0720-03	DSK-MW-6	12/19/14
14L0720-04	DSK-FD-01	12/19/14
BL41010-BLK1	Blank	12/19/14
BL41010-DUP1	Duplicate	12/19/14
BL41010-MS1	Matrix Spike	12/19/14
BL41010-SRM1	Reference	12/19/14

Batch ID: BL41043 **Preparation Method:** EPA 3010A **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
14L0720-01	DSK-MW-2S	12/19/14
14L0720-02	DSK-MW-4S	12/19/14
14L0720-03	DSK-MW-6	12/19/14
14L0720-04	DSK-FD-01	12/19/14
BL41043-BLK1	Blank	12/19/14
BL41043-DUP1	Duplicate	12/19/14
BL41043-MS1	Matrix Spike	12/19/14
BL41043-SRM1	Reference	12/19/14
BL41043-SRM2	Reference	12/19/14

Batch ID: BL41135 **Preparation Method:** % Solids Prep **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
14L0720-01	DSK-MW-2S	12/22/14
14L0720-02	DSK-MW-4S	12/22/14
14L0720-03	DSK-MW-6	12/22/14
BL41135-BLK1	Blank	12/22/14
BL41135-DUP2	Duplicate	12/22/14

Batch ID: BL41140 **Preparation Method:** Analysis Preparation **Prepared By:** SCA

YORK Sample ID	Client Sample ID	Preparation Date
14L0720-01	DSK-MW-2S	12/22/14
14L0720-02	DSK-MW-4S	12/22/14
14L0720-03	DSK-MW-6	12/22/14
BL41140-DUP1	Duplicate	12/22/14

Batch ID: BL41326 **Preparation Method:** EPA 300 **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
14L0720-01	DSK-MW-2S	12/24/14

14L0720-02	DSK-MW-4S	12/24/14
14L0720-03	DSK-MW-6	12/24/14
BL41326-BLK1	Blank	12/24/14
BL41326-BS1	LCS	12/24/14
BL41326-SRM1	Reference	12/24/14

Batch ID: BL41353 **Preparation Method:** EPA 300 **Prepared By:** KK

YORK Sample ID	Client Sample ID	Preparation Date
14L0720-01	DSK-MW-2S	12/24/14
14L0720-02	DSK-MW-4S	12/24/14
14L0720-03	DSK-MW-6	12/24/14
BL41353-BLK1	Blank	12/24/14
BL41353-BS1	LCS	12/24/14
BL41353-SRM1	Reference	12/24/14

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL41043 - EPA 3010A											
Blank (BL41043-BLK1)									Prepared & Analyzed: 12/19/2014		
Arsenic	ND	0.00400	mg/L								
Barium	ND	0.0100	"								
Cadmium	ND	0.00300	"								
Chromium	ND	0.00500	"								
Lead	ND	0.00300	"								
Sodium	ND	0.100	"								
Vanadium	ND	0.0100	"								
Duplicate (BL41043-DUP1)	*Source sample: 14L0720-01 (DSK-MW-2S)								Prepared: 12/19/2014 Analyzed: 12/20/2014		
Arsenic	0.0107	0.00400	mg/L		0.00978				8.73	20	
Barium	0.0252	0.0100	"		0.0250				1.07	20	
Cadmium	ND	0.00300	"		ND					20	
Chromium	ND	0.00500	"		ND					20	
Lead	ND	0.00300	"		ND					20	
Sodium	181	0.100	"		177				1.98	20	
Vanadium	ND	0.0100	"		ND					20	
Matrix Spike (BL41043-MS1)	*Source sample: 14L0720-01 (DSK-MW-2S)								Prepared: 12/19/2014 Analyzed: 12/20/2014		
Arsenic	2.08	0.00400	mg/L	2.00	0.00978	104	75-125				
Barium	2.12	0.0100	"	2.00	0.0250	105	75-125				
Cadmium	0.0514	0.00300	"	0.0500	ND	103	75-125				
Chromium	0.193	0.00500	"	0.200	ND	96.4	75-125				
Lead	0.495	0.00300	"	0.500	ND	98.9	75-125				
Vanadium	0.510	0.0100	"	0.500	ND	102	75-125				
Reference (BL41043-SRM1)									Prepared & Analyzed: 12/19/2014		
Arsenic	0.402	0.00400	mg/L	0.438		91.8	83.3-116				
Barium	0.379	0.0100	"	0.365		104	84.9-115				
Cadmium	0.325	0.00300	"	0.334		97.3	85-115				
Chromium	0.783	0.00500	"	0.797		98.2	84.9-115				
Lead	1.47	0.00300	"	1.47		100	85-115				
Vanadium	1.60	0.0100	"	1.68		95.0	85.1-115				

