



Dynegy Midwest Generation, LLC
1500 Eastport Plaza Drive
Collinsville, IL 62234

April 22, 2024

Illinois Environmental Protection Agency
DWPC – Permits MC#15
Attn: Part 845 Coal Combustion Residual Rule Submittal
1021 North Grand Avenue East
Springfield, IL 62794

Re: Hennepin Power Plant Ash Ponds No. 2 and No. 4; IEPA ID # W1550100002-04 and # W1550100002-07

Dear Mr. LeCrone:

In accordance with Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.610(b)(3)(D), Dynegy Midwest Generation, LLC is submitting groundwater monitoring data for the Quarter 1, 2024 sampling event at the Hennepin Power Plant Ash Ponds No. 2 and No. 4, identified by Illinois Environmental Protection Agency (IEPA) ID No. W1550100002-04 and No. W1550100002-07. This data is being submitted and placed in the facility's operating record as required by 35 I.A.C. § 845.800(d)(15) within 60 days of receiving final laboratory analytical data. Results were compared with the groundwater protection standards (GWPSs) described in 35 I.A.C. § 845.600 to determine statistical exceedances of the GWPS.

Sincerely,

A handwritten signature in blue ink, reading "Dianna Tickner", is written over a light blue circular stamp.

Dianna Tickner, PE, PMP
Senior Director, Demolition and Decommission

Enclosures

Groundwater Monitoring Data and Detected Exceedances, Quarter 1, 2024, Ash Ponds No. 2 and No. 4, Hennepin Power Plant, Hennepin, Illinois

35 I.A.C. § 845.610(B)(3)(D)
GROUNDWATER MONITORING DATA AND DETECTED EXCEEDANCES
QUARTER 1, 2024
ASH PONDS NO. 2 AND NO. 4, HENNEPIN POWER PLANT, HENNEPIN, ILLINOIS

April 22, 2024

Samples were collected on January 25 and 26, 2024 and analyzed for the parameters listed in Title 35 of the Illinois Administrative Code (35 I.A.C.) § 845.600(a), calcium, and turbidity. Final laboratory analytical data was received on February 22, 2024.

The monitoring well locations are included in **Figure 1. Attachment A** summarizes the groundwater elevation data for the Quarter 1, 2024 sampling event. **Table 1** is a summary of the field parameters and analytical results. **Attachment B** contains the associated laboratory analytical reports and field data sheets for the Quarter 1, 2024 sampling event.

Statistical procedures used to evaluate groundwater results are provided in the Addendum to the Groundwater Monitoring Plan¹ provided in the operating permit application. In accordance with 35 I.A.C. § 845.610(b)(3)(B), the Quarter 1, 2024 groundwater monitoring data were evaluated for statistical exceedances over background levels for the constituents listed in 35 I.A.C. § 845.600. **Attachment C** shows the statistically derived values compared to background levels.

In accordance with 35 I.A.C. § 845.610(b)(3)(C), the statistically derived values identified as Statistical Results in **Table 2** were compared with the groundwater protection standards (GWPSs) described in 35 I.A.C. § 845.600 to determine exceedances of the GWPS. As shown in **Table 2**, exceedances of the GWPS were not identified.

TABLES

Table 1	Field Parameters and Analytical Results - Quarter 1, 2024
Table 2	Comparison of Statistical Results to GWPS - Quarter 1, 2024

FIGURES

Figure 1	Monitoring Well Location Map
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ATTACHMENTS

Attachment A	Groundwater Elevation Data - Quarter 1, 2024
Attachment B	Laboratory Reports and Field Data Sheets - Quarter 1, 2024
Attachment C	Comparison of Statistical Results to Background - Quarter 1, 2024

¹ Ramboll Americas Engineering Solutions, Inc. (Ramboll), 2021. *Groundwater Monitoring Plan Addendum for Ash Pond No. 2 and Ash Pond No. 4, Hennepin Power Plant, Hennepin, Illinois. October 25, 2021.*

TABLES

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
07	Background	E004	01/26/2024	Antimony, total	0.0013 U	mg/L
07	Background	E004	01/26/2024	Arsenic, total	0.00023 U	mg/L
07	Background	E004	01/26/2024	Barium, total	0.100	mg/L
07	Background	E004	01/26/2024	Beryllium, total	0.00053 U	mg/L
07	Background	E004	01/26/2024	Boron, total	0.120	mg/L
07	Background	E004	01/26/2024	Cadmium, total	0.00017 U	mg/L
07	Background	E004	01/26/2024	Calcium, total	120	mg/L
07	Background	E004	01/26/2024	Chloride, total	56.0	mg/L
07	Background	E004	01/26/2024	Chromium, total	0.0011 U	mg/L
07	Background	E004	01/26/2024	Cobalt, total	0.00750	mg/L
07	Background	E004	01/26/2024	Dissolved Oxygen	4.30	mg/L
07	Background	E004	01/26/2024	Fluoride, total	0.120	mg/L
07	Background	E004	01/26/2024	Lead, total	0.00019 U	mg/L
07	Background	E004	01/26/2024	Lithium, total	0.00520	mg/L
07	Background	E004	01/26/2024	Mercury, total	0.000079 U	mg/L
07	Background	E004	01/26/2024	Molybdenum, total	0.0025 U	mg/L
07	Background	E004	01/26/2024	Oxidation Reduction Potential	143	mV
07	Background	E004	01/26/2024	pH (field)	7.0	SU
07	Background	E004	01/26/2024	Radium 226 + Radium 228, total	0.947	pCi/L
07	Background	E004	01/26/2024	Selenium, total	0.00098 U	mg/L
07	Background	E004	01/26/2024	Specific Conductance @ 25C (field)	1,026	micromhos/cm
07	Background	E004	01/26/2024	Sulfate, total	59.0	mg/L
07	Background	E004	01/26/2024	Temperature	10.0	degrees C
07	Background	E004	01/26/2024	Thallium, total	0.00057 U	mg/L
07	Background	E004	01/26/2024	Total Dissolved Solids	650	mg/L
07	Background	E004	01/26/2024	Turbidity, field	5.90	NTU
08	Background	E004	01/26/2024	Antimony, total	0.0013 U	mg/L
08	Background	E004	01/26/2024	Arsenic, total	0.00023 U	mg/L
08	Background	E004	01/26/2024	Barium, total	0.120	mg/L
08	Background	E004	01/26/2024	Beryllium, total	0.00053 U	mg/L
08	Background	E004	01/26/2024	Boron, total	0.150	mg/L
08	Background	E004	01/26/2024	Cadmium, total	0.00049 J	mg/L
08	Background	E004	01/26/2024	Calcium, total	200	mg/L
08	Background	E004	01/26/2024	Chloride, total	250	mg/L
08	Background	E004	01/26/2024	Chromium, total	0.0011 U	mg/L
08	Background	E004	01/26/2024	Cobalt, total	0.00430	mg/L
08	Background	E004	01/26/2024	Dissolved Oxygen	0.530	mg/L
08	Background	E004	01/26/2024	Fluoride, total	0.083 J	mg/L
08	Background	E004	01/26/2024	Lead, total	0.00031 J	mg/L
08	Background	E004	01/26/2024	Lithium, total	0.0130	mg/L
08	Background	E004	01/26/2024	Mercury, total	0.000079 U	mg/L
08	Background	E004	01/26/2024	Molybdenum, total	0.0025 U	mg/L
08	Background	E004	01/26/2024	Oxidation Reduction Potential	101	mV
08	Background	E004	01/26/2024	pH (field)	6.8	SU
08	Background	E004	01/26/2024	Radium 226 + Radium 228, total	1.41	pCi/L
08	Background	E004	01/26/2024	Selenium, total	0.00098 U	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
08	Background	E004	01/26/2024	Specific Conductance @ 25C (field)	1,839	micromhos/cm
08	Background	E004	01/26/2024	Sulfate, total	120	mg/L
08	Background	E004	01/26/2024	Temperature	12.3	degrees C
08	Background	E004	01/26/2024	Thallium, total	0.00057 U	mg/L
08	Background	E004	01/26/2024	Total Dissolved Solids	1,200	mg/L
08	Background	E004	01/26/2024	Turbidity, field	0.970	NTU
08D	Background	E004	01/25/2024	Antimony, total	0.0013 U	mg/L
08D	Background	E004	01/25/2024	Arsenic, total	0.00033 J	mg/L
08D	Background	E004	01/25/2024	Barium, total	0.140	mg/L
08D	Background	E004	01/25/2024	Beryllium, total	0.00053 U	mg/L
08D	Background	E004	01/25/2024	Boron, total	0.120	mg/L
08D	Background	E004	01/25/2024	Cadmium, total	0.000930	mg/L
08D	Background	E004	01/25/2024	Calcium, total	220	mg/L
08D	Background	E004	01/25/2024	Chloride, total	330	mg/L
08D	Background	E004	01/25/2024	Chromium, total	0.0011 U	mg/L
08D	Background	E004	01/25/2024	Cobalt, total	0.00460	mg/L
08D	Background	E004	01/25/2024	Dissolved Oxygen	0.500	mg/L
08D	Background	E004	01/25/2024	Fluoride, total	0.09 J	mg/L
08D	Background	E004	01/25/2024	Lead, total	0.000710	mg/L
08D	Background	E004	01/25/2024	Lithium, total	0.0140	mg/L
08D	Background	E004	01/25/2024	Mercury, total	0.000079 U	mg/L
08D	Background	E004	01/25/2024	Molybdenum, total	0.0025 U	mg/L
08D	Background	E004	01/25/2024	Oxidation Reduction Potential	86.7	mV
08D	Background	E004	01/25/2024	pH (field)	6.7	SU
08D	Background	E004	01/25/2024	Radium 226 + Radium 228, total	0.389	pCi/L
08D	Background	E004	01/25/2024	Selenium, total	0.00098 U	mg/L
08D	Background	E004	01/25/2024	Specific Conductance @ 25C (field)	2,389	micromhos/cm
08D	Background	E004	01/25/2024	Sulfate, total	170	mg/L
08D	Background	E004	01/25/2024	Temperature	12.5	degrees C
08D	Background	E004	01/25/2024	Thallium, total	0.00057 U	mg/L
08D	Background	E004	01/25/2024	Total Dissolved Solids	1,500	mg/L
08D	Background	E004	01/25/2024	Turbidity, field	4.40	NTU
03R	Compliance	E004	01/25/2024	Antimony, total	0.0013 U	mg/L
03R	Compliance	E004	01/25/2024	Arsenic, total	0.00055 J	mg/L
03R	Compliance	E004	01/25/2024	Barium, total	0.0720	mg/L
03R	Compliance	E004	01/25/2024	Beryllium, total	0.00053 U	mg/L
03R	Compliance	E004	01/25/2024	Boron, total	0.580	mg/L
03R	Compliance	E004	01/25/2024	Cadmium, total	0.00026 J	mg/L
03R	Compliance	E004	01/25/2024	Calcium, total	96.0	mg/L
03R	Compliance	E004	01/25/2024	Chloride, total	79.0	mg/L
03R	Compliance	E004	01/25/2024	Chromium, total	0.0011 U	mg/L
03R	Compliance	E004	01/25/2024	Cobalt, total	0.00056 J	mg/L
03R	Compliance	E004	01/25/2024	Dissolved Oxygen	1.28	mg/L
03R	Compliance	E004	01/25/2024	Fluoride, total	0.250	mg/L
03R	Compliance	E004	01/25/2024	Lead, total	0.00024 J	mg/L
03R	Compliance	E004	01/25/2024	Lithium, total	0.0180	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
03R	Compliance	E004	01/25/2024	Mercury, total	0.000079 U	mg/L
03R	Compliance	E004	01/25/2024	Molybdenum, total	0.0890	mg/L
03R	Compliance	E004	01/25/2024	Oxidation Reduction Potential	46.6	mV
03R	Compliance	E004	01/25/2024	pH (field)	7.3	SU
03R	Compliance	E004	01/25/2024	Radium 226 + Radium 228, total	0.319	pCi/L
03R	Compliance	E004	01/25/2024	Selenium, total	0.0021 J	mg/L
03R	Compliance	E004	01/25/2024	Specific Conductance @ 25C (field)	877	micromhos/cm
03R	Compliance	E004	01/25/2024	Sulfate, total	73.0	mg/L
03R	Compliance	E004	01/25/2024	Temperature	15.0	degrees C
03R	Compliance	E004	01/25/2024	Thallium, total	0.00057 U	mg/L
03R	Compliance	E004	01/25/2024	Total Dissolved Solids	570	mg/L
03R	Compliance	E004	01/25/2024	Turbidity, field	8.98	NTU
18S	Compliance	E004	01/25/2024	Antimony, total	0.0013 U	mg/L
18S	Compliance	E004	01/25/2024	Arsenic, total	0.00078 J	mg/L
18S	Compliance	E004	01/25/2024	Barium, total	0.0600	mg/L
18S	Compliance	E004	01/25/2024	Beryllium, total	0.00053 U	mg/L
18S	Compliance	E004	01/25/2024	Boron, total	1.70	mg/L
18S	Compliance	E004	01/25/2024	Cadmium, total	0.00017 U	mg/L
18S	Compliance	E004	01/25/2024	Calcium, total	99.0	mg/L
18S	Compliance	E004	01/25/2024	Chloride, total	74.0	mg/L
18S	Compliance	E004	01/25/2024	Chromium, total	0.0011 U	mg/L
18S	Compliance	E004	01/25/2024	Cobalt, total	0.0004 U	mg/L
18S	Compliance	E004	01/25/2024	Dissolved Oxygen	1.17	mg/L
18S	Compliance	E004	01/25/2024	Fluoride, total	0.170	mg/L
18S	Compliance	E004	01/25/2024	Lead, total	0.00019 U	mg/L
18S	Compliance	E004	01/25/2024	Lithium, total	0.0440	mg/L
18S	Compliance	E004	01/25/2024	Mercury, total	0.000079 U	mg/L
18S	Compliance	E004	01/25/2024	Molybdenum, total	0.160	mg/L
18S	Compliance	E004	01/25/2024	Oxidation Reduction Potential	44.8	mV
18S	Compliance	E004	01/25/2024	pH (field)	7.5	SU
18S	Compliance	E004	01/25/2024	Radium 226 + Radium 228, total	0.761	pCi/L
18S	Compliance	E004	01/25/2024	Selenium, total	0.0140	mg/L
18S	Compliance	E004	01/25/2024	Specific Conductance @ 25C (field)	827	micromhos/cm
18S	Compliance	E004	01/25/2024	Sulfate, total	98.0	mg/L
18S	Compliance	E004	01/25/2024	Temperature	13.3	degrees C
18S	Compliance	E004	01/25/2024	Thallium, total	0.00057 U	mg/L
18S	Compliance	E004	01/25/2024	Total Dissolved Solids	580	mg/L
18S	Compliance	E004	01/25/2024	Turbidity, field	2.81	NTU
18D	Compliance	E004	01/25/2024	Antimony, total	0.0013 U	mg/L
18D	Compliance	E004	01/25/2024	Arsenic, total	0.00098 J	mg/L
18D	Compliance	E004	01/25/2024	Barium, total	0.0700	mg/L
18D	Compliance	E004	01/25/2024	Beryllium, total	0.00053 U	mg/L
18D	Compliance	E004	01/25/2024	Boron, total	1.20	mg/L
18D	Compliance	E004	01/25/2024	Cadmium, total	0.00036 J	mg/L
18D	Compliance	E004	01/25/2024	Calcium, total	99.0	mg/L
18D	Compliance	E004	01/25/2024	Chloride, total	73.0	mg/L

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	Well Type	Event	Date	Parameter	Result	Unit
18D	Compliance	E004	01/25/2024	Chromium, total	0.0013 J	mg/L
18D	Compliance	E004	01/25/2024	Cobalt, total	0.00180	mg/L
18D	Compliance	E004	01/25/2024	Dissolved Oxygen	0.950	mg/L
18D	Compliance	E004	01/25/2024	Fluoride, total	0.150	mg/L
18D	Compliance	E004	01/25/2024	Lead, total	0.000720	mg/L
18D	Compliance	E004	01/25/2024	Lithium, total	0.0240	mg/L
18D	Compliance	E004	01/25/2024	Mercury, total	0.000079 U	mg/L
18D	Compliance	E004	01/25/2024	Molybdenum, total	0.0340	mg/L
18D	Compliance	E004	01/25/2024	Oxidation Reduction Potential	-10.5	mV
18D	Compliance	E004	01/25/2024	pH (field)	7.3	SU
18D	Compliance	E004	01/25/2024	Radium 226 + Radium 228, total	0.886	pCi/L
18D	Compliance	E004	01/25/2024	Selenium, total	0.00098 U	mg/L
18D	Compliance	E004	01/25/2024	Specific Conductance @ 25C (field)	856	micromhos/cm
18D	Compliance	E004	01/25/2024	Sulfate, total	95.0	mg/L
18D	Compliance	E004	01/25/2024	Temperature	14.5	degrees C
18D	Compliance	E004	01/25/2024	Thallium, total	0.00057 U	mg/L
18D	Compliance	E004	01/25/2024	Total Dissolved Solids	590	mg/L
18D	Compliance	E004	01/25/2024	Turbidity, field	28.2	NTU
45S	Compliance	E004	01/25/2024	Antimony, total	0.0013 U	mg/L
45S	Compliance	E004	01/25/2024	Arsenic, total	0.00100	mg/L
45S	Compliance	E004	01/25/2024	Barium, total	0.0850	mg/L
45S	Compliance	E004	01/25/2024	Beryllium, total	0.00053 U	mg/L
45S	Compliance	E004	01/25/2024	Boron, total	0.310	mg/L
45S	Compliance	E004	01/25/2024	Cadmium, total	0.00100	mg/L
45S	Compliance	E004	01/25/2024	Calcium, total	99.0	mg/L
45S	Compliance	E004	01/25/2024	Chloride, total	88.0	mg/L
45S	Compliance	E004	01/25/2024	Chromium, total	0.0018 J	mg/L
45S	Compliance	E004	01/25/2024	Cobalt, total	0.00180	mg/L
45S	Compliance	E004	01/25/2024	Dissolved Oxygen	0.0100	mg/L
45S	Compliance	E004	01/25/2024	Fluoride, total	0.250	mg/L
45S	Compliance	E004	01/25/2024	Lead, total	0.00160	mg/L
45S	Compliance	E004	01/25/2024	Lithium, total	0.0120	mg/L
45S	Compliance	E004	01/25/2024	Mercury, total	0.000079 U	mg/L
45S	Compliance	E004	01/25/2024	Molybdenum, total	0.0520	mg/L
45S	Compliance	E004	01/25/2024	Oxidation Reduction Potential	-0.100	mV
45S	Compliance	E004	01/25/2024	pH (field)	7.2	SU
45S	Compliance	E004	01/25/2024	Radium 226 + Radium 228, total	0.821	pCi/L
45S	Compliance	E004	01/25/2024	Selenium, total	0.00098 U	mg/L
45S	Compliance	E004	01/25/2024	Specific Conductance @ 25C (field)	976	micromhos/cm
45S	Compliance	E004	01/25/2024	Sulfate, total	67.0	mg/L
45S	Compliance	E004	01/25/2024	Temperature	17.8	degrees C
45S	Compliance	E004	01/25/2024	Thallium, total	0.00057 U	mg/L
45S	Compliance	E004	01/25/2024	Total Dissolved Solids	610	mg/L
45S	Compliance	E004	01/25/2024	Turbidity, field	34.2	NTU

TABLE 1.
FIELD PARAMETERS AND ANALYTICAL RESULTS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Notes:
C = Celsius
cm = centimeter
mg/L = milligrams per liter
mV = millivolts
NTU = Nephelometric Turbidity Units
pCi/L = picocuries per liter
SU = Standard Units
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
03R	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.006	Standard	No Exceedance
03R	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	100	All ND - Last	0.001	0.010	Standard	No Exceedance
03R	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CI around mean	0.0622	2.0	Standard	No Exceedance
03R	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.004	Standard	No Exceedance
03R	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	0.447	2	Standard	No Exceedance
03R	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	93	CB around T-S line	0.000644	0.005	Standard	No Exceedance
03R	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	77.9	435	Background	No Exceedance
03R	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	26	92	CB around T-S line	0.0015	0.1	Standard	No Exceedance
03R	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	27	96	CI around median	0.001	0.0380	Background	No Exceedance
03R	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CI around median	0.27	4.0	Standard	No Exceedance
03R	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
03R	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	31	0	CI around mean	0.0236	0.04	Standard	No Exceedance
03R	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
03R	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0826	0.1	Standard	No Exceedance
03R	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	35	0	CI around median	7.2/7.3	6.5/9.0	Standard/Standard	No Exceedance
03R	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around median	0.28	5	Standard	No Exceedance
03R	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	28	7	CB around T-S line	0.00171	0.05	Standard	No Exceedance
03R	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	72.9	400	Standard	No Exceedance
03R	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
03R	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	32	0	CI around mean	512	1,620	Background	No Exceedance
18S	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.006	Standard	No Exceedance
18S	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	97	CI around median	0.001	0.010	Standard	No Exceedance
18S	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.0502	2.0	Standard	No Exceedance
18S	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.004	Standard	No Exceedance
18S	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	0.935	2	Standard	No Exceedance
18S	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	77	CB around T-S line	0.00054	0.005	Standard	No Exceedance
18S	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	32	0	CB around linear reg	69.8	435	Background	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
18S	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	27	58	CI around median	0.0015	0.1	Standard	No Exceedance
18S	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	27	84	CI around median	0.001	0.0380	Background	No Exceedance
18S	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CB around T-S line	0.171	4.0	Standard	No Exceedance
18S	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	100	All ND - Last	0.0005	0.0075	Standard	No Exceedance
18S	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0351	0.04	Standard	No Exceedance
18S	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
18S	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0871	0.1	Standard	No Exceedance
18S	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	35	0	CI around median	7.3/7.4	6.5/9.0	Standard/Standard	No Exceedance
18S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around mean	0.344	5	Standard	No Exceedance
18S	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	28	3	CB around T-S line	0.000606	0.05	Standard	No Exceedance
18S	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	77.5	400	Standard	No Exceedance
18S	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
18S	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	476	1,620	Background	No Exceedance
18D	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.006	Standard	No Exceedance
18D	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	97	CI around median	0.001	0.010	Standard	No Exceedance
18D	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around T-S line	0.0638	2.0	Standard	No Exceedance
18D	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.004	Standard	No Exceedance
18D	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	32	0	CB around linear reg	1.2	2	Standard	No Exceedance
18D	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	94	CB around T-S line	0.000891	0.005	Standard	No Exceedance
18D	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	32	0	CI around mean	75.9	435	Background	No Exceedance
18D	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	26	93	CB around T-S line	0.0015	0.1	Standard	No Exceedance
18D	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	28	3	CB around linear reg	0.000118	0.0380	Background	No Exceedance
18D	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CI around median	0.15	4.0	Standard	No Exceedance
18D	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	93	CI around median	0.001	0.0075	Standard	No Exceedance
18D	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0228	0.04	Standard	No Exceedance
18D	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
18D	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	31	0	CI around median	0.0315	0.1	Standard	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	GWPS	GWPS Source	Compliance Result
18D	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	35	0	CI around median	7.1/7.2	6.5/9.0	Standard/Standard	No Exceedance
18D	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around mean	0.544	5	Standard	No Exceedance
18D	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	27	94	CB around T-S line	0.001	0.05	Standard	No Exceedance
18D	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	32	0	CB around linear reg	87.2	400	Standard	No Exceedance
18D	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
18D	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	468	1,620	Background	No Exceedance
45S	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.006	Standard	No Exceedance
45S	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	92	CI around median	0.001	0.010	Standard	No Exceedance
45S	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.0787	2.0	Standard	No Exceedance
45S	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.004	Standard	No Exceedance
45S	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	29	0	CB around linear reg	0.211	2	Standard	No Exceedance
45S	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	44	CB around linear reg	0.000569	0.005	Standard	No Exceedance
45S	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	29	0	CB around linear reg	86.1	435	Background	No Exceedance
45S	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	27	93	CB around T-S line	0.0015	0.1	Standard	No Exceedance
45S	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	28	14	CI around geomean	0.00139	0.0380	Background	No Exceedance
45S	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CB around T-S line	0.24	4.0	Standard	No Exceedance
45S	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	81	CI around median	0.001	0.0075	Standard	No Exceedance
45S	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.0106	0.04	Standard	No Exceedance
45S	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.002	Standard	No Exceedance
45S	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.042	0.1	Standard	No Exceedance
45S	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	29	0	CI around mean	7.1/7.2	6.5/9.0	Standard/Standard	No Exceedance
45S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around geomean	0.527	5	Standard	No Exceedance
45S	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	27	100	All ND - Last	0.0025	0.05	Standard	No Exceedance
45S	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	29	0	CI around median	70	400	Standard	No Exceedance
45S	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.002	Standard	No Exceedance
45S	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	29	0	CI around mean	526	1,620	Background	No Exceedance

TABLE 2.
COMPARISON OF STATISTICAL RESULTS TO GWPS - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Notes:

Compliance Result:

No Exceedance: the statistical result did not exceed the GWPS.

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown

CB around T-S line = Confidence band around Thiel-Sen line

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range

For pH, the values presented are the lower / upper limits

GWPS = Groundwater Protection Standard

GWPS Source:

Standard = standard specified in 35 I.A.C. § 845.600(a)(1)

Background = background concentration (see cover page for additional information)

FIGURES



- BACKGROUND WELL
- COMPLIANCE WELL
- REGULATED UNIT (SUBJECT UNIT)
- SITE FEATURE
- LIMITS OF FINAL COVER
- PROPERTY BOUNDARY

0 200 400
Feet

MONITORING WELL LOCATION
MAP

ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN POWER PLANT
HENNEPIN, ILLINOIS

FIGURE 1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.



ATTACHMENTS

**ATTACHMENT A
SUMMARY OF GROUNDWATER ELEVATION DATA
QUARTER 1, 2024**

ATTACHMENT A.
GROUNDWATER ELEVATION DATA - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	Well Type	Date	Depth to Groundwater (feet BMP)	Groundwater Elevation (feet NAVD88)
03R	Compliance	01/22/2024	34.96	447.13
07	Background	01/23/2024	68.78	449.49
08	Background	01/22/2024	53.82	447.36
08D	Background	01/22/2024	54.20	447.21
18S	Compliance	01/22/2024	40.42	447.26
18D	Compliance	01/22/2024	40.57	447.20
45S	Compliance	01/22/2024	20.24	447.24

Notes:
BMP = below measuring point
NAVD88 = North American Vertical Datum of 1988

**ATTACHMENT B
LABORATORY REPORTS AND FIELD DATA SHEETS
QUARTER 1, 2024**

ANALYTICAL REPORT

PREPARED FOR

Attn: Brian Voelker
Vistra Energy Corp
133 S 4th, Suite 206
Springfield, Illinois 62701

Generated 02/21/24 15:15:06

JOB DESCRIPTION

HEN-24Q1
HEN_845_802-805

JOB NUMBER

500-245277-17

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



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Authorized for release by
Dirk Nelson, Project Management Assistant II
Dirk.Nelson@et.eurofinsus.com
Designee for
Donna Campbell, Manager of Project Management
Donna.Campbell@et.eurofinsus.com
(217)519-2114

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Case Narrative

Client: Vistra Energy Corp
Project: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
IN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17

Job ID: 500-245277-17

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Job Narrative 500-245277-17

Receipt

The samples were received on 01/24/24 12:20. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 12 coolers at receipt time were 2.1° C, 2.3° C, 2.6° C, 2.7° C, 3.2° C, 3.3° C, 3.9° C, 4.1° C, 4.4° C, 4.4° C, 5.1° C and 5.2° C.

Metals

Method 6020B: The initial low level calibration verification (ICVL) result for batch 752984 was above the upper control limit. The affected analytes are: Se and Sb. Sample results are below the reporting limit, and have been reported as qualified data.

Method 6020B: The continuing calibration verification (CCV) associated with batch 500-752468 recovered above the upper control limit for As, Cd, and Cr. Reported samples associated with this CCV were non-detects for the affected analytes. The associated sample is impacted: (CCV 500-752468/65).

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

General Chemistry

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

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Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_03R

Lab Sample ID: 500-245277-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lithium	0.018		0.0050	0.0020	mg/L	1			200.7 Rev 4.4	Total
Arsenic	0.00055	J	0.0010	0.00023	mg/L	1			6020B	Recoverable
Barium	0.072		0.0025	0.00073	mg/L	1			6020B	Total
Boron	0.58		0.050	0.013	mg/L	1			6020B	Recoverable
Cadmium	0.00026	J	0.00050	0.00017	mg/L	1			6020B	Total
Calcium	96		0.20	0.044	mg/L	1			6020B	Recoverable
Cobalt	0.00056	J	0.0010	0.00040	mg/L	1			6020B	Total
Lead	0.00024	J	0.00050	0.00019	mg/L	1			6020B	Recoverable
Magnesium	27		0.20	0.049	mg/L	1			6020B	Total
Molybdenum	0.089		0.0050	0.0025	mg/L	1			6020B	Recoverable
Potassium	8.1		0.50	0.11	mg/L	1			6020B	Total
Selenium	0.0021	J	0.0025	0.00098	mg/L	1			6020B	Recoverable
Sodium	65		0.20	0.077	mg/L	1			6020B	Total
Chloride	79		5.0	0.58	mg/L	5			300.0	Recoverable
Sulfate	73		5.0	1.0	mg/L	5			300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	280		5.0	3.7	mg/L	1			SM 2320B	Total/NA
Total Dissolved Solids	570		10	4.3	mg/L	1			SM 2540C	Total/NA
Fluoride	0.25		0.10	0.056	mg/L	1			SM 4500 F C	Total/NA
Depth to Water (ft from MP)	35.85				ft	1			Field Sampling	Total/NA
Field pH	7.31				SU	1			Field Sampling	Total/NA
Field Temperature	15.0				Degrees C	1			Field Sampling	Total/NA
Oxidation Reduction Potential	46.6				millivolts	1			Field Sampling	Total/NA
Oxygen, Dissolved	1.28				mg/L	1			Field Sampling	Total/NA
Specific Conductance	877				umhos/cm	1			Field Sampling	Total/NA
Turbidity	8.98				NTU	1			Field Sampling	Total/NA

Client Sample ID: HEN_03R_FD

Lab Sample ID: 500-245277-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lithium	0.017		0.0050	0.0020	mg/L	1			200.7 Rev 4.4	Total
Arsenic	0.00042	J	0.0010	0.00023	mg/L	1			6020B	Recoverable
Barium	0.069		0.0025	0.00073	mg/L	1			6020B	Total
Boron	0.61		0.050	0.013	mg/L	1			6020B	Recoverable
Cadmium	0.00019	J	0.00050	0.00017	mg/L	1			6020B	Total
Calcium	100		0.20	0.044	mg/L	1			6020B	Recoverable
Magnesium	28		0.20	0.049	mg/L	1			6020B	Total

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
HEN_845_802-805
SDG: HEN_845_802-805

Client Sample ID: HEN_03R_FD (Continued)

Lab Sample ID: 500-245277-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.088		0.0050	0.0025	mg/L	1		6020B	Total Recoverable
Potassium	8.3		0.50	0.11	mg/L	1		6020B	Total Recoverable
Selenium	0.0020	J	0.0025	0.00098	mg/L	1		6020B	Total Recoverable
Sodium	58		0.20	0.077	mg/L	1		6020B	Total Recoverable
Chloride	80		5.0	0.58	mg/L	5		300.0	Total/NA
Sulfate	74		5.0	1.0	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	580		10	4.3	mg/L	1		SM 2540C	Total/NA
Fluoride	0.25		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Depth to Water (ft from MP)	35.85				ft	1		Field Sampling	Total/NA
Field pH	7.31				SU	1		Field Sampling	Total/NA
Field Temperature	15.0				Degrees C	1		Field Sampling	Total/NA
Oxidation Reduction Potential	46.6				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.28				mg/L	1		Field Sampling	Total/NA
Specific Conductance	877				umhos/cm	1		Field Sampling	Total/NA
Turbidity	8.98				NTU	1		Field Sampling	Total/NA

Client Sample ID: HEN_08&D

Lab Sample ID: 500-245277-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.014		0.0050	0.0020	mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.00033	J	0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Barium	0.14		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.12		0.050	0.013	mg/L	1		6020B	Total Recoverable
Cadmium	0.00093		0.00050	0.00017	mg/L	1		6020B	Total Recoverable
Calcium	220		0.20	0.044	mg/L	1		6020B	Total Recoverable
Cobalt	0.0046		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lead	0.00071		0.00050	0.00019	mg/L	1		6020B	Total Recoverable
Magnesium	59		0.20	0.049	mg/L	1		6020B	Total Recoverable
Potassium	4.3		0.50	0.11	mg/L	1		6020B	Total Recoverable
Sodium	190		0.20	0.077	mg/L	1		6020B	Total Recoverable
Chloride	330		20	2.3	mg/L	20		300.0	Total/NA
Sulfate	170		5.0	1.0	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	510		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1500		10	4.3	mg/L	1		SM 2540C	Total/NA
Fluoride	0.090	J	0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Depth to Water (ft from MP)	54.09				ft	1		Field Sampling	Total/NA
Field pH	6.69				SU	1		Field Sampling	Total/NA
Field Temperature	12.5				Degrees C	1		Field Sampling	Total/NA
Oxidation Reduction Potential	86.7				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
HEN-24Q1-802-805
SDG: HEN_845_802-805

Client Sample ID: HEN_08&D (Continued)

Lab Sample ID: 500-245277-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Oxygen, Dissolved	0.50				mg/L	1		Field Sampling	Total/NA
Specific Conductance	2389				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.40				NTU	1		Field Sampling	Total/NA

Client Sample ID: HEN_18#S

Lab Sample ID: 500-245277-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.044		0.0050	0.0020	mg/L	1		200.7 Rev 4.4	Total
Arsenic	0.00078	J	0.0010	0.00023	mg/L	1		6020B	Recoverable Total
Barium	0.060		0.0025	0.00073	mg/L	1		6020B	Recoverable Total
Boron	1.7		0.050	0.013	mg/L	1		6020B	Recoverable Total
Calcium	99		0.20	0.044	mg/L	1		6020B	Recoverable Total
Magnesium	24		0.20	0.049	mg/L	1		6020B	Recoverable Total
Molybdenum	0.16		0.0050	0.0025	mg/L	1		6020B	Recoverable Total
Potassium	10		0.50	0.11	mg/L	1		6020B	Recoverable Total
Selenium	0.014		0.0025	0.00098	mg/L	1		6020B	Recoverable Total
Sodium	50		0.20	0.077	mg/L	1		6020B	Recoverable Total
Chloride	74		5.0	0.58	mg/L	5		300.0	Total/NA
Sulfate	98		5.0	1.0	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	220		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	580		10	4.3	mg/L	1		SM 2540C	Total/NA
Fluoride	0.17		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Depth to Water (ft from MP)	40.35				ft	1		Field Sampling	Total/NA
Field pH	7.49				SU	1		Field Sampling	Total/NA
Field Temperature	13.3				Degrees C	1		Field Sampling	Total/NA
Oxidation Reduction Potential	44.8				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.17				mg/L	1		Field Sampling	Total/NA
Specific Conductance	827				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.81				NTU	1		Field Sampling	Total/NA

Client Sample ID: HEN_18&D

Lab Sample ID: 500-245277-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.024		0.0050	0.0020	mg/L	1		200.7 Rev 4.4	Total
Arsenic	0.00098	J	0.0010	0.00023	mg/L	1		6020B	Recoverable Total
Barium	0.070		0.0025	0.00073	mg/L	1		6020B	Recoverable Total
Boron	1.2		0.050	0.013	mg/L	1		6020B	Recoverable Total
Cadmium	0.00036	J	0.00050	0.00017	mg/L	1		6020B	Recoverable Total
Calcium	99		0.20	0.044	mg/L	1		6020B	Recoverable Total

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_18&D (Continued)

Lab Sample ID: 500-245277-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0013	J	0.0050	0.0011	mg/L	1		6020B	Total Recoverable
Cobalt	0.0018		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lead	0.00072		0.00050	0.00019	mg/L	1		6020B	Total Recoverable
Magnesium	27		0.20	0.049	mg/L	1		6020B	Total Recoverable
Molybdenum	0.034		0.0050	0.0025	mg/L	1		6020B	Total Recoverable
Potassium	8.5		0.50	0.11	mg/L	1		6020B	Total Recoverable
Sodium	47		0.20	0.077	mg/L	1		6020B	Total Recoverable
Chloride	73		5.0	0.58	mg/L	5		300.0	Total/NA
Sulfate	95		5.0	1.0	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	260		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	590		10	4.3	mg/L	1		SM 2540C	Total/NA
Fluoride	0.15		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Depth to Water (ft from MP)	40.50				ft	1		Field Sampling	Total/NA
Field pH	7.29				SU	1		Field Sampling	Total/NA
Field Temperature	14.5				Degrees C	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-10.5				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.95				mg/L	1		Field Sampling	Total/NA
Specific Conductance	856				umhos/cm	1		Field Sampling	Total/NA
Turbidity	28.20				NTU	1		Field Sampling	Total/NA