Metals by ICP - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL41043 - EPA 3010A											
Reference (BL41043-SRM2)								Prepared & Analyzed: 12/19/2014			
Sodium	72.5	0.100	mg/L	73.8		98.3	85-115				

Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL41010 - EPA 7473 water											
Blank (BL41010-BLK1)									Prepared & Analyzed: 12/19/2014		
Mercury	ND	0.00020	mg/L								
Duplicate (BL41010-DUP1)	*Source sample: 14L0720-01 (DSK-MW-2S)								Prepared & Analyzed: 12/19/2014		
Mercury	ND	0.00020	mg/L		ND					20	
Matrix Spike (BL41010-MS1)	*Source sample: 14L0720-01 (DSK-MW-2S)								Prepared & Analyzed: 12/19/2014		
Mercury	0.00219		mg/kg	0.00200	ND	109	75-125				
Reference (BL41010-SRM1)									Prepared & Analyzed: 12/19/2014		
Mercury	0.00243		mg/kg	0.00230		106	61.3-135				

Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL41135 - % Solids Prep											
Blank (BL41135-BLK1)									Prepared: 12/22/2014 Analyzed: 12/23/2014		
Total Suspended Solids	ND	2.00	mg/L								
Duplicate (BL41135-DUP2)	*Source sample: 14L0720-01 (DSK-MW-2S)								Prepared: 12/22/2014 Analyzed: 12/23/2014		
Total Suspended Solids	12.0	10.0	mg/L		13.0				8.00	15	

Anions by Ion Chromatography - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL41326 - EPA 300											
Blank (BL41326-BLK1)								Prepared & Analyzed: 12/24/2014			
Chloride	ND	0.500	mg/L								
Fluoride	ND	0.100	"								
LCS (BL41326-BS1)								Prepared & Analyzed: 12/24/2014			
Chloride	10.2	0.500	mg/L	10.0		102	85-115				
Fluoride	9.85	0.100	"	10.0		98.5	90-110				
Reference (BL41326-SRM1)								Prepared & Analyzed: 12/24/2014			
Chloride	6.90		mg/L	7.00		98.6	90-110				
Fluoride	2.06		"	2.03		102	90-110				
Batch BL41353 - EPA 300											
Blank (BL41353-BLK1)								Prepared & Analyzed: 12/24/2014			
Sulfate	ND	1.00	mg/L								
LCS (BL41353-BS1)								Prepared & Analyzed: 12/24/2014			
Sulfate	10.1	1.00	mg/L	10.0		101	85-115				
Reference (BL41353-SRM1)								Prepared & Analyzed: 12/24/2014			
Sulfate	4.45		mg/L	4.33		103	90-110				

Wet Chemistry Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL41140 - Analysis Preparation											
Duplicate (BL41140-DUP1)	*Source sample: 14L0720-01 (DSK-MW-2S)								Prepared & Analyzed: 12/22/2014		
pH	5.03	0.500	pH units		5.04				0.199	10	

Notes and Definitions

PRES	Sample was received with no preservative and was preserved upon receipt at the laboratory. If for metals, the sample was allowed to sit for 18-24 hours before analysis.
HT-pH	HOLDING TIME EXCEEDED. Samples for pH must be measured in the field or within 15 minutes of sample collection.

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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.
For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

YORK ANALYTICAL LABORATORIES INC

YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 14L0720

YOUR Information

Company: The Chazen Companies
Address: 21 Fox Street
Poughkeepsie, NY 12601
Phone No. 845-454-3980
Contact Person: Kevin McGrath
E-Mail Address: kmcgrath@chazencompanies.com

Report To:

Company: Chazen
Address:
Phone No.
Attention: Kevin McGrath
E-Mail Address:

Invoice To:

Company: Chazen
Address:
Phone No.
Attention: Accts Payable
E-Mail Address:

YOUR Project ID

Purchase Order No.

Samples from: CT ___ NY X NJ ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type

- Summary Report ___
- Summary w/ QA Summary ___
- CT RCP Package ___
- CTRCP DQA/DUE Pkg ___
- NY ASP A Package ___
- NY ASP B Package X
- NJDEP Red. Deliv. ___

Electronic Data Deliverables (EDD)

- Simple Excel X
- NYSDEC EQuIS X
- EQuIS (std) ___
- EZ-EDD (EQuIS) ___
- NJDEP SRP HazSite EDD ___
- GIS/KEY (std) ___
- Other ___
- **York Regulatory Comparison**
- **Excel Spreadsheet** ___

Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

William G. Olsen
Samples Collected/Authorized By (Signature)