Client Sample ID: HEN_45#S

Lab Sample ID: 500-245277-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.012		0.0050	0.0020	mg/L	1		200.7 Rev 4.4	Total Recoverable
Arsenic	0.0010		0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Barium	0.085		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.31		0.050	0.013	mg/L	1		6020B	Total Recoverable
Cadmium	0.0010		0.00050	0.00017	mg/L	1		6020B	Total Recoverable
Calcium	99		0.20	0.044	mg/L	1		6020B	Total Recoverable
Chromium	0.0018	J	0.0050	0.0011	mg/L	1		6020B	Total Recoverable
Cobalt	0.0018		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lead	0.0016		0.00050	0.00019	mg/L	1		6020B	Total Recoverable
Magnesium	29		0.20	0.049	mg/L	1		6020B	Total Recoverable
Molybdenum	0.052		0.0050	0.0025	mg/L	1		6020B	Total Recoverable
Potassium	6.2		0.50	0.11	mg/L	1		6020B	Total Recoverable
Sodium	55		0.20	0.077	mg/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_45#S (Continued)

Lab Sample ID: 500-245277-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	88		5.0	0.58	mg/L	5		300.0	Total/NA
Sulfate	67		5.0	1.0	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	300		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	610		10	4.3	mg/L	1		SM 2540C	Total/NA
Fluoride	0.25		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Depth to Water (ft from MP)	20.12				ft	1		Field Sampling	Total/NA
Field pH	7.19				SU	1		Field Sampling	Total/NA
Field Temperature	17.8				Degrees C	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-0.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.01				mg/L	1		Field Sampling	Total/NA
Specific Conductance	976				umhos/cm	1		Field Sampling	Total/NA
Turbidity	34.2				NTU	1		Field Sampling	Total/NA

Client Sample ID: HEN_07

Lab Sample ID: 500-245277-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.0052		0.0050	0.0020	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.10		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.12	B	0.050	0.013	mg/L	1		6020B	Total Recoverable
Calcium	120		0.20	0.044	mg/L	1		6020B	Total Recoverable
Cobalt	0.0075		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Magnesium	39		0.20	0.049	mg/L	1		6020B	Total Recoverable
Potassium	2.7		0.50	0.11	mg/L	1		6020B	Total Recoverable
Sodium	37		0.20	0.077	mg/L	1		6020B	Total Recoverable
Chloride	56		5.0	0.58	mg/L	5		300.0	Total/NA
Sulfate	59		5.0	1.0	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	350		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	650		10	4.3	mg/L	1		SM 2540C	Total/NA
Fluoride	0.12		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Depth to Water (ft from MP)	68.7				ft	1		Field Sampling	Total/NA
Field pH	6.97				SU	1		Field Sampling	Total/NA
Field Temperature	10.0				Degrees C	1		Field Sampling	Total/NA
Oxidation Reduction Potential	143.4				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	4.30				mg/L	1		Field Sampling	Total/NA
Specific Conductance	1026				umhos/cm	1		Field Sampling	Total/NA
Turbidity	5.90				NTU	1		Field Sampling	Total/NA

Client Sample ID: HEN_08

Lab Sample ID: 500-245277-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.013		0.0050	0.0020	mg/L	1		200.7 Rev 4.4	Total Recoverable
Barium	0.12		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.15	B	0.050	0.013	mg/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_08 (Continued)

Lab Sample ID: 500-245277-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00049	J	0.00050	0.00017	mg/L	1		6020B	Total Recoverable
Calcium	200		0.20	0.044	mg/L	1		6020B	Total Recoverable
Cobalt	0.0043		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lead	0.00031	J	0.00050	0.00019	mg/L	1		6020B	Total Recoverable
Magnesium	48		0.20	0.049	mg/L	1		6020B	Total Recoverable
Potassium	8.2		0.50	0.11	mg/L	1		6020B	Total Recoverable
Sodium	130		0.20	0.077	mg/L	1		6020B	Total Recoverable
Chloride	250		5.0	0.58	mg/L	5		300.0	Total/NA
Sulfate	120		5.0	1.0	mg/L	5		300.0	Total/NA
Bicarbonate Alkalinity as CaCO3	510		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1200		10	4.3	mg/L	1		SM 2540C	Total/NA
Fluoride	0.083	J	0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Depth to Water (ft from MP)	53.62				ft	1		Field Sampling	Total/NA
Field pH	6.78				SU	1		Field Sampling	Total/NA
Field Temperature	12.3				Degrees C	1		Field Sampling	Total/NA
Oxidation Reduction Potential	101.3				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.53				mg/L	1		Field Sampling	Total/NA
Specific Conductance	1839				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.97				NTU	1		Field Sampling	Total/NA

Client Sample ID: HEN_YSG_ILRIVER

Lab Sample ID: 500-245277-50

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Depth to Water (ft from MP)	22.07				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 509-245277-17
SDG: HEN_845_802-805

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET CHI
6020B	Metals (ICP/MS)	SW846	EET CHI
7470A	Mercury (CVAA)	SW846	EET CHI
300.0	Anions, Ion Chromatography	EPA	EET CHI
SM 2320B	Alkalinity	SM	EET CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CHI
SM 4500 F C	Fluoride	SM	EET CHI
Field Sampling	Field Sampling	EPA	EET CHI
200.7	Preparation, Total Recoverable Metals	EPA	EET CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CHI
7470A	Preparation, Mercury	SW846	EET CHI

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-245277-26	HEN_03R	Water	01/25/24 12:15	01/26/24 11:45
500-245277-27	HEN_03R_FD	Water	01/25/24 12:15	01/26/24 11:45
500-245277-30	HEN_08&D	Water	01/25/24 13:05	01/26/24 11:45
500-245277-32	HEN_18#S	Water	01/25/24 13:30	01/26/24 11:45
500-245277-33	HEN_18&D	Water	01/25/24 14:40	01/26/24 11:45
500-245277-35	HEN_45#S	Water	01/25/24 11:45	01/26/24 11:45
500-245277-39	HEN_07	Water	01/26/24 08:50	01/26/24 11:45
500-245277-40	HEN_08	Water	01/26/24 08:20	01/26/24 11:45
500-245277-50	HEN_YSG_ILRIVER	Water	01/22/24 14:20	01/26/24 11:45

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Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_03R

Lab Sample ID: 500-245277-26

Date Collected: 01/25/24 12:15

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.018		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 11:58	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/30/24 17:00	02/06/24 17:48	1
Arsenic	0.00055	J	0.0010	0.00023	mg/L		01/30/24 17:00	02/01/24 16:24	1
Barium	0.072		0.0025	0.00073	mg/L		01/30/24 17:00	02/01/24 16:24	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/30/24 17:00	02/06/24 17:48	1
Boron	0.58		0.050	0.013	mg/L		01/30/24 17:00	02/06/24 17:48	1
Cadmium	0.00026	J	0.00050	0.00017	mg/L		01/30/24 17:00	02/01/24 16:24	1
Calcium	96		0.20	0.044	mg/L		01/30/24 17:00	02/06/24 17:48	1
Chromium	<0.0050		0.0050	0.0011	mg/L		01/30/24 17:00	02/01/24 16:24	1
Cobalt	0.00056	J	0.0010	0.00040	mg/L		01/30/24 17:00	02/01/24 16:24	1
Lead	0.00024	J	0.00050	0.00019	mg/L		01/30/24 17:00	02/01/24 16:24	1
Magnesium	27		0.20	0.049	mg/L		01/30/24 17:00	02/01/24 16:24	1
Molybdenum	0.089		0.0050	0.0025	mg/L		01/30/24 17:00	02/01/24 16:24	1
Potassium	8.1		0.50	0.11	mg/L		01/30/24 17:00	02/01/24 16:24	1
Selenium	0.0021	J	0.0025	0.00098	mg/L		01/30/24 17:00	02/08/24 12:58	1
Sodium	65		0.20	0.077	mg/L		01/30/24 17:00	02/01/24 16:24	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/30/24 17:00	02/06/24 17:48	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	79		5.0	0.58	mg/L			02/03/24 14:37	5
Sulfate (EPA 300.0)	73		5.0	1.0	mg/L			02/03/24 14:37	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	280		5.0	3.7	mg/L			02/08/24 11:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 11:11	1
Total Dissolved Solids (SM 2540C)	570		10	4.3	mg/L			01/29/24 03:19	1
Fluoride (SM 4500 F C)	0.25		0.10	0.056	mg/L			02/09/24 12:17	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	35.85				ft			01/25/24 12:15	1
Field pH	7.31				SU			01/25/24 12:15	1
Field Temperature	15.0				Degrees C			01/25/24 12:15	1
Oxidation Reduction Potential	46.6				millivolts			01/25/24 12:15	1
Oxygen, Dissolved	1.28				mg/L			01/25/24 12:15	1
Specific Conductance	877				umhos/cm			01/25/24 12:15	1
Turbidity	8.98				NTU			01/25/24 12:15	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_03R_FD

Lab Sample ID: 500-245277-27

Date Collected: 01/25/24 12:15

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.017		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 12:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/30/24 17:00	02/06/24 17:51	1
Arsenic	0.00042	J	0.0010	0.00023	mg/L		01/30/24 17:00	02/01/24 16:35	1
Barium	0.069		0.0025	0.00073	mg/L		01/30/24 17:00	02/01/24 16:35	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/30/24 17:00	02/06/24 17:51	1
Boron	0.61		0.050	0.013	mg/L		01/30/24 17:00	02/01/24 16:35	1
Cadmium	0.00019	J	0.00050	0.00017	mg/L		01/30/24 17:00	02/01/24 16:35	1
Calcium	100		0.20	0.044	mg/L		01/30/24 17:00	02/06/24 17:51	1
Chromium	<0.0050		0.0050	0.0011	mg/L		01/30/24 17:00	02/01/24 16:35	1
Cobalt	<0.0010		0.0010	0.00040	mg/L		01/30/24 17:00	02/01/24 16:35	1
Lead	<0.00050		0.00050	0.00019	mg/L		01/30/24 17:00	02/01/24 16:35	1
Magnesium	28		0.20	0.049	mg/L		01/30/24 17:00	02/01/24 16:35	1
Molybdenum	0.088		0.0050	0.0025	mg/L		01/30/24 17:00	02/01/24 16:35	1
Potassium	8.3		0.50	0.11	mg/L		01/30/24 17:00	02/01/24 16:35	1
Selenium	0.0020	J	0.0025	0.00098	mg/L		01/30/24 17:00	02/08/24 13:02	1
Sodium	58		0.20	0.077	mg/L		01/30/24 17:00	02/01/24 16:35	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/30/24 17:00	02/06/24 17:51	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	F2	0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	80		5.0	0.58	mg/L			02/03/24 14:52	5
Sulfate (EPA 300.0)	74		5.0	1.0	mg/L			02/03/24 14:52	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	230		5.0	3.7	mg/L			02/08/24 11:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 11:20	1
Total Dissolved Solids (SM 2540C)	580		10	4.3	mg/L			01/29/24 03:22	1
Fluoride (SM 4500 F C)	0.25		0.10	0.056	mg/L			02/09/24 12:22	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	35.85				ft			01/25/24 12:15	1
Field pH	7.31				SU			01/25/24 12:15	1
Field Temperature	15.0				Degrees C			01/25/24 12:15	1
Oxidation Reduction Potential	46.6				millivolts			01/25/24 12:15	1
Oxygen, Dissolved	1.28				mg/L			01/25/24 12:15	1
Specific Conductance	877				umhos/cm			01/25/24 12:15	1
Turbidity	8.98				NTU			01/25/24 12:15	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_08&D

Lab Sample ID: 500-245277-30

Date Collected: 01/25/24 13:05

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.014		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 12:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/30/24 17:00	02/06/24 18:05	1
Arsenic	0.00033	J	0.0010	0.00023	mg/L		01/30/24 17:00	02/01/24 16:50	1
Barium	0.14		0.0025	0.00073	mg/L		01/30/24 17:00	02/01/24 16:50	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/30/24 17:00	02/06/24 18:05	1
Boron	0.12		0.050	0.013	mg/L		01/30/24 17:00	02/01/24 16:50	1
Cadmium	0.00093		0.00050	0.00017	mg/L		01/30/24 17:00	02/01/24 16:50	1
Calcium	220		0.20	0.044	mg/L		01/30/24 17:00	02/06/24 18:05	1
Chromium	<0.0050		0.0050	0.0011	mg/L		01/30/24 17:00	02/01/24 16:50	1
Cobalt	0.0046		0.0010	0.00040	mg/L		01/30/24 17:00	02/01/24 16:50	1
Lead	0.00071		0.00050	0.00019	mg/L		01/30/24 17:00	02/01/24 16:50	1
Magnesium	59		0.20	0.049	mg/L		01/30/24 17:00	02/01/24 16:50	1
Molybdenum	<0.0050		0.0050	0.0025	mg/L		01/30/24 17:00	02/01/24 16:50	1
Potassium	4.3		0.50	0.11	mg/L		01/30/24 17:00	02/01/24 16:50	1
Selenium	<0.0025	^1+	0.0025	0.00098	mg/L		01/30/24 17:00	02/06/24 18:05	1
Sodium	190		0.20	0.077	mg/L		01/30/24 17:00	02/01/24 16:50	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/30/24 17:00	02/06/24 18:05	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	330		20	2.3	mg/L			02/06/24 13:50	20
Sulfate (EPA 300.0)	170		5.0	1.0	mg/L			02/03/24 15:07	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	510		5.0	3.7	mg/L			02/08/24 11:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 11:47	1
Total Dissolved Solids (SM 2540C)	1500		10	4.3	mg/L			01/29/24 03:30	1
Fluoride (SM 4500 F C)	0.090	J	0.10	0.056	mg/L			02/09/24 12:46	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	54.09				ft			01/25/24 13:05	1
Field pH	6.69				SU			01/25/24 13:05	1
Field Temperature	12.5				Degrees C			01/25/24 13:05	1
Oxidation Reduction Potential	86.7				millivolts			01/25/24 13:05	1
Oxygen, Dissolved	0.50				mg/L			01/25/24 13:05	1
Specific Conductance	2389				umhos/cm			01/25/24 13:05	1
Turbidity	4.40				NTU			01/25/24 13:05	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_18#S

Lab Sample ID: 500-245277-32

Date Collected: 01/25/24 13:30

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.044		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 12:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/30/24 17:00	02/06/24 18:19	1
Arsenic	0.00078	J	0.0010	0.00023	mg/L		01/30/24 17:00	02/01/24 17:01	1
Barium	0.060		0.0025	0.00073	mg/L		01/30/24 17:00	02/01/24 17:01	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/30/24 17:00	02/06/24 18:19	1
Boron	1.7		0.050	0.013	mg/L		01/30/24 17:00	02/01/24 17:01	1
Cadmium	<0.00050		0.00050	0.00017	mg/L		01/30/24 17:00	02/01/24 17:01	1
Calcium	99		0.20	0.044	mg/L		01/30/24 17:00	02/06/24 18:19	1
Chromium	<0.0050		0.0050	0.0011	mg/L		01/30/24 17:00	02/01/24 17:01	1
Cobalt	<0.0010		0.0010	0.00040	mg/L		01/30/24 17:00	02/01/24 17:01	1
Lead	<0.00050		0.00050	0.00019	mg/L		01/30/24 17:00	02/01/24 17:01	1
Magnesium	24		0.20	0.049	mg/L		01/30/24 17:00	02/01/24 17:01	1
Molybdenum	0.16		0.0050	0.0025	mg/L		01/30/24 17:00	02/01/24 17:01	1
Potassium	10		0.50	0.11	mg/L		01/30/24 17:00	02/01/24 17:01	1
Selenium	0.014		0.0025	0.00098	mg/L		01/30/24 17:00	02/08/24 13:06	1
Sodium	50		0.20	0.077	mg/L		01/30/24 17:00	02/01/24 17:01	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/30/24 17:00	02/06/24 18:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	74		5.0	0.58	mg/L			02/03/24 15:23	5
Sulfate (EPA 300.0)	98		5.0	1.0	mg/L			02/03/24 15:23	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	220		5.0	3.7	mg/L			02/08/24 11:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 11:57	1
Total Dissolved Solids (SM 2540C)	580		10	4.3	mg/L			01/29/24 03:32	1
Fluoride (SM 4500 F C)	0.17		0.10	0.056	mg/L			02/09/24 12:51	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	40.35				ft			01/25/24 13:30	1
Field pH	7.49				SU			01/25/24 13:30	1
Field Temperature	13.3				Degrees C			01/25/24 13:30	1
Oxidation Reduction Potential	44.8				millivolts			01/25/24 13:30	1
Oxygen, Dissolved	1.17				mg/L			01/25/24 13:30	1
Specific Conductance	827				umhos/cm			01/25/24 13:30	1
Turbidity	2.81				NTU			01/25/24 13:30	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_18&D

Lab Sample ID: 500-245277-33

Date Collected: 01/25/24 14:40

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.024		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 12:23	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/30/24 17:00	02/06/24 18:26	1
Arsenic	0.00098	J	0.0010	0.00023	mg/L		01/30/24 17:00	02/01/24 17:08	1
Barium	0.070		0.0025	0.00073	mg/L		01/30/24 17:00	02/01/24 17:08	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/30/24 17:00	02/06/24 18:26	1
Boron	1.2		0.050	0.013	mg/L		01/30/24 17:00	02/01/24 17:08	1
Cadmium	0.00036	J	0.00050	0.00017	mg/L		01/30/24 17:00	02/01/24 17:08	1
Calcium	99		0.20	0.044	mg/L		01/30/24 17:00	02/06/24 18:26	1
Chromium	0.0013	J	0.0050	0.0011	mg/L		01/30/24 17:00	02/01/24 17:08	1
Cobalt	0.0018		0.0010	0.00040	mg/L		01/30/24 17:00	02/01/24 17:08	1
Lead	0.00072		0.00050	0.00019	mg/L		01/30/24 17:00	02/01/24 17:08	1
Magnesium	27		0.20	0.049	mg/L		01/30/24 17:00	02/01/24 17:08	1
Molybdenum	0.034		0.0050	0.0025	mg/L		01/30/24 17:00	02/01/24 17:08	1
Potassium	8.5		0.50	0.11	mg/L		01/30/24 17:00	02/01/24 17:08	1
Selenium	<0.0025	^1+	0.0025	0.00098	mg/L		01/30/24 17:00	02/06/24 18:26	1
Sodium	47		0.20	0.077	mg/L		01/30/24 17:00	02/01/24 17:08	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/30/24 17:00	02/06/24 18:26	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	73		5.0	0.58	mg/L			02/03/24 15:38	5
Sulfate (EPA 300.0)	95		5.0	1.0	mg/L			02/03/24 15:38	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	260		5.0	3.7	mg/L			02/08/24 12:06	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 12:06	1
Total Dissolved Solids (SM 2540C)	590		10	4.3	mg/L			01/29/24 03:35	1
Fluoride (SM 4500 F C)	0.15		0.10	0.056	mg/L			02/09/24 13:07	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	40.50				ft			01/25/24 14:40	1
Field pH	7.29				SU			01/25/24 14:40	1
Field Temperature	14.5				Degrees C			01/25/24 14:40	1
Oxidation Reduction Potential	-10.5				millivolts			01/25/24 14:40	1
Oxygen, Dissolved	0.95				mg/L			01/25/24 14:40	1
Specific Conductance	856				umhos/cm			01/25/24 14:40	1
Turbidity	28.20				NTU			01/25/24 14:40	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_45#S