William G Olsen
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s) All Plastic
DSK-MW-2S	12-17-14 14:10	GW	As, Ba, Cd, Cr, Pb, Hg, Na, V, Cl^-, F^-, SO_4^{-2}, TSS, pH	1 x 250ml w/HNO_3, 1 x 500ml unpre.
DSK-MW-4S	16:13	GW	" " " " " " " " " " " " "	1 x 1,000ml w/HNO_3, 1 x 500ml unpre.
DSK-MW-6	14:56	GW	" " " " " " " " " " " " "	1 x 250ml w/HNO_3, 1 x 500ml unpre.
* DSK-FD-01	XX:XX	GW	" " " " " " " "	1 x 250ml, unpreserved
* DSK-MW-2S-MS	14:10	GW	" " " " " " " "	1 x 250ml, unpreserved
* DSK-MW-2S-MSD	14:10	GW	" " " " " " " "	1 x 250ml, unpreserved

Comments
* Samples to be acidified at lab.

Preservation Check those Applicable
4°C X Frozen ___ HCl ___ MeOH ___ HNO_3 X H_2SO_4 ___ NaOH ___
ZnAc Ascorbic Acid Other

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Samples Relinquished By	Date/Time	Samples Received By	Date/Time
[signature]	12-18-14 12:58	[signature]	12-18-14 13:00
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time
		[signature]	12/18/14 1635

Temperature on Receipt 4.7 °C

The Chazen Companies

FIELD DATA SHEET

SAMPLE INFORMATION:

Sample ID: DSK-MW-2S
Well ID: MW-2S
Project Name: Dan Kamma
Sample Location: Newburgh, NY

Sample Time: 13:15
Sample Date: 2-17-15
Sample Tech(s): WS
Project and Task #: 41440.00/0300
Project Manager: KM

Sample Matrix *(circle)*: **Groundwater** Soil Surface Water Air Drinking Water Other:

WELL INFORMATION:

Well Condition: GOOD

Lock Type: MASTER Key #: 3303

PURGE DATA:

Measuring Point: T.O.PVC
Depth to Bottom: 16.55
Depth to Water: 7.18
Water Column Height: *(A)*
(depth to bottom - depth to water)
# of Volumes to be Purged: *(C)*
Gal. to be Purged: *(AxBxC)*

(B)

Pipe Width	Gal/Foot
1.0"	0.037
1.5"	0.092
2.0"	0.163
2.5"	0.255
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method: Peristaltic - Low Flow
Start Date: 2-17-15
Start Time: 12:50
Stop Time: 13:15
Purge Rate (gpm):
Elapsed Time (min): 25
Well Vol. Purged (#):
Purge Vol. (gal): ~1.5
Well went dry? No Yes
Conditions: No Odor Odor; Clear Slightly-Turbid Turbid

FIELD RESULTS:

Gal purged	Date & Time	Depth to Water	Temp	SpCond	Cond.	Turbidity	TDS		DO	pH	ORP	Odor
gal		ft	deg C	mS/cm^c	mS/cm		g/L		mg/L		mV	
	12:50	7.18	9.86	2.496	1.774	Sl. Turb.	1.623		11.45	4.76	171.8	None
	12:55	8.16	9.55	2.489	1.755	Clear	1.617		6.32	4.63	184.9	None
	13:00	8.35	10.01	2.463	1.759	Clear	1.600		4.62	4.64	192.6	None
	13:05	8.45	10.39	2.456	1.771	Clear	1.596		3.86	4.64	198.1	None
	13:10	8.55	10.82	2.444	1.782	Clear	1.589		3.28	4.66	198.0	None
	13:15	8.63	10.79	2.456	1.790	Clear	1.596		3.00	4.69	200.0	None

SAMPLE INFORMATION:

Sample Method: Peristaltic *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*
Sample Type: **Grab** Composite
Weather: Sunny Cold
Sample Depth: ~11'
Barometric Pres.:
Air Temp.(°F): <32°F
Wind: Calm
Notes:

LAB REQUESTS:

Laboratory Name: YORK
Analysis/Method: See C.O.C.
Turn Around Time: Norm

QA/QC: Duplicate Equip. Blank Field Blank Trip Blank MS/MSD

The Chazen Companies

FIELD DATA SHEET

SAMPLE INFORMATION:

Sample ID: DSK-MW-4S
Well ID: MW-4S
Project Name: Dan Kamner
Sample Location: Newburgh, NY

Sample Time: 14:44
Sample Date: 2-17-15
Sample Tech(s): WS
Project and Task #: 41440.00
Project Manager: KM

Sample Matrix *(circle)*: **Groundwater** Soil / Surface Water Air / Drinking Water Other:

WELL INFORMATION:

Well Condition: FAIR - casing + guard pipe bent.