Lab Sample ID: 500-245277-35

Date Collected: 01/25/24 11:45

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.012		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 12:27	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/30/24 17:00	02/06/24 18:32	1
Arsenic	0.0010		0.0010	0.00023	mg/L		01/30/24 17:00	02/01/24 17:16	1
Barium	0.085		0.0025	0.00073	mg/L		01/30/24 17:00	02/01/24 17:16	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/30/24 17:00	02/06/24 18:32	1
Boron	0.31		0.050	0.013	mg/L		01/30/24 17:00	02/01/24 17:16	1
Cadmium	0.0010		0.00050	0.00017	mg/L		01/30/24 17:00	02/01/24 17:16	1
Calcium	99		0.20	0.044	mg/L		01/30/24 17:00	02/06/24 18:32	1
Chromium	0.0018	J	0.0050	0.0011	mg/L		01/30/24 17:00	02/01/24 17:16	1
Cobalt	0.0018		0.0010	0.00040	mg/L		01/30/24 17:00	02/01/24 17:16	1
Lead	0.0016		0.00050	0.00019	mg/L		01/30/24 17:00	02/01/24 17:16	1
Magnesium	29		0.20	0.049	mg/L		01/30/24 17:00	02/01/24 17:16	1
Molybdenum	0.052		0.0050	0.0025	mg/L		01/30/24 17:00	02/01/24 17:16	1
Potassium	6.2		0.50	0.11	mg/L		01/30/24 17:00	02/01/24 17:16	1
Selenium	<0.0025	^1+	0.0025	0.00098	mg/L		01/30/24 17:00	02/06/24 18:32	1
Sodium	55		0.20	0.077	mg/L		01/30/24 17:00	02/01/24 17:16	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/30/24 17:00	02/06/24 18:32	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	88		5.0	0.58	mg/L			02/03/24 15:53	5
Sulfate (EPA 300.0)	67		5.0	1.0	mg/L			02/03/24 15:53	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	300		5.0	3.7	mg/L			02/08/24 12:27	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 12:27	1
Total Dissolved Solids (SM 2540C)	610		10	4.3	mg/L			01/29/24 03:40	1
Fluoride (SM 4500 F C)	0.25		0.10	0.056	mg/L			02/09/24 13:16	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	20.12				ft			01/25/24 11:45	1
Field pH	7.19				SU			01/25/24 11:45	1
Field Temperature	17.8				Degrees C			01/25/24 11:45	1
Oxidation Reduction Potential	-0.1				millivolts			01/25/24 11:45	1
Oxygen, Dissolved	0.01				mg/L			01/25/24 11:45	1
Specific Conductance	976				umhos/cm			01/25/24 11:45	1
Turbidity	34.2				NTU			01/25/24 11:45	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_07

Lab Sample ID: 500-245277-39

Date Collected: 01/26/24 08:50

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.0052		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 12:44	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/31/24 08:07	02/06/24 19:21	1
Arsenic	<0.0010	^+	0.0010	0.00023	mg/L		01/31/24 08:07	02/01/24 18:16	1
Barium	0.10		0.0025	0.00073	mg/L		01/31/24 08:07	02/01/24 18:16	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/31/24 08:07	02/06/24 19:21	1
Boron	0.12	B	0.050	0.013	mg/L		01/31/24 08:07	02/06/24 19:21	1
Cadmium	<0.00050	^+	0.00050	0.00017	mg/L		01/31/24 08:07	02/01/24 18:16	1
Calcium	120		0.20	0.044	mg/L		01/31/24 08:07	02/06/24 19:21	1
Chromium	<0.0050		0.0050	0.0011	mg/L		01/31/24 08:07	02/06/24 19:21	1
Cobalt	0.0075		0.0010	0.00040	mg/L		01/31/24 08:07	02/01/24 18:16	1
Lead	<0.00050		0.00050	0.00019	mg/L		01/31/24 08:07	02/01/24 18:16	1
Magnesium	39		0.20	0.049	mg/L		01/31/24 08:07	02/01/24 18:16	1
Molybdenum	<0.0050		0.0050	0.0025	mg/L		01/31/24 08:07	02/01/24 18:16	1
Potassium	2.7		0.50	0.11	mg/L		01/31/24 08:07	02/01/24 18:16	1
Selenium	<0.0025	^1+	0.0025	0.00098	mg/L		01/31/24 08:07	02/06/24 19:21	1
Sodium	37		0.20	0.077	mg/L		01/31/24 08:07	02/06/24 19:21	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/31/24 08:07	02/06/24 19:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	56		5.0	0.58	mg/L			02/03/24 17:24	5
Sulfate (EPA 300.0)	59		5.0	1.0	mg/L			02/03/24 17:24	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	350		5.0	3.7	mg/L			02/08/24 13:07	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 13:07	1
Total Dissolved Solids (SM 2540C)	650		10	4.3	mg/L			01/29/24 03:50	1
Fluoride (SM 4500 F C)	0.12		0.10	0.056	mg/L			02/09/24 13:48	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	68.7				ft			01/26/24 08:50	1
Field pH	6.97				SU			01/26/24 08:50	1
Field Temperature	10.0				Degrees C			01/26/24 08:50	1
Oxidation Reduction Potential	143.4				millivolts			01/26/24 08:50	1
Oxygen, Dissolved	4.30				mg/L			01/26/24 08:50	1
Specific Conductance	1026				umhos/cm			01/26/24 08:50	1
Turbidity	5.90				NTU			01/26/24 08:50	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_08

Lab Sample ID: 500-245277-40

Date Collected: 01/26/24 08:20

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.013		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 12:48	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/31/24 08:07	02/06/24 19:24	1
Arsenic	<0.0010	^+	0.0010	0.00023	mg/L		01/31/24 08:07	02/01/24 18:20	1
Barium	0.12		0.0025	0.00073	mg/L		01/31/24 08:07	02/01/24 18:20	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/31/24 08:07	02/06/24 19:24	1
Boron	0.15	B	0.050	0.013	mg/L		01/31/24 08:07	02/06/24 19:24	1
Cadmium	0.00049	J	0.00050	0.00017	mg/L		01/31/24 08:07	02/06/24 19:24	1
Calcium	200		0.20	0.044	mg/L		01/31/24 08:07	02/06/24 19:24	1
Chromium	<0.0050	^+	0.0050	0.0011	mg/L		01/31/24 08:07	02/01/24 18:20	1
Cobalt	0.0043		0.0010	0.00040	mg/L		01/31/24 08:07	02/01/24 18:20	1
Lead	0.00031	J	0.00050	0.00019	mg/L		01/31/24 08:07	02/01/24 18:20	1
Magnesium	48		0.20	0.049	mg/L		01/31/24 08:07	02/01/24 18:20	1
Molybdenum	<0.0050		0.0050	0.0025	mg/L		01/31/24 08:07	02/01/24 18:20	1
Potassium	8.2		0.50	0.11	mg/L		01/31/24 08:07	02/01/24 18:20	1
Selenium	<0.0025	^1+	0.0025	0.00098	mg/L		01/31/24 08:07	02/06/24 19:24	1
Sodium	130		0.20	0.077	mg/L		01/31/24 08:07	02/06/24 19:24	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/31/24 08:07	02/06/24 19:24	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 09:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	250		5.0	0.58	mg/L			02/03/24 17:39	5
Sulfate (EPA 300.0)	120		5.0	1.0	mg/L			02/03/24 17:39	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	510		5.0	3.7	mg/L			02/08/24 13:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.0		5.0	3.7	mg/L			02/08/24 13:16	1
Total Dissolved Solids (SM 2540C)	1200		10	4.3	mg/L			01/29/24 03:53	1
Fluoride (SM 4500 F C)	0.083	J	0.10	0.056	mg/L			02/09/24 13:53	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	53.62				ft			01/26/24 08:20	1
Field pH	6.78				SU			01/26/24 08:20	1
Field Temperature	12.3				Degrees C			01/26/24 08:20	1
Oxidation Reduction Potential	101.3				millivolts			01/26/24 08:20	1
Oxygen, Dissolved	0.53				mg/L			01/26/24 08:20	1
Specific Conductance	1839				umhos/cm			01/26/24 08:20	1
Turbidity	0.97				NTU			01/26/24 08:20	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Client Sample ID: HEN_YSG_ILRIVER

Lab Sample ID: 500-245277-50

Date Collected: 01/22/24 14:20

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Depth to Water (ft from MP)	22.07				ft			01/22/24 14:20	1

Definitions/Glossary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

QC Association Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Metals

Prep Batch: 752046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total Recoverable	Water	3005A	
500-245277-27	HEN_03R_FD	Total Recoverable	Water	3005A	
500-245277-30	HEN_08&D	Total Recoverable	Water	3005A	
500-245277-32	HEN_18#S	Total Recoverable	Water	3005A	
500-245277-33	HEN_18&D	Total Recoverable	Water	3005A	
500-245277-35	HEN_45#S	Total Recoverable	Water	3005A	
MB 500-752046/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-752046/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 752130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-39	HEN_07	Total Recoverable	Water	3005A	
500-245277-40	HEN_08	Total Recoverable	Water	3005A	
MB 500-752130/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-752130/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 752277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total Recoverable	Water	200.7	
500-245277-27	HEN_03R_FD	Total Recoverable	Water	200.7	
500-245277-30	HEN_08&D	Total Recoverable	Water	200.7	
500-245277-32	HEN_18#S	Total Recoverable	Water	200.7	
500-245277-33	HEN_18&D	Total Recoverable	Water	200.7	
500-245277-35	HEN_45#S	Total Recoverable	Water	200.7	
500-245277-39	HEN_07	Total Recoverable	Water	200.7	
500-245277-40	HEN_08	Total Recoverable	Water	200.7	
MB 500-752277/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 500-752277/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 752468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total Recoverable	Water	6020B	752046
500-245277-27	HEN_03R_FD	Total Recoverable	Water	6020B	752046
500-245277-30	HEN_08&D	Total Recoverable	Water	6020B	752046
500-245277-32	HEN_18#S	Total Recoverable	Water	6020B	752046
500-245277-33	HEN_18&D	Total Recoverable	Water	6020B	752046
500-245277-35	HEN_45#S	Total Recoverable	Water	6020B	752046
500-245277-39	HEN_07	Total Recoverable	Water	6020B	752130
500-245277-40	HEN_08	Total Recoverable	Water	6020B	752130
MB 500-752046/1-A	Method Blank	Total Recoverable	Water	6020B	752046
MB 500-752130/1-A	Method Blank	Total Recoverable	Water	6020B	752130
LCS 500-752046/2-A	Lab Control Sample	Total Recoverable	Water	6020B	752046
LCS 500-752130/2-A	Lab Control Sample	Total Recoverable	Water	6020B	752130

Prep Batch: 752693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	7470A	
500-245277-27	HEN_03R_FD	Total/NA	Water	7470A	
500-245277-30	HEN_08&D	Total/NA	Water	7470A	
500-245277-32	HEN_18#S	Total/NA	Water	7470A	
500-245277-33	HEN_18&D	Total/NA	Water	7470A	

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QC Association Summary

845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
HEN_245_802-805

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-17
SDG: HEN_845_802-805

Metals (Continued)

Prep Batch: 752693 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-35	HEN_45#S	Total/NA	Water	7470A	
500-245277-39	HEN_07	Total/NA	Water	7470A	
500-245277-40	HEN_08	Total/NA	Water	7470A	
MB 500-752693/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-752693/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-245277-27 MS	HEN_03R_FD	Total/NA	Water	7470A	
500-245277-27 MSD	HEN_03R_FD	Total/NA	Water	7470A	
500-245277-27 DU	HEN_03R_FD	Total/NA	Water	7470A	

Analysis Batch: 752818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total Recoverable	Water	200.7 Rev 4.4	752277
500-245277-27	HEN_03R_FD	Total Recoverable	Water	200.7 Rev 4.4	752277
500-245277-30	HEN_08&D	Total Recoverable	Water	200.7 Rev 4.4	752277
500-245277-32	HEN_18#S	Total Recoverable	Water	200.7 Rev 4.4	752277
500-245277-33	HEN_18&D	Total Recoverable	Water	200.7 Rev 4.4	752277
500-245277-35	HEN_45#S	Total Recoverable	Water	200.7 Rev 4.4	752277
500-245277-39	HEN_07	Total Recoverable	Water	200.7 Rev 4.4	752277
500-245277-40	HEN_08	Total Recoverable	Water	200.7 Rev 4.4	752277
MB 500-752277/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	752277
LCS 500-752277/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	752277

Analysis Batch: 752861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	7470A	752693
500-245277-27	HEN_03R_FD	Total/NA	Water	7470A	752693
500-245277-30	HEN_08&D	Total/NA	Water	7470A	752693
500-245277-32	HEN_18#S	Total/NA	Water	7470A	752693
500-245277-33	HEN_18&D	Total/NA	Water	7470A	752693
500-245277-35	HEN_45#S	Total/NA	Water	7470A	752693
500-245277-39	HEN_07	Total/NA	Water	7470A	752693
500-245277-40	HEN_08	Total/NA	Water	7470A	752693
MB 500-752693/12-A	Method Blank	Total/NA	Water	7470A	752693
LCS 500-752693/13-A	Lab Control Sample	Total/NA	Water	7470A	752693
500-245277-27 MS	HEN_03R_FD	Total/NA	Water	7470A	752693
500-245277-27 MSD	HEN_03R_FD	Total/NA	Water	7470A	752693
500-245277-27 DU	HEN_03R_FD	Total/NA	Water	7470A	752693

Analysis Batch: 752984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total Recoverable	Water	6020B	752046
500-245277-27	HEN_03R_FD	Total Recoverable	Water	6020B	752046
500-245277-30	HEN_08&D	Total Recoverable	Water	6020B	752046
500-245277-32	HEN_18#S	Total Recoverable	Water	6020B	752046
500-245277-33	HEN_18&D	Total Recoverable	Water	6020B	752046
500-245277-35	HEN_45#S	Total Recoverable	Water	6020B	752046
500-245277-39	HEN_07	Total Recoverable	Water	6020B	752130
500-245277-40	HEN_08	Total Recoverable	Water	6020B	752130
MB 500-752046/1-A	Method Blank	Total Recoverable	Water	6020B	752046
MB 500-752130/1-A	Method Blank	Total Recoverable	Water	6020B	752130
LCS 500-752046/2-A	Lab Control Sample	Total Recoverable	Water	6020B	752046

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QC Association Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
HEN_245_802-805
SDG: HEN_845_802-805

Metals (Continued)

Analysis Batch: 752984 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-752130/2-A	Lab Control Sample	Total Recoverable	Water	6020B	752130

Analysis Batch: 753282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total Recoverable	Water	6020B	752046
500-245277-27	HEN_03R_FD	Total Recoverable	Water	6020B	752046
500-245277-32	HEN_18#S	Total Recoverable	Water	6020B	752046

General Chemistry

Analysis Batch: 751720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	SM 2540C	
500-245277-27	HEN_03R_FD	Total/NA	Water	SM 2540C	
500-245277-30	HEN_08&D	Total/NA	Water	SM 2540C	
500-245277-32	HEN_18#S	Total/NA	Water	SM 2540C	
500-245277-33	HEN_18&D	Total/NA	Water	SM 2540C	
500-245277-35	HEN_45#S	Total/NA	Water	SM 2540C	
500-245277-39	HEN_07	Total/NA	Water	SM 2540C	
500-245277-40	HEN_08	Total/NA	Water	SM 2540C	
MB 500-751720/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-751720/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 752534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	300.0	
500-245277-27	HEN_03R_FD	Total/NA	Water	300.0	
500-245277-30	HEN_08&D	Total/NA	Water	300.0	
500-245277-32	HEN_18#S	Total/NA	Water	300.0	
500-245277-33	HEN_18&D	Total/NA	Water	300.0	
500-245277-35	HEN_45#S	Total/NA	Water	300.0	
500-245277-39	HEN_07	Total/NA	Water	300.0	
500-245277-40	HEN_08	Total/NA	Water	300.0	
MB 500-752534/3	Method Blank	Total/NA	Water	300.0	
LCS 500-752534/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 752833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-30	HEN_08&D	Total/NA	Water	300.0	
MB 500-752833/3	Method Blank	Total/NA	Water	300.0	
LCS 500-752833/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 753401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	SM 2320B	
500-245277-27	HEN_03R_FD	Total/NA	Water	SM 2320B	
500-245277-30	HEN_08&D	Total/NA	Water	SM 2320B	
500-245277-32	HEN_18#S	Total/NA	Water	SM 2320B	
500-245277-33	HEN_18&D	Total/NA	Water	SM 2320B	
500-245277-35	HEN_45#S	Total/NA	Water	SM 2320B	
500-245277-39	HEN_07	Total/NA	Water	SM 2320B	

QC Association Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
HEN_845_802-805
SDG: HEN_845_802-805

General Chemistry (Continued)

Analysis Batch: 753401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-40	HEN_08	Total/NA	Water	SM 2320B	
MB 500-753401/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-753401/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 753484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	SM 4500 F C	
500-245277-27	HEN_03R_FD	Total/NA	Water	SM 4500 F C	
500-245277-30	HEN_08&D	Total/NA	Water	SM 4500 F C	
500-245277-32	HEN_18#S	Total/NA	Water	SM 4500 F C	
500-245277-33	HEN_18&D	Total/NA	Water	SM 4500 F C	
500-245277-35	HEN_45#S	Total/NA	Water	SM 4500 F C	
500-245277-39	HEN_07	Total/NA	Water	SM 4500 F C	
500-245277-40	HEN_08	Total/NA	Water	SM 4500 F C	
MB 500-753484/3	Method Blank	Total/NA	Water	SM 4500 F C	
MB 500-753484/31	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-753484/32	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 500-753484/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 753002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	Field Sampling	
500-245277-27	HEN_03R_FD	Total/NA	Water	Field Sampling	
500-245277-30	HEN_08&D	Total/NA	Water	Field Sampling	
500-245277-32	HEN_18#S	Total/NA	Water	Field Sampling	
500-245277-33	HEN_18&D	Total/NA	Water	Field Sampling	
500-245277-35	HEN_45#S	Total/NA	Water	Field Sampling	
500-245277-39	HEN_07	Total/NA	Water	Field Sampling	
500-245277-40	HEN_08	Total/NA	Water	Field Sampling	

Analysis Batch: 753107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-50	HEN_YSG_ILRIVER	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 500-752277/1-A
Matrix: Water
Analysis Batch: 752818

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 752277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.0050		0.0050	0.0020	mg/L		02/01/24 08:29	02/05/24 11:33	1

Lab Sample ID: LCS 500-752277/2-A
Matrix: Water
Analysis Batch: 752818

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 752277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.250	0.256		mg/L		102	85 - 115