Lock Type: Not lockable Key #:

PURGE DATA:

Measuring Point: T.O. PVC
Depth to Bottom: 16.20
Depth to Water: 5.25
Water Column Height: *(A)*
(depth to bottom - depth to water)
# of Volumes to be Purged: *(C)*
Gal. to be Purged: *(AxBxC)*

Pipe Width	Gal/Foot *(B)*
1.0"	0.037
1.5"	0.092
2.0"	0.163
2.5"	0.255
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method: Peristaltic - Low-Flow
Start Date: 2-17-15
Start Time: 14:24
Stop Time: 14:44
Purge Rate (gpm):
Elapsed Time (min): 20
Well Vol. Purged (#):
Purge Vol. (gal): 1.75
Well went dry? (No) Yes
Conditions: (No Odor) Odor
(Clear) Slightly-Turbid Turbid

FIELD RESULTS:

Gal purged	Date & Time	Depth to Water	Temp	SpCond	Cond.	TURB.	TDS		DO	pH	ORP	Odo-
gal		ft	deg C	mS/cm[c]	mS/cm		g/L		mg/L		mV	
	14:24	5.25	9.24	0.768	0.538	Turb.	0.501		5.32	9.33	12.4	None
	14:29	5.82	9.67	0.787	0.556	Clear	0.511		1.72	9.53	19.4	None
	14:34	5.85	9.65	0.787	0.556	Clear	0.512		1.32	9.55	15.4	None
	14:39	5.75	9.72	0.788	0.558	Clear	0.513		1.13	9.55	12.3	None
	14:44	6.00	9.73	0.794	0.562	Clear	0.516		1.06	9.53	0.5	None

SAMPLE INFORMATION:

Sample Method: Peristaltic *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*
Sample Type: (Grab) Composite
Weather: Sunny, Cold
Sample Depth: ~11
Barometric Pres.:
Air Temp.(°F):
Wind:
Notes:

LAB REQUESTS:

Laboratory Name: YORK
Analysis/Method: See C.O.C.
Turn Around Time: Normal

QA/QC: Duplicate Equip. Blank Field Blank Trip Blank

The Chazen Companies

FIELD DATA SHEET

SAMPLE INFORMATION:

Sample ID: DSK-MW-4D
Well ID: MW-4D
Project Name: Danskammer
Sample Location: Newburgh, NY

Sample Time: 15:29
Sample Date: 2-17-15
Sample Tech(s): JJ
Project and Task #: 41440.00/2300
Project Manager: KM

Sample Matrix *(circle)*: **Groundwater** Soil / Surface Water Air / Drinking Water Other:

WELL INFORMATION:

Well Condition: FAIR - Casing higher than guard pipe

Lock Type: Not Lockable Key #:

PURGE DATA:

Measuring Point: T.O.PVC
Depth to Bottom: 43
Depth to Water: 5.33
Water Column Height: *(A)*
(depth to bottom - depth to water)
# of Volumes to be Purged: *(C)*
Gal. to be Purged: *(AxBxC)*

Pipe Width	Gal/Foot *(B)*
1.0"	0.037
1.5"	0.092
2.0"	0.163
2.5"	0.255
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method: Peristaltic - Low-Flow
Start Date: 2-17-15
Start Time: 14:59
Stop Time: 15:29
Purge Rate (gpm):
Elapsed Time (min): 20
Well Vol. Purged (#):
Purge Vol. (gal): ≈1.5
Well went dry? No Yes
Conditions: No Odor / Odor; Clear / Slightly Turbid / Turbid

FIELD RESULTS:

Gal purged	Date & Time	Depth to Water	Temp	SpCond	Cond.		TDS		DO	pH	ORP	
gal		ft	deg C	mS/cm^c	mS/cm		g/L		mg/L		mV	
	14:59	5.33	10.52	0.974	0.707	Clear	0.636		9.53	7.58	-48.2	Decaying Org. Odor
	15:04	6.91	10.62	1.032	0.749	Clear	0.671		1.79	7.23	-71.8	Sulfurous Odor
	15:09	7.46	10.87	1.044	0.763	Clear	0.679		1.33	7.10	-98.2	Sulfurous Odor
	15:14	7.75	10.81	1.050	0.766	Clear	0.683		1.22	7.06	-109.6	Strong Sulfur Odor
	15:19	8.02	10.82	1.051	0.766	Clear	0.683		1.18	7.06	-109.1	" "

SAMPLE INFORMATION:

Sample Method: Peristaltic *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*
Sample Type: **Grab** Composite
Weather: Sunny, Cold
Sample Depth:
Barometric Pres.:
Air Temp.(°F):
Wind: Calm
Notes:

LAB REQUESTS:

Laboratory Name: YORK
Analysis/Method: See C.O.C.
Turn Around Time: Norm.

QA/QC: Duplicate Equip. Blank Field Blank Trip Blank

The Chazen Companies

FIELD DATA SHEET

SAMPLE INFORMATION:

Sample ID: DSK-MW-6
Well ID: MW-6
Project Name: DAVIS KAMMER
Sample Location: Newburgh, NY

Sample Time: 13:54
Sample Date: 2-17-15
Sample Tech(s): SO
Project and Task #: 41440.02/0300
Project Manager: KM

Sample Matrix *(circle)*: **Groundwater** Soil Surface Water Air Drinking Water Other:

WELL INFORMATION:

Well Condition: FAIR - Casing/Guard Pipe bent

Lock Type: MASTER Key #: 3303

PURGE DATA:

Measuring Point: T.O. PVC
Depth to Bottom: 12.83
Depth to Water: 7.10
Water Column Height: *(A)*
(depth to bottom - depth to water)
# of Volumes to be Purged: *(C)*
Gal. to be Purged: *(AxBxC)*

(B)

Pipe Width	Gal/Foot
1.0"	0.037
~~1.5"~~	~~0.092~~
2.0"	0.163
2.5"	0.255
3.0"	0.367
4.0"	0.653
6.0"	1.469
8.0"	2.611

Purge Method: Peristaltic - Low Flow
Start Date: 2-17-15
Start Time: 13:34
Stop Time: 13:54
Purge Rate (gpm):
Elapsed Time (min): 20
Well Vol. Purged (#):
Purge Vol. (gal): 1.5
Well went dry? (No) Yes
Conditions: No Odor (Odor)
(Clear) Slightly-Turbid Turbid

FIELD RESULTS:

Gal purged	Date & Time	Depth to Water	Temp	SpCond	Cond.	TURB.	TDS		DO	pH	ORP	Odor
gal		ft	deg C	mS/cm	mS/cm		g/L		mg/L		mV	
	13:34	7.10	8.29	1.015	0.700	Rusty	0.675	-	12.95	6.80	54.4	Sl. Petro.
	13:39	8.67	8.72	0.982	0.676	Rusty	0.635	-	2.33	6.81	41.4	Sl. Petro
	13:44	9.73	8.59	0.943	0.642	Clear	0.613	-	1.43	6.77	64.2	Sl. Petro.
	13:49	10.08	8.32	0.941	0.641	Clear	0.611	-	1.37	6.50	18.0	Sl. Petro.
	13:54	10.33	8.21	0.918	0.623	Clear	0.597	-	1.43	6.55	33	Sl. Petro

SAMPLE INFORMATION:

Sample Method: Peristaltic *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*
Sample Type: (Grab) Composite
Weather: Sunny, Cold
Sample Depth: 10.00'
Barometric Pres.:
Air Temp.(°F): ~32° F
Wind: Calm
Notes:

LAB REQUESTS:

Laboratory Name: YORK
Analysis/Method: See C.O.C.
Turn Around Time: Normal

QA/QC: Duplicate Equip. Blank Field Blank Trip Blank

DATA USABILITY SUMMARY REPORT

For

DANSKAMMER
WATER SAMPLES

Metals, Mercury and Wet Chemistry Parameters

SDG No: 15B0492

Sampling Dates: February 15, 2015

Submitted to:

Chazen Environmental Services
21 Fox Street
Poughkeepsie NY, 12601

Prepared by:
Environmental Occupational & Public Health Consultants Inc. (EOPHC, Inc.)
Environmental Data Validation Inc (EDV, Inc.)
1326 Orangewood Ave
Pittsburgh, PA 15216
(412) 341-5281

DATA USABILITY SUMMARY REPORT
Volatiles
USEPA REGION II

Site: Danskammer

SDG #s: 15B0492

Client: Chazen Environmental Services Inc.