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-752046/1-A
Matrix: Water
Analysis Batch: 752468

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 752046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010	0.00023	mg/L		01/30/24 17:00	02/01/24 15:50	1
Barium	<0.0025		0.0025	0.00073	mg/L		01/30/24 17:00	02/01/24 15:50	1
Cadmium	<0.00050		0.00050	0.00017	mg/L		01/30/24 17:00	02/01/24 15:50	1
Chromium	<0.0050		0.0050	0.0011	mg/L		01/30/24 17:00	02/01/24 15:50	1
Cobalt	<0.0010		0.0010	0.00040	mg/L		01/30/24 17:00	02/01/24 15:50	1
Lead	<0.00050		0.00050	0.00019	mg/L		01/30/24 17:00	02/01/24 15:50	1
Magnesium	<0.20		0.20	0.049	mg/L		01/30/24 17:00	02/01/24 15:50	1
Molybdenum	<0.0050		0.0050	0.0025	mg/L		01/30/24 17:00	02/01/24 15:50	1
Potassium	<0.50		0.50	0.11	mg/L		01/30/24 17:00	02/01/24 15:50	1
Sodium	<0.20		0.20	0.077	mg/L		01/30/24 17:00	02/01/24 15:50	1

Lab Sample ID: MB 500-752046/1-A
Matrix: Water
Analysis Batch: 752984

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 752046

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/30/24 17:00	02/06/24 17:37	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/30/24 17:00	02/06/24 17:37	1
Boron	<0.050		0.050	0.013	mg/L		01/30/24 17:00	02/06/24 17:37	1
Calcium	<0.20		0.20	0.044	mg/L		01/30/24 17:00	02/06/24 17:37	1
Selenium	<0.0025	^1+	0.0025	0.00098	mg/L		01/30/24 17:00	02/06/24 17:37	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/30/24 17:00	02/06/24 17:37	1

Lab Sample ID: LCS 500-752046/2-A
Matrix: Water
Analysis Batch: 752468

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 752046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0944		mg/L		94	80 - 120
Barium	0.500	0.488		mg/L		98	80 - 120
Cadmium	0.0500	0.0499		mg/L		100	80 - 120
Chromium	0.200	0.206		mg/L		103	80 - 120
Cobalt	0.500	0.476		mg/L		95	80 - 120
Lead	0.100	0.0922		mg/L		92	80 - 120

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QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
HEN_845_802-805
SDG: HEN_845_802-805

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-752046/2-A
Matrix: Water
Analysis Batch: 752468

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 752046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	10.0	9.19		mg/L		92	80 - 120
Molybdenum	1.00	0.951		mg/L		95	80 - 120
Potassium	10.0	9.23		mg/L		92	80 - 120
Sodium	10.0	9.20		mg/L		92	80 - 120

Lab Sample ID: LCS 500-752046/2-A
Matrix: Water
Analysis Batch: 752984

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 752046

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.534	^1+	mg/L		107	80 - 120
Beryllium	0.0500	0.0502		mg/L		100	80 - 120
Boron	1.00	0.944		mg/L		94	80 - 120
Calcium	10.0	8.60		mg/L		86	80 - 120
Selenium	0.100	0.102	^1+	mg/L		102	80 - 120
Thallium	0.100	0.0962		mg/L		96	80 - 120

Lab Sample ID: MB 500-752130/1-A
Matrix: Water
Analysis Batch: 752468

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 752130

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010	0.00023	mg/L		01/31/24 08:07	02/01/24 17:31	1
Barium	<0.0025		0.0025	0.00073	mg/L		01/31/24 08:07	02/01/24 17:31	1
Cadmium	<0.00050		0.00050	0.00017	mg/L		01/31/24 08:07	02/01/24 17:31	1
Chromium	<0.0050		0.0050	0.0011	mg/L		01/31/24 08:07	02/01/24 17:31	1
Cobalt	<0.0010		0.0010	0.00040	mg/L		01/31/24 08:07	02/01/24 17:31	1
Lead	<0.00050		0.00050	0.00019	mg/L		01/31/24 08:07	02/01/24 17:31	1
Magnesium	<0.20		0.20	0.049	mg/L		01/31/24 08:07	02/01/24 17:31	1
Molybdenum	<0.0050		0.0050	0.0025	mg/L		01/31/24 08:07	02/01/24 17:31	1
Potassium	<0.50		0.50	0.11	mg/L		01/31/24 08:07	02/01/24 17:31	1
Sodium	0.169	J	0.20	0.077	mg/L		01/31/24 08:07	02/01/24 17:31	1

Lab Sample ID: MB 500-752130/1-A
Matrix: Water
Analysis Batch: 752984

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 752130

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030	^1+	0.0030	0.0013	mg/L		01/31/24 08:07	02/06/24 18:39	1
Beryllium	<0.0010		0.0010	0.00053	mg/L		01/31/24 08:07	02/06/24 18:39	1
Boron	0.0176	J	0.050	0.013	mg/L		01/31/24 08:07	02/06/24 18:39	1
Calcium	<0.20		0.20	0.044	mg/L		01/31/24 08:07	02/06/24 18:39	1
Selenium	<0.0025	^1+	0.0025	0.00098	mg/L		01/31/24 08:07	02/06/24 18:39	1
Thallium	<0.0020		0.0020	0.00057	mg/L		01/31/24 08:07	02/06/24 18:39	1

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-752130/2-A
Matrix: Water
Analysis Batch: 752468

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 752130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.100	0.0996		mg/L		100	80 - 120
Barium	0.500	0.465		mg/L		93	80 - 120
Cadmium	0.0500	0.0495		mg/L		99	80 - 120
Chromium	0.200	0.199		mg/L		99	80 - 120
Cobalt	0.500	0.473		mg/L		95	80 - 120
Lead	0.100	0.0893		mg/L		89	80 - 120
Magnesium	10.0	8.80		mg/L		88	80 - 120
Molybdenum	1.00	0.936		mg/L		94	80 - 120
Potassium	10.0	9.01		mg/L		90	80 - 120
Sodium	10.0	8.92		mg/L		89	80 - 120

Lab Sample ID: LCS 500-752130/2-A
Matrix: Water
Analysis Batch: 752984

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 752130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.500	0.522	^1+	mg/L		104	80 - 120
Beryllium	0.0500	0.0519		mg/L		104	80 - 120
Boron	1.00	0.914		mg/L		91	80 - 120
Calcium	10.0	8.33		mg/L		83	80 - 120
Selenium	0.100	0.100	^1+	mg/L		100	80 - 120
Thallium	0.100	0.0966		mg/L		97	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-752693/12-A
Matrix: Water
Analysis Batch: 752861

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 752693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000079	mg/L		02/05/24 10:45	02/06/24 08:36	1

Lab Sample ID: LCS 500-752693/13-A
Matrix: Water
Analysis Batch: 752861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 752693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00201	0.00224		mg/L		112	80 - 120

Lab Sample ID: 500-245277-27 MS
Matrix: Water
Analysis Batch: 752861

Client Sample ID: HEN_03R_FD
Prep Type: Total/NA
Prep Batch: 752693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.00020	F2	0.00100	0.000991		mg/L		99	75 - 125

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 500-245277-27 MSD
Matrix: Water
Analysis Batch: 752861

Client Sample ID: HEN_03R_FD
Prep Type: Total/NA
Prep Batch: 752693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.00020	F2	0.00100	0.00124	F2	mg/L		124	75 - 125	22	20

Lab Sample ID: 500-245277-27 DU
Matrix: Water
Analysis Batch: 752861

Client Sample ID: HEN_03R_FD
Prep Type: Total/NA
Prep Batch: 752693

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	<0.00020	F2	<0.00020		mg/L		NC	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-752534/3
Matrix: Water
Analysis Batch: 752534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0	0.12	mg/L			02/03/24 11:20	1
Sulfate	<1.0		1.0	0.21	mg/L			02/03/24 11:20	1

Lab Sample ID: LCS 500-752534/4
Matrix: Water
Analysis Batch: 752534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.2		mg/L		101	90 - 110
Sulfate	20.0	19.9		mg/L		99	90 - 110

Lab Sample ID: MB 500-752833/3
Matrix: Water
Analysis Batch: 752833

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		1.0	0.12	mg/L			02/06/24 11:49	1
Sulfate	<1.0		1.0	0.21	mg/L			02/06/24 11:49	1

Lab Sample ID: LCS 500-752833/4
Matrix: Water
Analysis Batch: 752833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	20.0	20.5		mg/L		102	90 - 110
Sulfate	20.0	20.0		mg/L		100	90 - 110

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-753401/3
Matrix: Water
Analysis Batch: 753401

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	3.7	mg/L			02/08/24 10:58	1
Carbonate Alkalinity as CaCO3	<5.0		5.0	3.7	mg/L			02/08/24 10:58	1

Lab Sample ID: LCS 500-753401/4
Matrix: Water
Analysis Batch: 753401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	107		mg/L		107	90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-751720/1
Matrix: Water
Analysis Batch: 751720

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	4.3	mg/L			01/29/24 02:54	1

Lab Sample ID: LCS 500-751720/2
Matrix: Water
Analysis Batch: 751720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	250	236		mg/L		94	80 - 120

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-753484/3
Matrix: Water
Analysis Batch: 753484

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10	0.056	mg/L			02/09/24 10:43	1

Lab Sample ID: MB 500-753484/31
Matrix: Water
Analysis Batch: 753484

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.10	0.056	mg/L			02/09/24 12:56	1

Lab Sample ID: LCS 500-753484/32
Matrix: Water
Analysis Batch: 753484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.90		mg/L		99	90 - 119

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
SDG: HEN_845_802-805

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-753484/4
Matrix: Water
Analysis Batch: 753484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	10.0	9.96		mg/L		100	90 - 119

Lab Chronicle

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
HEN_845_802-805
SDG: HEN_845_802-805

Client Sample ID: HEN_03R

Date Collected: 01/25/24 12:15

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 11:58
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 16:24
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 17:48
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	753282	RN	EET CHI	02/08/24 12:58
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:03
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 14:37
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 11:11
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:19
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 12:17
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/25/24 12:15

Client Sample ID: HEN_03R_FD

Date Collected: 01/25/24 12:15

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 12:02
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 16:35
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 17:51
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	753282	RN	EET CHI	02/08/24 13:02
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:05
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 14:52
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 11:20
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:22
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 12:22
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/25/24 12:15

Client Sample ID: HEN_08&D

Date Collected: 01/25/24 13:05

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 12:06

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Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-17
HEN-24-802-805
SDG: HEN_845_802-805

Client Sample ID: HEN_08&D

Lab Sample ID: 500-245277-30

Date Collected: 01/25/24 13:05

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 16:50
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 18:05
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:14
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 15:07
Total/NA	Analysis	300.0		20	752833	W1T	EET CHI	02/06/24 13:50
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 11:47
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:30
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 12:46
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/25/24 13:05

Client Sample ID: HEN_18#S

Lab Sample ID: 500-245277-32

Date Collected: 01/25/24 13:30

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 12:11
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 17:01
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 18:19
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	753282	RN	EET CHI	02/08/24 13:06
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:16
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 15:23
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 11:57
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:32
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 12:51
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/25/24 13:30

Client Sample ID: HEN_18&D

Lab Sample ID: 500-245277-33

Date Collected: 01/25/24 14:40

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 12:23
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 17:08

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ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-17
HEN-24-802-805
SDG: HEN_845_802-805

Client Sample ID: HEN_18&D

Lab Sample ID: 500-245277-33

Date Collected: 01/25/24 14:40

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 18:26
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:18
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 15:38
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 12:06
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:35
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 13:07
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/25/24 14:40

Client Sample ID: HEN_45#S

Lab Sample ID: 500-245277-35

Date Collected: 01/25/24 11:45

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 12:27
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 17:16
Total Recoverable	Prep	3005A			752046	MC	EET CHI	01/30/24 17:00 - 01/30/24 23:00 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 18:32
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:24
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 15:53
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 12:27
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:40
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 13:16
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/25/24 11:45

Client Sample ID: HEN_07

Lab Sample ID: 500-245277-39

Date Collected: 01/26/24 08:50

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 12:44
Total Recoverable	Prep	3005A			752130	BDE	EET CHI	01/31/24 08:07 - 01/31/24 14:07 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 18:16
Total Recoverable	Prep	3005A			752130	BDE	EET CHI	01/31/24 08:07 - 01/31/24 14:07 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 19:21
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:33
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 17:24
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 13:07

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ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-17
HEN_845_802-805
SDG: HEN_845_802-805

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Client Sample ID: HEN_07

Date Collected: 01/26/24 08:50

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-39

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:50
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 13:48
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/26/24 08:50

Client Sample ID: HEN_08

Date Collected: 01/26/24 08:20

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			752277	BDE	EET CHI	02/01/24 08:29 - 02/01/24 14:29 ¹
Total Recoverable	Analysis	200.7 Rev 4.4		1	752818	SJ	EET CHI	02/05/24 12:48
Total Recoverable	Prep	3005A			752130	BDE	EET CHI	01/31/24 08:07 - 01/31/24 14:07 ¹
Total Recoverable	Analysis	6020B		1	752468	RN	EET CHI	02/01/24 18:20
Total Recoverable	Prep	3005A			752130	BDE	EET CHI	01/31/24 08:07 - 01/31/24 14:07 ¹
Total Recoverable	Analysis	6020B		1	752984	RN	EET CHI	02/06/24 19:24
Total/NA	Prep	7470A			752693	MJG	EET CHI	02/05/24 10:45 - 02/05/24 12:45 ¹
Total/NA	Analysis	7470A		1	752861	MJG	EET CHI	02/06/24 09:35
Total/NA	Analysis	300.0		5	752534	W1T	EET CHI	02/03/24 17:39
Total/NA	Analysis	SM 2320B		1	753401	SO	EET CHI	02/08/24 13:16
Total/NA	Analysis	SM 2540C		1	751720	CLB	EET CHI	01/29/24 03:53
Total/NA	Analysis	SM 4500 F C		1	753484	SO	EET CHI	02/09/24 13:53
Total/NA	Analysis	Field Sampling		1	753002	DN	EET CHI	01/26/24 08:20

Client Sample ID: HEN_YSG_ILRIVER

Date Collected: 01/22/24 14:20

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-50

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Field Sampling		1	753107	DN	EET CHI	01/22/24 14:20

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
Q15 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 509-245277-17
SDG: HEN_845_802-805

Laboratory: Eurofins Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Lithium
Field Sampling		Water	Depth to Water (ft from MP)
Field Sampling		Water	Field pH
Field Sampling		Water	Field Temperature
Field Sampling		Water	Oxidation Reduction Potential
Field Sampling		Water	Oxygen, Dissolved
Field Sampling		Water	Specific Conductance
Field Sampling		Water	Turbidity
SM 2320B		Water	Bicarbonate Alkalinity as CaCO ₃
SM 2320B		Water	Carbonate Alkalinity as CaCO ₃

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Page 1 of 3

500-245277 COC

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
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TEMP = 2.6 → 2.1, 3.7 → 3.2,
1.8 → 2.3

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Vistra Corp-Hennepin	Report To: Brian Voelker	Attention: Dave McCoy
Address: 13498 E 800th St Hennepin, IL 61327	Copy To: Jason Stuckey Jason.Stuckey@vistracorp.com Sam Davies samantha.davies@vistracorp.com	Company Name: A3 Environmental
Email To: Brian.Voelker@VistraCorp.com	Purchase Order No.	Address: 3030 Warrenville Rd , Suite 418 Warrenville, IL 60532
Phone: (217) 753-8911 Fax:	Project Name:	Project Manager
Requested Due Date/TAT: 10 day	Project Number: 50022619	Profile #:
REGULATORY AGENCY		
NPDES GROUND WATER DRINKING WATER		
UST RCRA OTHER		
Site Location IL		
STATE.		

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	SAMPLE ID (A-Z, 0-9 /) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Y/N																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER. Allison Beckett					
SIGNATURE OF SAMPLER. Beckett					
DATE Signed (MM/DD/YYYY) 1/23/24					

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
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- 1
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- 12
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- 14
- 15

02/21/24

Section A
Required Client Information:

Company	Visira Corp-Hennepin	
Address	13498 E 800th St Hennepin, IL 61327	
Email To	Brian.Voelker@VisiraCorp.com	
Phone	(217) 753-8911	Fax
Requested Due Date/TAT*	10 day	

Section B
Required Project Information

Report To	Brian Voelker	
Copy To	Jason Stuckey Jason.Stuckey@visiracorp.com Sam Davies samantha.davies@visiracorp.com	
Purchase Order No		
Project Name		
Project Number	50022619	

Section C
Invoice Information

Attention	Dave McCoy	
Company Name	A3 Environmental	
Address	3030 Warrenville Rd, Suite 418 Warrenville, IL 60532	
Project Manager		
Profile #		

REGULATORY AGENCY

NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER

Site Location

STATE

IL

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Y/N	Residual Chlorine (Y/N)	Project No./ Lab I.D.
							Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other						
	SAMPLE ID (A-Z, 0-9 /) Sample IDs MUST BE UNIQUE	DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS																		
18	HEN-22&D																			
	HEN-23	WT G	1/24/24	0835		8														
	HEN-25																			
	HEN-26																			
	HEN-27																			
	HEN-30																			
	HEN-31																			
	HEN-32																			
	HEN-33																			
	HEN-34																			
	HEN-35																			
	HEN-36																			
	HEN-40#S																			
	HEN-45#S																			
19	HEN-46	WT G	1/24/24	1310		6														
20	HEN-47	WT G	1/24/24	1430		6														

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

HEN-24Q1 Rev 2

Allison Beckett A3E

1/25/24 0700

J.G. Egan

1/25/24 0840

J.G. Egan

1/25/24 1151

Stephanie Hemminger EEA

1/25/24 1151

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER

Allison Beckett

SIGNATURE of SAMPLER

Beckett

DATE Signed

(MM/DD/YY) 1/24/24

Temp in °C

Received on

Ice (Y/N)

Custody

Sealed Cooler

(Y/N)

Samples

Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately

Section A

Section B

Section C

Page 1 of 3

Required Client Information:		Required Project Information:		Invoice Information:		HENNEPIN POWER PLANT, ASH POND NO. 2 AND NO. 4		
Company	Visira Energy Corp-Hennepin	Report To:	Brian Voelker	Attention:	Dave McCoy	HEN-845-802-805		
Address	13498 E 800th St	Copy To	Jason Stuckey Jason.Stuckey@vistracorp.com Sam Davies samantha.davies@vistracorp.com	Company Name	A3 Environmental	REGULATORY AGENCY		
	Hennepin, IL 61327			Address	3030 Warrenville Rd , Suite 418	NPDES	GROUND WATER	DRINKING WATER
Email To	Brian.Voelker@VisiraCorp.com	Purchase Order No.			Warrenville, IL 60532	UST	RCRA	OTHER
Phone	(217) 753-8911	Fax:		Project Manager:		Site Location	IL	
Requested Due Date/TAT	10 day	Project Number:	50022619	Profile #:		STATE		