Date: March 16, 2015

Laboratory: York Analytical Laboratories

Reviewer: L. Wright

Sample Identification Table

Client Sample ID	Laboratory ID	Matrix	Metals/ Mercury	Wet Chemistry (Chloride, fluoride, sulphate, pH)
SDG 15B0492				
DSK-MW-2S	15B0492-01	Water	X	X
DSK-MW-6	15B0492-02	Water	X	X
DSK-MW-4S	15B0492-03	Water	X	X
DSK-MW-4D	15B0492-04	Water	X	X
DSK-FD-01	15B0492-05	Water	X	

This report contains one (1) SDG with field QC samples. The samples were analyzed EPA Methods 200.7, 245.1, 300, SM 2540 & SM4500. The adherence of laboratory analytical performance to this method's analytical specifications was evaluated during the data validation process. The data package was evaluated for its usability as defined by the Guidance for the Development of Data Usability Summary Reports (DER-10, 11/09). USEPA Region II checklists were used as guidance documents. According to the NYSDEC Guidance for the Development of Data Usability Summary Reports, the following QC data were evaluated: blanks, instrument tunings, calibration standards, calibration verifications, laboratory controls, surrogate recoveries, spike recoveries, and sample data. All QC data were within quality control limits, except the following issues:

Cover letter, Narrative and Data Reporting Forms (Form 1s): All criteria were met. The deficiencies noted in the case narrative have been discussed in applicable sections.

Chain of Custody (COC): All were present.

Holding Time: Holding times were within acceptable criterion for all samples and analyses.

Blanks Quality Control: The results were acceptable

Calibration Quality Control: The results were acceptable.

Laboratory Control Sample (LCS): The laboratory control sample is acceptable.

Surrogates: The surrogate recoveries were acceptable.

Matrix Spike: The matrix spike recoveries were acceptable.

Internal Standards: NA

Compound Quantitation: Quantitation was acceptable.

Additional Comments: There are no additional comments.

Data usability: Data qualified with the "UJ" qualifier are to be used cautiously as they are estimated data with some quality control issues. Data qualified with the "J" qualifier are to be used cautiously as they are estimated data with some quality control issues. Data qualified with the "R" qualifier are not usable due to severe quality control issues. Data qualified with the "U" qualifier are usable as there are no quality control issues.

ATTACHMENT A

FORM 1s

Sample Information

Client Sample ID: DSK-MW-2S

York Sample ID: 15B0492-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 1:15 pm	02/18/2015

Arsenic by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.00863**		mg/L	0.00270	0.00400	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:24	MW

Barium by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.0207**		mg/L	0.00240	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:24	MW

Cadmium by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00250	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:24	MW

Chromium by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00100	0.00500	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:24	MW

Lead by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.00130	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:24	MW

Sodium by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**144**		mg/L	0.0354	0.100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:24	MW

Vanadium by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	ND		mg/L	0.000900	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:24	MW

Mercury by EPA 245.1

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 245.1 Mercury

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00009500	0.0002000	1	EPA 245.1	02/19/2015 12:01	02/19/2015 12:30	AA

Sample Information

Client Sample ID: DSK-MW-2S **York Sample ID:** 15B0492-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 1:15 pm	02/18/2015

Total Suspended Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Suspended Solids	**21.0**		mg/L	10.0	10.0	1	SM 2540D	02/18/2015 16:31	02/19/2015 20:38	AA

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**26.9**		mg/L	0.0690	0.500	1	EPA 300.0	02/19/2015 03:59	02/19/2015 03:59	KK

Fluoride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16984-48-8	**Fluoride**	**0.161**		mg/L	0.0280	0.100	1	EPA 300.0	02/19/2015 03:59	02/19/2015 03:59	KK

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	Sulfate	ND		mg/L	0.0860	1.00	1	EPA 300.0	02/19/2015 03:59	02/19/2015 03:59	KK

pH

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	*** pH**	**4.79**	HT-pH	pH units		0.500	1	SM 4500 H+B	02/20/2015 10:43	02/20/2015 12:20	KK

Sample Information

Client Sample ID: DSK-MW-6 **York Sample ID:** 15B0492-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 1:54 pm	02/18/2015

Arsenic by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.00270	0.00400	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:43	MW

Sample Information

Client Sample ID: DSK-MW-6 **York Sample ID:** 15B0492-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 1:54 pm	02/18/2015

Barium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.428**		mg/L	0.00240	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:43	MW

Cadmium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00250	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:43	MW

Chromium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00100	0.00500	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:43	MW

Lead by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.00130	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:43	MW

Sodium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**13.3**		mg/L	0.0354	0.100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:43	MW

Vanadium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	ND		mg/L	0.000900	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:43	MW

Mercury by EPA 245.1

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 245.1 Mercury

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00009500	0.0002000	1	EPA 245.1	02/19/2015 12:01	02/19/2015 12:30	AA

Total Suspended Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Suspended Solids	**17.0**		mg/L	10.0	10.0	1	SM 2540D	02/18/2015 16:31	02/19/2015 20:38	AA

Sample Information

Client Sample ID: DSK-MW-6 **York Sample ID:** 15B0492-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 1:54 pm	02/18/2015

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**30.8**		mg/L	0.0690	0.500	1	EPA 300.0	02/19/2015 06:00	02/19/2015 06:00	KK

Fluoride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16984-48-8	**Fluoride**	**0.430**		mg/L	0.0280	0.100	1	EPA 300.0	02/19/2015 06:00	02/19/2015 06:00	KK

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**122**		mg/L	0.860	10.0	10	EPA 300.0	02/19/2015 22:26	02/19/2015 22:26	KK

pH

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	*** pH**	**7.26**	HT-pH	pH units		0.500	1	SM 4500 H+B	02/20/2015 10:43	02/20/2015 12:20	KK

Sample Information

Client Sample ID: DSK-MW-4S **York Sample ID:** 15B0492-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 2:44 pm	02/18/2015

Arsenic by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.0252**		mg/L	0.00270	0.00400	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:47	MW

Barium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.148**		mg/L	0.00240	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:47	MW

Cadmium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: DSK-MW-4S **York Sample ID:** 15B0492-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 2:44 pm	02/18/2015

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00250	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:47	MW

Chromium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00100	0.00500	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:47	MW

Lead by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**0.00358**		mg/L	0.00130	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:47	MW

Sodium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**40.4**		mg/L	0.0354	0.100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:47	MW

Vanadium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	**Vanadium**	**0.0256**		mg/L	0.000900	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:47	MW

Mercury by EPA 245.1

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 245.1 Mercury

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00009500	0.0002000	1	EPA 245.1	02/19/2015 12:01	02/19/2015 12:30	AA

Total Suspended Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Suspended Solids	**13.0**		mg/L	10.0	10.0	1	SM 2540D	02/18/2015 16:31	02/19/2015 20:38	AA

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**106**		mg/L	0.690	5.00	10	EPA 300.0	02/19/2015 22:47	02/19/2015 22:47	KK

Sample Information

Client Sample ID: DSK-MW-4S **York Sample ID:** 15B0492-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 2:44 pm	02/18/2015

Fluoride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16984-48-8	**Fluoride**	**0.293**		mg/L	0.0280	0.100	1	EPA 300.0	02/19/2015 06:20	02/19/2015 06:20	KK

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**197**		mg/L	0.860	10.0	10	EPA 300.0	02/19/2015 22:47	02/19/2015 22:47	KK

pH

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	*** pH**	**9.38**	HT-pH	pH units		0.500	1	SM 4500 H+B	02/20/2015 10:43	02/20/2015 12:20	KK

Sample Information

Client Sample ID: DSK-MW-4D **York Sample ID:** 15B0492-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 3:19 pm	02/18/2015

Arsenic by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.00270	0.00400	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:53	MW

Barium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.0655**		mg/L	0.00240	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:53	MW

Cadmium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00250	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:53	MW

Chromium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: DSK-MW-4D **York Sample ID:** 15B0492-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 3:19 pm	02/18/2015

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00100	0.00500	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:53	MW

Lead by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	**Lead**	**0.00857**		mg/L	0.00130	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:53	MW

Sodium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**14.6**		mg/L	0.0354	0.100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:53	MW

Vanadium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	ND		mg/L	0.000900	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:53	MW

Mercury by EPA 245.1

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 245.1 Mercury

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00009500	0.0002000	1	EPA 245.1	02/19/2015 12:01	02/19/2015 12:30	AA

Total Suspended Solids

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Suspended Solids	ND		mg/L	10.0	10.0	1	SM 2540D	02/18/2015 16:31	02/19/2015 20:38	AA

Chloride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16887-00-6	**Chloride**	**22.7**		mg/L	0.0690	0.500	1	EPA 300.0	02/19/2015 06:41	02/19/2015 06:41	KK

Fluoride

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16984-48-8	**Fluoride**	**0.298**		mg/L	0.0280	0.100	1	EPA 300.0	02/19/2015 06:41	02/19/2015 06:41	KK

Sample Information

Client Sample ID: DSK-MW-4D **York Sample ID:** 15B0492-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 3:19 pm	02/18/2015

Sulfate as SO4

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 300

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
14808-79-8	**Sulfate**	**241**		mg/L	0.860	10.0	10	EPA 300.0	02/19/2015 23:07	02/19/2015 23:07	KK

pH

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	*** pH**	**7.44**	HT-pH	pH units		0.500	1	SM 4500 H+B	02/20/2015 10:43	02/20/2015 12:20	KK

Sample Information

Client Sample ID: DSK-FD-01 **York Sample ID:** 15B0492-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 3:00 pm	02/18/2015

Arsenic by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.00567**		mg/L	0.00270	0.00400	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:58	MW

Barium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-39-3	**Barium**	**0.0207**		mg/L	0.00240	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:58	MW