[illegible]

4.6+4.1, 3.8+3.3, 3.1+2.6,
3.2+2.7, 4.9+4.4

130	7
25	7

Page 1 of 3

Σ 70 Σ 200

CHAIN-OF-CUSTODY / Analytical Request Document

Report To: Brian Voelker		Company: Vista Corp-Hennepin		Address: 13498 E 800th St		Email To: Brian.Voelker@VistaCorp.com		Phone: (217) 753-8911		Requested Due Date/TAT: 10 day	
Copy To: Jason Stuckey, Jason Stuckey@vistacorp.com		Company Name: A3 Environmental		Address: 3030 Warrenville Rd, Suite 418		Project Name: Warrenville, IL 60532		Project Manager: Dave McCoy		Profile #: 50022619	
Section B Required Project Information:		Section C The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.									
Page 1 of 1											

Requested Analysis Filtered (Y/N)		Residual Chlorine (Y/N)		Project No./Lab I.D.		SAMPLE ID (A-Z 0-9 /) Sample IDs MUST BE UNIQUE		Valid Matrix Codes MATRIX DRINKING WATER WATER WASTE WATER PRODUCT P SOLICID SL CL WP AR OT TS		Required Client Information	
HEN-02		X		HEN-000		HEN-02		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-03R		X		HEN-000		HEN-03R		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-05IR		X		HEN-000		HEN-05IR		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-05&OR		X		HEN-000		HEN-05&OR		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-07		X		HEN-000		HEN-07		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-08		X		HEN-000		HEN-08		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-10		X		HEN-000		HEN-10		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-12		X		HEN-000		HEN-12		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-13		X		HEN-000		HEN-13		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-16		X		HEN-000		HEN-16		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-17		X		HEN-000		HEN-17		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-18#S		X		HEN-000		HEN-18#S		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-18&D		X		HEN-000		HEN-18&D		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-21R		X		HEN-000		HEN-21R		MATRIX		Sample IDs MUST BE UNIQUE	
HEN-22		X		HEN-000		HEN-22		MATRIX		Sample IDs MUST BE UNIQUE	
ADDITIONAL COMMENTS		DATE		TIME		RELINQUISHED BY / AFFILIATION		DATE		TIME	
HEN-24Q1 Rev 2		1/26/24		11:45		Allison Becker HSE		1/26/24		11:45	
SIGNATURE OF SAMPLER		DATE SIGNED (MM/DD/YY)		RECEIVED ON (Y/N)		CUSTODY / SEALED COOLER (Y/N)		SAMPLES INTACT (Y/N)		TEMP IN °C	
Allison Becker		1/26/24		1/26/24		1/26/24		1/26/24		1/26/24	

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
HEN-845-802-805

Login Sample Receipt Checklist

Client: Vistra Energy Corp

Job Number: 500-245277-17
SDG Number: HEN_845_802-805

Login Number: 245277

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1,3.2,2.3,3.9,5.2,5.1,4.4,4.1,3.3,2.6,2.7,4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

[illegible]

Nitric
acid. hyd.
un-
svf.

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION										
Site: Hennepin	Client: Vistra									
Project Number: 2024-0054	Task #: AB/LF	Start Date: 1-25-24	Time: 1115							
Field Personnel:	Finish Date: 1/25/24	Time: 1225								
WELL INFORMATION				EVENT TYPE						
Well ID: Hen-03R	Well Development	Low-Flow / Low Stress Sampling Other (Specify): Low Flow								
Transducer Serial #: 21615140	Well Volume Approach Sampling									
WATER QUALITY INDICATOR PARAMETERS (continued)										
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (us/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Purge	1115		35.85	3%	+1	3%	10%	10%	+10	11/60ddy
	1120		35.85	15.0	7.34	878	1.56	16.746	66.8	
	1125		35.85	14.7	7.34	876	1.60	67.70	64.7	
	1130		35.85	14.4	7.33	876	1.51	31.53	58.8	
	1135		35.85	14.4	7.33	876	1.41	73.47	55.5	
	1140		35.89	14.6	7.33	877	1.39	16.80	50.0	
	1145		35.89	14.7	7.32	876	1.35	18.50	49.7	
	1150		35.89	15.1	7.32	877	1.29	12.46	49.1	
	1155		35.90	15.0	7.32	877	1.33	13.38	49.0	
	1200		35.90	15.0	7.31	877	1.26	11.98	47.3	
	1205		35.90	15.0	7.31	877	1.27	10.04	46.6	
	1210		35.91	15.0	7.31	877	1.28	8.97	46.5	
	1215	56gal	35.9	15.0	7.31	877	1.28	8.98	46.6	
NOTES (continued)										
Timed out at 1 hr. Sample at 1215										
Dupe Sample at 1225										

15 Bottles
15 Dupe Bottles
HAD to Run Pump at a Higher Pressure to Get Water to Pump, 125/150 PSI

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin	Client: Vistra										
Project Number: 2024.0054	Task #: 125/24	Start Date: 1/25/24	Time: 1430								
Field Personnel: AB/LF	Finish Date: 1/25/24	Time: 1010									
WELL INFORMATION				EVENT TYPE							
Well ID: HEN-051R	Well Development: Well Volume Approach Sampling	Low-Flow / Low Stress Sampling Other (Specify): Low Flow									
Transducer Serial #: N/A											
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0 purg	1440	0	41.00	41.00	3%	+1	852	0.88	10%	+10	clear
5 purg	1511	1	41.00	41.00	14.6	7.70	851	1.08	40.48	124.8	"
15	1516	2	41.00	41.00	14.7	7.70	851	0.85	39.70	121.0	"
20	1521	2	41.00	41.00	14.9	7.69	853	0.83	25.99	114.4	"
25	1526		41.00	41.00	14.9	7.69	852	1.13	14.91	116.2	"
30	1531		41.00	41.00	15.0	7.69	854	1.03	12.91	104.7	murky
35	1536		41.00	41.00	15.1	7.69	856	0.94	11.80	104.0	"
40	1541	3.5	41.00	41.00	15.1	7.69	857	1.02	5.21	101.4	"
45	1546		41.00	41.00	15.2	7.69	851	0.96	8.54	100.0	"
50	1550		41.00	41.00	15.2	7.69			4.55	98.7	
NOTES (continued)										ABBREVIATIONS	
Sampled @ 1550										Cond. - Actual Conductivity FI 810C - Feet Below Top of Casing 18 - ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units	

*bladder
Pumped air into YST, but
still stabilized
* took 30 min to get water out
of wen (use high pressure)

11 bottles

PROJECT INFORMATION

25 30 35 40 45 50 55 60

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin	Client: Vistra										
Project Number: Task #: 2024-0054	Start Date: 1/20/24	Time: 0800									
Field Personnel: AB/LF	Finish Date: 1/20/24	Time: 0850									
WELL INFORMATION			EVENT TYPE								
Well ID: HEN-02			Low-Flow / Low Stress Sampling Other (Specify): Low Flow								
Transducer Serial #: 21015139			Well Development Well Volume Approach Sampling								
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (milli)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
pre	800	0	68.7		3%	+1	1025	4.66	2.37	+10	
purge	805		68.7		9.9	6.99	1037	4.40	3.97	144.2	
	810		68.7		10.1	6.97	1035	4.35	1.03	141.3	
	815		68.7		10.1	6.97	1034	4.33	1.07	140.3	
	820		68.7		10.1	6.97	1029	4.33	1.82	137.8	
	825		68.7		10.1	6.97	1026	4.23	3.26	137.8	
	830		68.7		10.0	6.97	1027	4.30	6.80	139.7	
	835		68.7		10.0	6.97	1030	4.33	6.45	141.7	
	840		68.7		10.0	6.97	1026	4.30	5.90	143.4	
	845		68.7								
	850		68.7								
NOTES (continued)										ABBREVIATIONS	
sampled @ 0850										ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units	

15 bottles

10
15
20
25
30
35
40
45
50

sampled @ 0820

16 bottles

PROJECT INFORMATION											
Site: <u>Hennepin</u>	Client: <u>Vistra</u>	Task #: <u>2024.0054</u>	Start Date: <u>1/25/24</u>	Time: <u>12:15</u>	Finish Date: <u>1/25/24</u>	Time: <u>1325</u>					
Project Number: _____	Field Personnel: _____	AB/LF _____									
WELL INFORMATION			EVENT TYPE								
Well ID: <u>HEN-089D</u>			Low-Flow / Low Stress Sampling Other (specify): <u>Low Flow</u>								
Transducer Serial #: <u>21015598</u>			Well Development Well Volume Approach Sampling								
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>pre</u>	<u>1223</u>	<u>0</u>	<u>54.09</u>		<u>3%</u>	<u>7.21</u>	<u>3%</u>	<u>10%</u>	<u>10%</u>	<u>+10</u>	<u>clear</u>
<u>purge</u>	<u>1225</u>		<u>54.09</u>		<u>10.8</u>		<u>1799</u>	<u>9.32</u>	<u>5.04</u>	<u>104.6</u>	
	<u>1230</u>		<u>54.09</u>		<u>11.9</u>	<u>0.77</u>	<u>2244</u>	<u>3.98</u>	<u>2.97</u>	<u>102.7</u>	
	<u>1235</u>	<u>1</u>	<u>54.09</u>		<u>12.4</u>	<u>0.71</u>	<u>2363</u>	<u>4.94</u>	<u>5.01</u>	<u>45.0</u>	
	<u>1240</u>		<u>54.09</u>		<u>12.4</u>	<u>0.70</u>	<u>2390</u>	<u>0.90</u>	<u>5.18</u>	<u>91.2</u>	
	<u>1245</u>		<u>54.09</u>		<u>12.5</u>	<u>0.69</u>	<u>2396</u>	<u>0.72</u>	<u>5.06</u>	<u>89.4</u>	
	<u>1250</u>		<u>54.09</u>		<u>12.4</u>	<u>0.69</u>	<u>2396</u>	<u>0.50</u>	<u>5.23</u>	<u>87.5</u>	
	<u>1255</u>		<u>54.09</u>		<u>12.4</u>	<u>0.69</u>	<u>2393</u>	<u>0.51</u>	<u>5.04</u>	<u>86.8</u>	
	<u>1300</u>	<u>2.5</u>	<u>54.09</u>		<u>12.5</u>	<u>0.69</u>	<u>2389</u>	<u>0.50</u>	<u>4.40</u>	<u>86.7</u>	
NOTES (continued)			ABBREVIATIONS								
			Cond. - Actual Conductivity PT BTOC - Feet Below Top of Casing in ft. ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units								

10 bottles

*air is being

hair is being pumped through yst from bladder, but still stabilized

Sampled @ 1305

Unpres.
sulf. acid
Hyd. acid
sod. hyd
Nitric

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM											
PROJECT INFORMATION											
Site: Hennepin		Client: Vistra									
Project Number: 2024-0054		Task #: AB/LF		Start Date: 1/24/24		Time: 1510					
Field Personnel: AB/LF		Finish Date: 1/24/24		Time: 1600							
WELL INFORMATION				EVENT TYPE							
Well ID: Hen-10				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
Transducer Serial #: N/A				Well Development Well Volume Approach Sampling							
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (us/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Pre 1510			50.71		3%	+1	950	10%	10%	+10	Clear
Purge 1515			50.71		14.2	7.17	945	3.52	.52	179.6	
1520			50.71		13.5	7.16	945	3.85	.55	176.6	
1525			50.71		13.8	7.15	945	4.01	.83	172.7	
1530			50.71		14.0	7.15	943	4.05	.83	172.7	
1535			50.71		14.1	7.15	944	3.97	.75	176.2	
1540			50.71		14.1	7.15	945	3.93	.69	176.2	
1545			50.71		14.3	7.16	944	3.93	.66	176.5	
1550			50.71		14.3	7.15	944	3.89	.59	176.9	
1555			50.71		14.3	7.15	945	3.82	.58	177.9	
1600			50.71	45A1	14.3	7.15	946	3.81	.56	178.0	
NOTES (continued)											
Sample at 1600											
13 Bottles											
Sulfuric Acid											
Nitric Acid											
Sodium Hydrox.											
Sulfuric Acid											
Hydrochloric Acid											
ABBREVIATIONS											
Cond. - Actual Conductivity FT BTDC - Feet Below Top of Casing na - Conductance SU - Standard Units ORP - Oxidation-Reduction Potential SEC - Specific Electrical											

Cond. - Ac	FT BTDC
Sampled @ 1155	air being pumped through bladder, but still stabilized

Nitric
Sulfuric
Soda Hyd

[illegible]

Sulfuric
Nitric
80d. Hyd.

PROJECT INFORMATION											
Site:	Hennepin	Client:	Vistra								
Project Number:	Task #: 2024.0054	Start Date:	1/24/24	Time:	0955						
Field Personnel:	AB/LF	Finish Date:	1/24/24	Time:	1115						
WELL INFORMATION			EVENT TYPE								
Well ID: HEN-16	Well Development			Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
Transducer Serial #: 21615534	Well Volume Approach Sampling										
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
PRE	1020	0	54.33		3%	+1	801	10%	10%	+10	CLEAR
PURGE	1021		54.34		16.1	7.34		6.55	105.84	48.4	"
	1026		54.35		12.2	7.34	792	4.30	84.45	40.6	"
	1031	0.5	54.33		16.3	7.33	811	0.78	105.32	24.2	"
	1036		54.33		16.1	7.32	813	0.75	2.309	14.8	"
	1041		54.34		16.1	7.31	813	0.52	2.602	4.2	"
	1046	1.5	54.33		16.1	7.31	812	0.46	3.50	-0.09	"
	1051		54.34		16.0	7.31	814	0.48	3.64	-4.2	"
NOTES (continued)							ABBREVIATIONS				
Sampled @ 1055							GDS - Actual Conductivity FT BTDC - Feet Below Top of Casing vs - Conductance SU - Standard Units				
DURE!							ORP - Oxidation-Reduction Potential SEC - Specific Electrical				

12 bottles

PROJECT INFORMATION											
Site: Hennepin	Client: Vistra	Task #: 2024.0054	Start Date: 1/24/24	Time: 1110							
Project Number:	LF/AB	Finish Date: 1/24/24	Time: 1155								
Field Personnel:											
WELL INFORMATION					EVENT TYPE						
Well ID: Hen-17	Well Development				Low-Flow / Low Stress Sampling Other						
Casing ID: 21615500	Well Volume Approach Sampling				**Specify: Low Flow						
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Pre	1110		58.90		3%	+1	3%	10%	10%	+10	1/00r
Purge	1110		58.90		14.3	6.96	1107	3.09	5.76	127.9	
	1115		58.90		14.0	6.96	1114	3.02	2.47	128.7	
	1120		58.90		14.0	6.96	1111	2.92	2.30	179.1	
	1125		58.90		13.9	6.96	1112	2.94	1.69	131.2	
	1130		58.90		14.1	6.97	1109	2.97	3.17	133.5	
	1135		58.90		13.9	6.99	1091	3.56	7.34	135.6	
	1140		58.90		14.1	6.97	1107	3.41	2.17	139.2	
	1145		58.90		14.0	6.97	1110	3.38	2.46	141.3	
	1150		58.90		14.1	6.97	1109	3.34	2.48	142.8	
	1155	3.56	58.90		14.1	6.99	1110	3.32	2.49	142.7	
NOTES (continued)										ABBREVIATIONS	
Bladder Pump / Clear / No Color / No odor											

Sample @ 1155	Air Bubbles in water Lane # 151
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□ □ □ □

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin		Client: Vistra		Start Date: 1/25/24		Time: 1355					
Project Number: 2024-0037		Task #: AB/LF		Finish Date: 1/25/24		Time: 1440					
Field Personnel: AB/LF											
WELL INFORMATION				EVENT TYPE							
Well ID: HEN-18011P				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
Transducer Serial #: 21015009											
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Pre	1355		40.50		3%	+1	861	10%	10%	+10	
Purge	1355		40.50		13.6	7.29	861	1.22	25.28	36.6	
	1400		40.50		14.1	7.29	859	1.14	31.24	37.5	
	1405		40.53		14.2	7.29	861	1.07	35.00	35.4	
	1410		40.53		14.2	7.29	859	1.10	42.82	22.7	
	1415		40.53		14.1	7.30	859	1.10	30.29	4.1	
	1420		40.54		14.1	7.30	858	1.05	29.60	-14.7	
	1425		40.54		14.3	7.29	857	1.02	34.29	-14.0	
	1430		40.54		14.5	7.29	858	1.02	29.22	-12.6	
	1435		40.55		14.5	7.29	856	.97	28.40	-11.7	
	1440	3.56 gal	40.55		14.5	7.29	856	.95	28.20	-10.5	
NOTES (continued)											
Sample at 1440 15 Bottles											
ABBREVIATIONS											
Cond. - Actual Conductivity FT BIOC - Feet Below Top of Casing in - ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units											

PROJECT INFORMATION											
Site:	Hennepin	Client:	Vistra								
Project Number:	Task #	Start Date:	Time:								
Field Personnel:	AB/LF	Finish Date:	Time:								
WELL INFORMATION				EVENT TYPE							
Well ID:	Low-Flow / Low Stress Sampling Other (Specify) Low Flow										
Transducer Serial #											
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mv)	Visual Clarity
PRE	1202		5.33		3%	+1	3%	10%	10%	+10	MURKY
	12015		5.39		11.1	7.59	112.1	1.82	170.10	-183.4	"
	1220	1.5	5.35		10.3	7.59	112.5	0.97	135.42	-180.4	"
	1225		5.3		10.2	7.59	112.2	1.26	131.83	-180.0	"
	1230		5.38		10.01	7.59	112.1	1.35	132.90	-178.7	"
	1235		5.38		10.01	7.59	112.1	1.38	130.21	-179.7	"
	1240										
NOTES (continued)											
Sampled @ 1240											
* Well/bladder may be damaged Sending air through											
ABBREVIATIONS											
COND - Actual Conductivity FT BTOC - Feet Below Top of Casing na - Conductance SU - Standard Units											
ORP - Oxidation-Reduction Potential SEC - Specific Electrical											

Sampled @ 1240

- *well/bladder may be damaged
- ↳ sending air through VCI, but was still stable

MS/MS

[illegible]

0	5	10	15	20	25	30
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sampled @	1500	* bladder/pump is sending air into YSI, but is still stable
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1500

YST, but is still stable

ABBREVIATIONS

Cond - Actual Conductivity	ORP - Oxidation-Reduction Potential SEC - Specific Electrical
FT BTOC - Feet Below Top of Casing na -	Conductance SU - Standard Units

PROJECT INFORMATION											
Site: <u>Hennepin</u>	Client: <u>Vistra</u>	Task #: <u>2024-0054</u>	Start Date: <u>1/24/24</u>	Time: <u>0750</u>							
Field Personnel: <u>AB/LF</u>	Finish Date: <u>1/24/24</u>	Time: <u>0852</u>									
WELL INFORMATION					EVENT TYPE						
Well ID: <u>HEN-23</u>	Well Development				Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>						
Transducer Serial #: <u>21015400</u>	Well Volume Approach Sampling										
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>pre</u>	<u>0800</u>	<u>0</u>	<u>10.48</u>		<u>3%</u>	<u>+1</u>					
<u>large</u>	<u>0805</u>		<u>10.02</u>		<u>12.1</u>	<u>7.58</u>	<u>1152</u>	<u>1.57</u>	<u>10%</u>	<u>+10</u>	<u>clear</u>
	<u>0810</u>		<u>10.00</u>		<u>12.1</u>	<u>7.51</u>	<u>1150</u>	<u>0.22</u>	<u>5.93</u>	<u>-120.1</u>	<u>"</u>
	<u>0815</u>	<u>1.5</u>	<u>10.05</u>		<u>11.0</u>	<u>7.58</u>	<u>1145</u>	<u>0.14</u>	<u>4.79</u>	<u>-151.9</u>	<u>"</u>
	<u>0820</u>		<u>10.62</u>		<u>11.3</u>	<u>7.58</u>	<u>1138</u>	<u>0.13</u>	<u>4.47</u>	<u>-154.4</u>	<u>"</u>
	<u>0825</u>		<u>10.58</u>		<u>11.4</u>	<u>7.57</u>	<u>1134</u>	<u>0.11</u>	<u>5.02</u>	<u>-152.9</u>	<u>"</u>
	<u>0830</u>		<u>10.00</u>		<u>11.5</u>	<u>7.50</u>	<u>1133</u>	<u>0.12</u>	<u>0.09</u>	<u>-148.2</u>	<u>"</u>
	<u>0835</u>	<u>2.5</u>	<u>10.00</u>		<u>11.4</u>	<u>7.50</u>	<u>1134</u>	<u>0.11</u>	<u>0.25</u>	<u>-146.9</u>	<u>"</u>
NOTES (continued)										ABBREVIATIONS	
<u>sampled @ 0835</u> <u>0835</u>										Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing na - ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units	

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin		Client: Vistra									
Project Number: 2024.005		Task #: 1123/24		Start Date: 11/23/24		Time: 0945					
Field Personnel: ABJ.F		Finish Date: 1/23/24		Time: 11/23/24							
WELL INFORMATION				EVENT TYPE							
Well ID: HEN-27				Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
Transducer Serial #: 21015576				Well Development Well Volume Approach Sampling							
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0 PRE	0949	0	3.76		3%	+1	3%	10%	10%	+10	
5 PULSED	0950		3.77		9.1	7.37	1059	1.50	12.58	71.8	Clear
10	0955	0.5	3.77		9.5	7.26	1079	0.15	10.19	13.0	
15	1000		3.77		9.7	7.25	1087	-0.17	69.90	-25.2	
20	1005		3.77		9.7	7.25	1088	-0.21	70.71	-24.2	
25	1010	1	3.77		9.9	7.25	1088	-0.26	40.75	-38.0	
30	1015		3.77		9.7	7.25	1088	-0.29	46.85	-45.5	
35	1020	1.5	3.77		9.7	7.25	1088	-0.30	32.37	-48.7	
40	1025		3.77		9.8	7.25	1088	-0.31	24.54	-52.4	
45	1030		3.77		9.8	7.25	1089	-0.32	16.42	-57.5	
50	1035	2.5	3.77		9.9	7.25	1088	-0.32	18.51	-11.2	
55	1040	2.5	3.77		9.8	7.25	1087	-0.33	18.22	-62.0	
60	1045	3	3.77		9.7	7.25	1089	-0.30	18.13	-65.4	
NOTES (continued)										ABBREVIATIONS	
Sampled @ 1045										ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units	
did not stabilize until last minute?											

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: <u>Hennepin</u>	Client: <u>Vistra</u>										
Project Number: <u>2024-0054</u>	Start Date: <u>1/23/24</u>	Time: <u>0815</u>									
Field Personnel: <u>AB/LF</u>	Finish Date: <u>1/23/24</u>	Time: <u>0940</u>									
WELL INFORMATION			EVENT TYPE								
Well ID: <u>HEN-32</u>	Well Development		Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>								
Transducer Serial #: <u>21015487</u>	Well Volume Approach Sampling										
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>PRE</u>	<u>0840</u>	<u>0.15</u>	<u>4.50</u>		<u>3%</u>	<u>+1</u>		<u>10%</u>	<u>10%</u>	<u>+10</u>	<u>murky</u>
<u>P100</u>	<u>0844</u>		<u>4.44</u>		<u>10.5</u>	<u>7.19</u>	<u>1012</u>	<u>1.43</u>	<u>140.00</u>	<u>178.0</u>	
	<u>0849</u>	<u>1</u>	<u>4.08</u>		<u>10.4</u>	<u>7.17</u>	<u>1011</u>	<u>0.08</u>	<u>87.20</u>	<u>170.7</u>	
	<u>0854</u>		<u>4.00</u>		<u>10.7</u>	<u>7.10</u>	<u>1000</u>	<u>0.33</u>	<u>72.78</u>	<u>172.0</u>	
	<u>0859</u>	<u>1.25</u>	<u>4.00</u>		<u>10.7</u>	<u>7.10</u>	<u>1001</u>	<u>0.07</u>	<u>54.83</u>	<u>105.9</u>	
	<u>0904</u>		<u>4.00</u>		<u>10.8</u>	<u>7.10</u>	<u>1002</u>	<u>0.01</u>	<u>47.03</u>	<u>103.0</u>	
	<u>0909</u>		<u>4.00</u>		<u>10.8</u>	<u>7.10</u>	<u>999</u>	<u>-0.04</u>	<u>37.19</u>	<u>159.8</u>	
	<u>0914</u>	<u>3</u>	<u>4.00</u>		<u>10.8</u>	<u>7.15</u>	<u>999</u>	<u>-0.05</u>	<u>30.09</u>	<u>158.3</u>	
	<u>0919</u>		<u>4.00</u>		<u>10.2</u>	<u>7.10</u>	<u>998</u>	<u>-0.03</u>	<u>29.80</u>	<u>153.0</u>	
	<u>0924</u>		<u>4.00</u>		<u>10.1</u>	<u>7.10</u>	<u>999</u>	<u>-0.08</u>	<u>30.01</u>	<u>157.5</u>	
	<u>0929</u>	<u>4.5</u>	<u>4.00</u>		<u>10.2</u>	<u>7.10</u>	<u>1001</u>	<u>-0.07</u>	<u>29.73</u>	<u>157.1</u>	
NOTES (continued)											
<u>sampled @ 0930</u>											
ABBREVIATIONS											
Cond - Actual Conductivity PTBDC - Feet Below Top of Casing rd - ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units											

[illegible]

0 5 10 15 20 25 30 35 40 45 50 55 60 65

PROJECT INFORMATION											
Site: Hennepin	Client: Vistra	Start Date: 1/23/24	Time: 1305	Finish Date: 1/23/24	Time: 1357						
Project Number: 2024.0054	Task #: AB/LF										
Field Personnel:											
WELL INFORMATION		EVENT TYPE									
Well ID: HEN-35	Well Development		Low-Flow / Low Stress Sampling Other (Specify): Low Flow								
Transducer Serial #: 21015510	Well Volume Approach Sampling										
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mv)	Visual Clarity
Purge	1310	0	7.90		3%	+1	3%	10%	10%	+10	Brown/oxid
	1315		7.90		11.3	7.13	796	0.54	39.42	40.8	"
	1320		7.91		11.3	7.11	806	0.08	13.75	36.1	"
	1325	1	7.92		11.4	7.11	818	-0.06	10.71	33.1	"
	1330		7.91		11.4	7.10	839	-0.13	7.49	30.7	"
	1335		7.90		11.4	7.10	842	-0.15	5.91	29.5	Cloudy
	1340	2.5	7.90		11.5	7.10	856	-0.17	5.92	28.5	"
NOTES (continued)										ABBREVIATIONS	
Sampled @ 1340										Cond. = Actual Conductivity ORP = Oxidation-Reduction Potential SEC = Specific Electrical FT 810C = Feet Below Top of Casing in = Conductance SU = Standard Units	

Sampled @ 1340

dup

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION										
Site: <u>Hennepin</u>	Client: <u>Vistra</u>									
Project Number: <u>Task #:</u>	Start Date: <u>1/25/24</u>	Time: <u>1330</u>								
Field Personnel: <u>AB/LF</u>	Finish Date: <u>1/25/24</u>	Time: <u>1430</u>								
WELL INFORMATION			EVENT TYPE							
Well ID: <u>WEN-40#5</u>			Low-Flow / Low Stress Sampling Other (Specify): <u>Low Flow</u>							
Transducer Serial #: <u>N/A</u>			Well Development Well Volume Approach Sampling							
WATER QUALITY INDICATOR PARAMETERS (continued)										
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
<u>PRC</u>	<u>1338</u>	<u>6</u>	<u>40.310</u>	<u>3%</u>	<u>+1</u>	<u>3%</u>	<u>10%</u>	<u>10%</u>	<u>+10</u>	<u>clear</u>
<u>5 purge</u>	<u>13402</u>		<u>40.36</u>	<u>13.1</u>	<u>8.03</u>	<u>777</u>	<u>8.33</u>	<u>3.86</u>	<u>122.5</u>	<u>"</u>
<u>10</u>	<u>1347</u>		<u>40.36</u>	<u>14.6</u>	<u>7.96</u>	<u>782</u>	<u>0.24</u>	<u>1.40</u>	<u>93.7</u>	<u>"</u>
<u>15</u>	<u>1352</u>	<u>1</u>	<u>40.36</u>	<u>15.0</u>	<u>7.96</u>	<u>784</u>	<u>0.24</u>	<u>1.28</u>	<u>93.5</u>	<u>"</u>
<u>20</u>	<u>1357</u>		<u>40.36</u>	<u>15.0</u>	<u>7.94</u>	<u>785</u>	<u>0.16</u>	<u>0.87</u>	<u>87.3</u>	<u>"</u>
<u>25</u>	<u>1402</u>		<u>40.36</u>	<u>14.9</u>	<u>7.94</u>	<u>784</u>	<u>0.09</u>	<u>0.26</u>	<u>81.6</u>	<u>"</u>
<u>30</u>	<u>1407</u>		<u>40.36</u>	<u>14.9</u>	<u>7.94</u>	<u>784</u>	<u>0.08</u>	<u>0.48</u>	<u>78.3</u>	<u>"</u>
<u>35</u>	<u>1412</u>	<u>2.5</u>	<u>40.36</u>	<u>15.0</u>	<u>7.94</u>	<u>784</u>	<u>0.09</u>	<u>0.91</u>	<u>74.4</u>	<u>"</u>
NOTES (continued)			ABBREVIATIONS							
Sampled @ 1415			Cond. - Actual Conductivity PT BTOC - Feet Below Top of Ceiling na - ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units							

Sampled @ 1415

11 bottles

Sulf. acid
Nit. acid
Soc. Hyd.

PROJECT INFORMATION											
Site:	Hennepin	Client:	Vistra								
Project Number:	Task # 2024 0054	Start Date:	1/25/24	Time:	1105						
Field Personnel:	AB/LF	Finish Date:	1/25/24	Time:	1205						
WELL INFORMATION		EVENT TYPE									
Well ID:	HEN-45#5		Low-Flow / Low Stress Sampling Other (Specify): Low Flow								
Transducer Serial #:	N/A										
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mv)	Visual Clarity
pre purge	1120 1120	0	20.12		3%	+1	981	10%	10%	+10	cloudy
	1125	0.5	20.12		18.0	7.36	977	0.58	124.15	14.1	"
	1130 1130		20.12		17.4	7.23	977	0.16	97.25	8.5	"
	1135		20.12		17.0	7.20	970	0.02	51.25	2.4	"
	1140		20.12		17.7	7.20	976	0.02	38.93	1.6	"
	1145		20.12		17.7	7.19	977	0.02	38.92	0.1	"
					17.8	7.19	976	0.01	34.2	-0.1	"
NOTES (continued)											
ABBREVIATIONS											
Cond - Actual Conductivity FT BIOC - Feet Below Top of casing in ft. ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units											

Sampled @ 1145

Sampled @ 1145

15 bottles

Sheen on water in bucket

unp.
hyd. acid
sulf. acid
nitric acid -
sol. Hyd

PROJECT INFORMATION											
Site:	Hemepin	Client:	Vistra								
Project Number:	Task # 2024.0854	Start Date:	1/24/24	Time:	12:25						
Field Personnel:	AB/LF	Finish Date:	1/24/24	Time:	13:10						
WELL INFORMATION		EVENT TYPE									
Well ID:	Hen-#10		Low-Flow / Low Stress Sampling Other (Specify): Low Flow								
Transducer Serial #:	21015491										
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mv)	Visual Clarity
Per	1225		51.61		3%	+1		10%	10%	+10	clear
Page	1225		51.61		14.2	7.35	846	2.45	1.33	136.7	
	1230		51.61		13.6	7.36	842	2.41	1.19	135.8	
	1235		51.61		14.5	7.36	849	2.37	1.06	131.4	
	1240		51.61		14.4	7.35	848	2.35	.79	129.9	
	1245		51.61		14.5	7.35	849	2.33	.90	128.3	
	1250		51.61		14.7	7.35	847	2.31	.77	127.1	
	1255		51.61		14.4	7.35	847	2.29	.70	124.5	
	1300		51.61		14.6	7.35	847	2.28	.75	122.5	
	1305		51.61		14.6	7.35	848	2.26	.72	120.0	
	1310	46pk	51.61		14.6	7.35	848	2.27	.70	118.5	
NOTES (continued)						ABBREVIATIONS					
						Cond. - Actual Conductivity GSP - Oxidation-Reduction Potential SEC - Specific Electrical FT BTOC - Feet Below Top of Casing na - Conductance SU - Standard Units					

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin	Client: Vistra										
Project Number:	Task #: 1/23/24	Start Date: 1/23/24	Time: 1520								
Field Personnel: AB/LF	Finish Date: 1/23/24	Time: 1040									
WELL INFORMATION				EVENT TYPE							
Well ID: HEN-49	Well Development	Low-Flow / Low Stress Sampling Other (Specify): Low Flow									
Transducer Serial #: 21029307	Well Volume Approach Sampling										
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (us/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0	1530	0	21.25		3%	+1	1028	10%	10%	+10	clear
5	1538	0.25	21.25		11.6	7.21	1028	10%	73.75	40.0	"
10	1543	0.25	21.25		9.8	7.20	1057	10%	69.100	40.2	"
15	1548	0.25	21.25		8.7	7.18	1032	10%	86.14	40.10	"
20	1553	0.25	21.25		9.1	7.16	1055	10%	110.27	51.8	"
25	1558	1.5	21.25		12.9	7.14	1053	10%	73.88	48.4	"
30	1603	2	21.25		13.1	7.16	1052	10%	72.81	46.3	cloudy
35	1608	2	21.25		13.1	7.16	1054	10%	69.98	45.3	"
40			21.25		13.0	7.16	1054	10%	80.02	44.3	"
NOTES (continued)											
Sampled @ 1610											
0.17											
ABBREVIATIONS											
Cond - Actual Conductivity FTB DC - Feet Below Top of Casing in - Conductance SU - Standard Units											
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units											

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin		Client: Vistra		Start Date: 1.24.24		Time: 8:20					
Project Number: 2024 000614		Finish Date: 1/24/24		Time: 900							
Field Personnel: AB/LF											
WELL INFORMATION					EVENT TYPE						
Well ID: HEN-51					Low-Flow / Low Stress Sampling Other (Specify): Low Flow						
Transducer Serial #: 21615008											
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
Pre-Purge	820		17.81		9.5	7.36	1087	2.15	41.66	-106.7	Cloudy
	825		17.95		9.7	7.37	1091	1.37	41.69	-128.6	
	830		17.95		9.9	7.40	1094	0.39	110.07	-156.8	
	835		17.95		10.1	7.41	1094	0.17	133.17	-165.0	
	840		17.85		10.0	7.42	1094	0.04	135.14	-171.2	
	845		17.95		9.9	7.42	1094	0.01	125.14	-174.0	
	850		17.95		9.8	7.43	1093	-0.06	111.37	-176.4	
	855		17.95		9.8	7.43	1093	-0.06	110.73	-177.0	
	900		17.95	36AL	9.9	7.42	1094	-0.06	109.77	-178.2	
NOTES (continued)										ABBREVIATIONS	
Sample at 900										Cond - Actual Conductivity FT BTDC - Feet Below Top of Casing in - ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units	
8 bottles											

Sampling at 1025

6 Bottles	no Filter Samples
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PROJECT INFORMATION											
Site:	Hennepin	Client:	Vistra								
Project Number:	Task # 2024-0054	Start Date:	1/24/24	Time:	1315						
Field Personnel:	AB/LF	Finish Date:	1/24/24	Time:	1411						
WELL INFORMATION			EVENT TYPE								
Well ID:	HENL54	Well Development	Low-Flow / Low Stress Sampling Other (specify): Low Flow								
Transducer Serial #:	21015143	Well Volume Approach Sampling									
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mv)	Visual Clarity
PCE	1324	0	53.21		3%	+1	3%	10%	10%	+10	Clear
duplicate	1325		53.20		13.4	7.53	814	6.78	5.12	75.3	"
	1335		53.20		14.1	7.36	869	2.22	7.19	58.7	"
	1340		53.21		14.2	7.36	869	1.94	7.43	53.3	"
	1345		53.20		14.3	7.36	870	1.84	6.59	48.7	"
	1350		53.20		14.4	7.35	871	1.68	5.55	44.3	"
	1355		53.20		14.4	7.35	873	1.05	4.28	39.8	"
NOTES (continued)						ABBREVIATIONS					
Sampled @ 1357 dupe!						Cond. - Actual Conductivity RT BDOC - Feet Below Top of Casing m. ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units					

Sampled @ 1357	dupe!	
		(12 bottles (inc. dupe))

0 5 10 15 20 25 30

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin		Client: Vistra									
Project Number: Task #: 2024.0054		Start Date: 1/25/24		Time: 0750							
Field Personnel: AB/LF		Finish Date: 1/25/24		Time: 0900							
WELL INFORMATION											
Well ID: HEN-XP001-Pore		Well Development		EVENT TYPE							
Transducer Serial #: N/A		Well Volume Approach Sampling		Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (Feet)	Drawdown (Feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
PR	0752		10.50		3%	+1	1080	0.53	10%	+10	Clear
Purge	0755		10.51		14.5	11.44	1080	0.53	5.75	-146.1	"
	0800	0.850	10.50		13.9	11.47	1081	0.10	4.30	-177.7	"
	0805		10.51		14.2	11.40	1082	-0.05	1.33	-213.0	"
	0810	1.25	10.52		14.1	11.47	1085	-0.07	12.11	-721.5	"
	0815		10.52		14.0	11.47	1090	-0.08	7.08	-229.2	"
	0820	2.0	10.52		14.1	11.47	1093	0.01	9.04	-233.5	"
	0825		10.52		14.2	11.47	1097	-0.07	12.40	-237.8	"
	0830	2.5	10.51		14.3	11.48	1104	-0.07	18.99	-251.5	"
	0835		10.52		13.9	11.49	1109	-0.18	11.22	-253.7	"
	0840		10.52		14.4	11.48	1116	-0.18	12.20	-257.5	"
	0845	3.0	10.52		14.4	11.48	1113	-0.18	11.89	-259.9	"
	0850										
	0855										
NOTES (continued)											
Sampled 0845											
* Water smelled like sulfur & had a sheen											
10 bottles											
no dedicated bladder											
* Used peristaltic pump											
6.08											
ABBREVIATIONS											
ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units											

WELL DEVELOPMENT AND GROUNDWATER SAMPLING FIELD FORM

PROJECT INFORMATION											
Site: Hennepin		Client: Vistra									
Project Number: Task # 2024.0054		Start Date: 1/25/24		Time: 0950							
Field Personnel: AB/LF		Finish Date: 1/25/24		Time: 1100							
WELL INFORMATION											
Well ID: HEN-XPW03-Pore		Well Development		EVENT TYPE							
Transducer Serial #: N/A		Well Volume Approach Sampling		Low-Flow / Low Stress Sampling Other (Specify): Low Flow							
WATER QUALITY INDICATOR PARAMETERS (continued)											
Sampling Stage	Time (military)	Volume Removed (gallons)	Depth to Water (feet)	Drawdown (feet)	Temp. (°C)	pH (SU)	SEC or Cond. (µs/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Visual Clarity
0 pre	0954	0	6.10		3%	+1	3%	10%	10%	+10	clear
5 purge	0956		6.27		11.3	11.95	1038	2.48	3.49	-52.1	"
10	1001		6.24		11.5	11.91	1597	0.87	1.31	-44.5	"
15	1006	1	6.25		11.5	11.92	1597	0.38	1.21	-74.9	"
20	1011		6.25		11.5	11.92	1594	0.20	1.16	-78.1	"
25	1016		6.25		11.4	11.93	1598	0.09	1.59	-82.3	"
30	1021		6.25		11.3	11.93	1598	0.09	1.13	-84.4	"
35	1026	2.5	6.25		11.4	11.93	1598	0.08	1.00	-85.7	"
NOTES (continued)										ABBREVIATIONS	
Sampled @ 1030										Cond. - Actual Conductivity FT BTOC - Feet Below Top of Casing m - ORP - Oxidation-Reduction Potential SEC - Specific Electrical Conductance SU - Standard Units	

*No dedicated bladder
used peristaltic

SAR-3: Episodic Depth to Groundwater Measurements

All DTWs on SAR-3 must be collected within 24 hours.