Cadmium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		mg/L	0.00250	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:58	MW

Chromium by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-47-3	Chromium	ND		mg/L	0.00100	0.00500	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:58	MW

Lead by EPA 200.7

Log-in Notes: **Sample Notes:**

Sample Information

Client Sample ID: DSK-FD-01 **York Sample ID:** 15B0492-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15B0492	41440.00 Task 0300 DANSKAMMER	Water	February 17, 2015 3:00 pm	02/18/2015

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.00130	0.00300	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:58	MW

Sodium by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-23-5	**Sodium**	**143**		mg/L	0.0354	0.100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:58	MW

Vanadium by EPA 200.7

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	ND		mg/L	0.000900	0.0100	1	EPA 200.7	02/19/2015 14:24	02/19/2015 20:58	MW

Mercury by EPA 245.1

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 245.1 Mercury

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00009500	0.0002000	1	EPA 245.1	02/19/2015 12:01	02/19/2015 12:30	AA

ATTACHMENT B

CASE NARRATIVE & COC

Report Date: 02/20/2015
Client Project ID: 41440.00 Task 0300 DANSKAMMER
York Project (SDG) No.: 15B0492

Chazen Environmental Services (Poughkeepsie)
21 Fox Street
Poughkeepsie NY, 12601
Attention: Will Olsen

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 18, 2015 and listed below. The project was identified as your project: **41440.00 Task 0300 DANSKAMMER**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15B0492-01	DSK-MW-2S	Water	02/17/2015	02/18/2015
15B0492-02	DSK-MW-6	Water	02/17/2015	02/18/2015
15B0492-03	DSK-MW-4S	Water	02/17/2015	02/18/2015
15B0492-04	DSK-MW-4D	Water	02/17/2015	02/18/2015
15B0492-05	DSK-FD-01	Water	02/17/2015	02/18/2015

General Notes for York Project (SDG) No.: 15B0492

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 02/20/2015

Benjamin Gulizia
Laboratory Director

YORK ANALYTICAL LABORATORIES
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
FAX (203) 357-0166

Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 15B0492

YOUR Information

Company: The Chazen Companies
Address: 21 Fox Street
Poughkeepsie, NY 12601
Phone No: 845-454-3580
Contact Person: Will Olsen
E-Mail Address: wolsen@chazencompanies.com

Report To:

Company: Chazen
Address:
Phone No.
Attention: Will Olsen
E-Mail Address:

Invoice To:

Company: Chazen
Address:
Phone No.
Attention: ACCTS PAYABLE
E-Mail Address:

YOUR Project ID

41440.00
TASK 0300
DANSKAMMER

Purchase Order No.

P16652

Samples from: CT ___ NY X NJ ___

Turn-Around Time

- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) X

Report Type

- Summary Report X
- Summary w/ QA Summary
- CT RCP Package
- CTRCP DQA/DUE Pkg
- NY ASP A Package
- NY ASP B Package X
- NJDEP Red. Deliv.

Electronic Data Deliverables (EDD)

- Simple Excel X
- NYSDEC EQuIS X
- EQuIS (std)
- EZ-EDD (EQuIS)
- NJDEP SRP HazSite EDD
- GIS/KEY (std)
- Other
- **York Regulatory Comparison**
- **Excel Spreadsheet**

Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Will G. Olsen
Samples Collected/Authorized By (Signature)

William G. Olsen
Name (printed)

Matrix Codes

S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
*8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
DSK-MW-2S	2-17-15 13:15	GW	As, Ba, Cd, Cr, Pb, Hg, Na, V, Cl⁻, F⁻, SO_4^{-2}, TSS, pH	1X 250mL w/HNO_3; 1X250mL unpre.
DSK-MW-6	" 13:54	GW		" "
DSK-MW-4S	" 14:44	GW		" "
DSK-MW-4D	" 15:19	GW		" "
DSK-FD-01	" XX:XX	GW		1X 250mL w/HNO_3
DSK-MW-2S-MS	" 13:15	GW		" "
DSK-MW-2S-MSD	" 13:15	GW		" "

Comments

Preservation Check those Applicable: 4°C X Frozen ___ HCl ___ MeOH ___ HNO_3 X H_2SO_4 ___ NaOH ___ ZnAc ___ Ascorbic Acid ___ Other ___

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Samples Relinquished By: Straddle 2/18/15 10:00 Date/Time
Samples Relinquished By: ___ Date/Time

Samples Received By: Chris 2-18-15 10:00 Date/Time
Samples Received in LAB by: TC Mulvihill 2/18/15 1600 Date/Time

Temperature on Receipt 3.6 °C