Plant: HEN

Event: HEN-24Q1 Rev 0

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	Comments	Initials
02	HEN_02	1/22/24	1222	44.93	DTB: 51.13	AB
04R	HEN_04R	1/22/24	1112	39.39	DTB: 45.43	AB
05DR	HEN_05&DR	1/22/24	1145	41.26	DTB: 71.29	AB
05R	HEN_05!R	1/22/24	1147	4.17	DTB: 48.79	AB
06	HEN_06	1/22/24	1002	22.54	DTB: 33.8	AB
10	HEN_10	1/22/24	1023	50.72	DTB: 51.45	AB
11	HEN_11	1/22/24	1028	50.95	DTB: 69.5	AB
15	HEN_15	1/22/24	1107	49.73	DTB: 52.81	AB
19D	HEN_19&D	1/22/24	1125	40.03	DTB: 65.44	AB
19S	HEN_19#S	1/22/24	1126	40.17	DTB: 42.57	AB
25	HEN_25	1/22/24	1527	15.62	DTB: 18.17	AB
26	HEN_26	1/22/24	1529	15.67	DTB: 27.32	AB
30	HEN_30	1/22/24	1544	6.25	DTB: 21.30	AB
31	HEN_31	1/22/24	1543	6.17	10.03: DTB	AB
33	HEN_33	1/22/24	1606	3.71	DTB: 38.16	AB
36	HEN_36	1/22/24	1430	15.70	DTB: 28.85	AB
40S	HEN_40#S	1/22/24	1133	40.49	DTB: 42.37	AB
45S	HEN_45#S	1/22/24	1015	20.24	DTB: 38.52	AB
48	HEN_48	1/22/24	1137	39.57	DTB: 45.13	AB
XPW01	HEN_XPW01_pore	1/22/24	1340	10.51	DTB: 19.73	AB
XPW02	HEN_XPW02_pore	1/22/24	1350	14.63	DTB: 21.73	AB
XPW03	HEN_XPW03_pore	1/22/24	1330	6.58	DTB: 22.04	AB
SG02	HEN_YSG_ILRIVER	1/22/24	1420	22.07	from higher elev. on bridge	AB
53	HEN_53	1/22/24	1345	55.67	U: 12/19/23 JRK DTB: 66.72	AB

go as we sample

SAR-4: Depth to Groundwater Measurements - On-site Transducer Downloads
~~All DTB's on SAR-4 form may be collected at anytime during the sampling event.~~
Plant: HEN
Event: HEN-24Q1 Rev 0

24 hours!!

Well	Unique ID	Date	Time	Measured Depth to Water (ft bmp)	On-site Transducer Data					Comments	Initials
					Data Logger Serial No.	Does Data Logger Serial No. Match?	WL Reading on Transducer (ft)	Data down-loaded?	Batt (H/M/L)		
03R	HEN_03R	1/22/24	1212	34.96	21615140	Y	447.38	Y	H	DTB: 46.93	AB
07	HEN_07	1/23/24	0720	68.78	21615139	Y	449.61	Y	H	DTB: 72.27	AB
08	HEN_08	1/22/24	1245	53.82	21615138	Y	447.54	Y	H	DTB: 53.96	AB
08D	HEN_08&D	1/22/24	1250	54.2	21615598	Y	447.21	Y	H	DTB: 84.13	AB
12	HEN_12	1/22/24	1052	51.34	21615520	Y	447.44	Y	H	DTB: 51.35	AB
13	HEN_13	1/22/24	1049	51.36	21615515	Y	447.44	Y	H	DTB: 51.91	AB
16	HEN_16	1/22/24	1315	54.38	21615534	Y	447.15	Y	H	DTB: 60.82	AB
17	HEN_17	1/22/24	1320	58.98	21615500	Y	448.39	Y	H	DTB: 61.79	AB
18D	HEN_18&D	1/22/24	1154	40.57	21615609	Y	447.41	Y	H	DTB: 72.47	AB
18S	HEN_18#S	1/22/24	1150	40.42	21615482	Y	447.38	Y	H	DTB: 42.87	AB
21R	HEN_21R	1/22/24	1440	15.48	21615613	Y	446.92	Y	H	DTB: 45.03	AB
22	HEN_22	1/22/24	1505	17.95	21615497	Y	446.82	Y	H	DTB: 27.35	AB
22D	HEN_22&D	1/22/24	1502	18.79	21564134	Y	446.92	Y	H	DTB: 53.45	AB
23	HEN_23	1/22/24	1450	16.68	21615600	Y	447.08	Y	H	DTB: 35.34	AB
27	HEN_27	1/22/24	1415	3.82	21615576	Y	446.98	Y	H	DTB: 29.95	AB
32	HEN_32	1/22/24	1550	4.64	21615487	Y	447.08	Y	H	DTB: 13.25	AB
34	HEN_34	1/22/24	1633	4.09	21615509	Y	445.9	Y	H	DTB: 30.23	AB
35	HEN_35	1/22/24	1535	7.97	21615510	Y	447.05	Y	H	DTB: 16.08	AB
46	HEN_46	1/22/24	1100	51.58	21615491	Y	446.75	Y	H	DTB: 59.39	AB
47	HEN_47	1/22/24	1030	55.84	21615505	Y	447.15	Y	H	DTB: 57.61	AB
49	HEN_49	1/22/24	1455	21.33	21629307	Y	447.08	Y	H	DTB: 38.59	AB
50	HEN_50	1/22/24	1410	17.54	21615489	Y	446.69	Y		DTB: 22.94	AB
51	HEN_51	1/22/24	1440	18.04	21615608	Y	447.08	Y	H	DTB: 58.25	AB
52	HEN_52	1/22/24	1228	53.98	21615145	Y	447.24	Y	H	DTB: 61.21	AB
54	HEN_54	1/22/24	1039	53.92	21615143	Y	447.18	Y	H	DTB: 68.29	AB
55	HEN_55	1/22/24	1045	51.55	21615612	Y	447.24	Y	H	DTB: 93.11	AB
XSG01	HEN_XSG01	1/22/24	1355	10.1	21768087	Y	483.63	Y	H	NO DTB	AB
SG02	HEN_YSG_ILRIVER	1/22/24	1420	22.87	21768088	Y	11.25	Y	H	NO DTB	AB

U: 12/19/23 JRK

ANALYTICAL REPORT

PREPARED FOR

Attn: Brian Voelker
Vistra Energy Corp
133 S 4th, Suite 206
Springfield, Illinois 62701

Generated 02/22/24 15:37:07

JOB DESCRIPTION

HEN-24Q1
HEN_000_RAD

JOB NUMBER

500-245277-2

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization



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Authorized for release by
Dirk Nelson, Project Management Assistant II
Dirk.Nelson@et.eurofinsus.com
Designee for
Donna Campbell, Manager of Project Management
Donna.Campbell@et.eurofinsus.com
(217)519-2114

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Case Narrative

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
IN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project: HEN-24Q1

Job ID: 500-245277-2

Job ID: 500-245277-2

Eurofins Chicago

Job Narrative 500-245277-2

Receipt

The samples were received on 01/24/24 12:20. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 12 coolers at receipt time were 2.1° C, 2.3° C, 2.6° C, 2.7° C, 3.2° C, 3.3° C, 3.9° C, 4.1° C, 4.4° C, 4.4° C, 5.1° C and 5.2° C.

RAD

Method 904.0: Radium-228 prep batch 160-645980:

The following samples have an RER (replicate error ratio) result outside of the acceptance criteria of 1 for 1.20. Duplicate precision is demonstrated by acceptable relative percent difference (RPD), within the limit of 40%. The data have been reported with this narrative. HEN_49_MSD (500-245277-9[MSD])

Method 904.0: Radium-228 prep batch 160-645980:

The following samples did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. HEN_21R (500-245277-1), HEN_49 (500-245277-9) and HEN_49_MS (500-245277-9[MS])

Method 904.0: Radium-228 prep batch 160-645980:

The matrix spike (MS) recoveries for preparation batch 160-645980 and analytical batch 160-647494 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 904.0: Radium-228 prep batch 160-646071:

The following samples did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interference. During preparation the analyst visually noted matrix effects. The data have been reported with this narrative. HEN_XPW01_PORE (500-245277-36)

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

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Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HENE-24Q1-005
SDG: HEN_000_RAD

Client Sample ID: HEN_21R	Lab Sample ID: 500-245277-1
☐ No Detections.	
Client Sample ID: HEN_22	Lab Sample ID: 500-245277-2
☐ No Detections.	
Client Sample ID: HEN_22&D	Lab Sample ID: 500-245277-3
☐ No Detections.	
Client Sample ID: HEN_27	Lab Sample ID: 500-245277-4
☐ No Detections.	
Client Sample ID: HEN_32	Lab Sample ID: 500-245277-5
☐ No Detections.	
Client Sample ID: HEN_34	Lab Sample ID: 500-245277-6
☐ No Detections.	
Client Sample ID: HEN_35	Lab Sample ID: 500-245277-7
☐ No Detections.	
Client Sample ID: HEN_35_FD	Lab Sample ID: 500-245277-8
☐ No Detections.	
Client Sample ID: HEN_49	Lab Sample ID: 500-245277-9
☐ No Detections.	
Client Sample ID: HEN_50	Lab Sample ID: 500-245277-10
☐ No Detections.	
Client Sample ID: HEN_12	Lab Sample ID: 500-245277-13
☐ No Detections.	
Client Sample ID: HEN_13	Lab Sample ID: 500-245277-14
☐ No Detections.	
Client Sample ID: HEN_16	Lab Sample ID: 500-245277-15
☐ No Detections.	
Client Sample ID: HEN_16_FD	Lab Sample ID: 500-245277-16
☐ No Detections.	
Client Sample ID: HEN_17	Lab Sample ID: 500-245277-17
☐ No Detections.	
Client Sample ID: HEN_23	Lab Sample ID: 500-245277-18
☐ No Detections.	

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2024-05
SDG: HEN_000_RAD

Client Sample ID: HEN_46	Lab Sample ID: 500-245277-19
☐ No Detections.	
Client Sample ID: HEN_47	Lab Sample ID: 500-245277-20
☐ No Detections.	
Client Sample ID: HEN_51	Lab Sample ID: 500-245277-21
☐ No Detections.	
Client Sample ID: HEN_52	Lab Sample ID: 500-245277-22
☐ No Detections.	
Client Sample ID: HEN_54	Lab Sample ID: 500-245277-23
☐ No Detections.	
Client Sample ID: HEN_54_FD	Lab Sample ID: 500-245277-24
☐ No Detections.	
Client Sample ID: HEN_FB	Lab Sample ID: 500-245277-25
☐ No Detections.	
Client Sample ID: HEN_03R	Lab Sample ID: 500-245277-26
☐ No Detections.	
Client Sample ID: HEN_03R_FD	Lab Sample ID: 500-245277-27
☐ No Detections.	
Client Sample ID: HEN_08&D	Lab Sample ID: 500-245277-30
☐ No Detections.	
Client Sample ID: HEN_18#S	Lab Sample ID: 500-245277-32
☐ No Detections.	
Client Sample ID: HEN_18&D	Lab Sample ID: 500-245277-33
☐ No Detections.	
Client Sample ID: HEN_45#S	Lab Sample ID: 500-245277-35
☐ No Detections.	
Client Sample ID: HEN_XPW01_PORE	Lab Sample ID: 500-245277-36
☐ No Detections.	
Client Sample ID: HEN_XPW02_PORE	Lab Sample ID: 500-245277-37
☐ No Detections.	
Client Sample ID: HEN_XPW03_PORE	Lab Sample ID: 500-245277-38
☐ No Detections.	

This Detection Summary does not include radiochemical test results.

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Detection Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_07

Lab Sample ID: 500-245277-39

No Detections.

Client Sample ID: HEN_08

Lab Sample ID: 500-245277-40

No Detections.

This Detection Summary does not include radiochemical test results.

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- 1
- 2
- 3
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Method Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 590-245277-2
HEN-24-002905
SDG: HEN_000_RAD

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2024
SDG: HEN_000_RAD

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-245277-1	HEN_21R	Water	01/23/24 12:40	01/24/24 12:20
500-245277-2	HEN_22	Water	01/23/24 15:20	01/24/24 12:20
500-245277-3	HEN_22&D	Water	01/23/24 15:00	01/24/24 12:20
500-245277-4	HEN_27	Water	01/23/24 10:45	01/24/24 12:20
500-245277-5	HEN_32	Water	01/23/24 09:30	01/24/24 12:20
500-245277-6	HEN_34	Water	01/23/24 11:50	01/24/24 12:20
500-245277-7	HEN_35	Water	01/23/24 13:40	01/24/24 12:20
500-245277-8	HEN_35_FD	Water	01/23/24 13:40	01/24/24 12:20
500-245277-9	HEN_49	Water	01/23/24 16:10	01/24/24 12:20
500-245277-10	HEN_50	Water	01/23/24 16:10	01/24/24 12:20
500-245277-13	HEN_12	Water	01/24/24 11:55	01/25/24 11:51
500-245277-14	HEN_13	Water	01/24/24 12:41	01/25/24 11:51
500-245277-15	HEN_16	Water	01/24/24 10:55	01/25/24 11:51
500-245277-16	HEN_16_FD	Water	01/24/24 10:55	01/25/24 11:51
500-245277-17	HEN_17	Water	01/24/24 11:55	01/25/24 11:51
500-245277-18	HEN_23	Water	01/24/24 08:35	01/25/24 11:51
500-245277-19	HEN_46	Water	01/24/24 13:10	01/25/24 11:51
500-245277-20	HEN_47	Water	01/24/24 14:30	01/25/24 11:51
500-245277-21	HEN_51	Water	01/24/24 09:00	01/25/24 11:51
500-245277-22	HEN_52	Water	01/24/24 10:25	01/25/24 11:51
500-245277-23	HEN_54	Water	01/24/24 13:57	01/25/24 11:51
500-245277-24	HEN_54_FD	Water	01/24/24 13:57	01/25/24 11:51
500-245277-25	HEN_FB	Water	01/24/24 16:10	01/25/24 11:51
500-245277-26	HEN_03R	Water	01/25/24 12:15	01/26/24 11:45
500-245277-27	HEN_03R_FD	Water	01/25/24 12:15	01/26/24 11:45
500-245277-30	HEN_08&D	Water	01/25/24 13:05	01/26/24 11:45
500-245277-32	HEN_18#S	Water	01/25/24 13:30	01/26/24 11:45
500-245277-33	HEN_18&D	Water	01/25/24 14:40	01/26/24 11:45
500-245277-35	HEN_45#S	Water	01/25/24 11:45	01/26/24 11:45
500-245277-36	HEN_XPW01_PORE	Water	01/25/24 08:45	01/26/24 11:45
500-245277-37	HEN_XPW02_PORE	Water	01/25/24 09:30	01/26/24 11:45
500-245277-38	HEN_XPW03_PORE	Water	01/25/24 10:30	01/26/24 11:45
500-245277-39	HEN_07	Water	01/26/24 08:50	01/26/24 11:45
500-245277-40	HEN_08	Water	01/26/24 08:20	01/26/24 11:45

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_21R

Lab Sample ID: 500-245277-1

Date Collected: 01/23/24 12:40

Matrix: Water

Date Received: 01/24/24 12:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.989		0.317	0.329	1.00	0.310	pCi/L	01/29/24 09:16	02/20/24 07:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.8		30 - 110					01/29/24 09:16	02/20/24 07:30	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.277	U F G	0.843	0.843	1.00	1.66	pCi/L	01/29/24 09:19	02/09/24 12:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	61.8		30 - 110					01/29/24 09:19	02/09/24 12:14	1
Y Carrier	84.1		30 - 110					01/29/24 09:19	02/09/24 12:14	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.989	U	0.901	0.905	5.00	1.66	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_22

Date Collected: 01/23/24 15:20

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.124		0.0805	0.0813	1.00	0.112	pCi/L	01/29/24 09:16	02/20/24 07:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					01/29/24 09:16	02/20/24 07:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.458	U F	0.411	0.413	1.00	0.654	pCi/L	01/29/24 09:19	02/09/24 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					01/29/24 09:19	02/09/24 12:15	1
Y Carrier	82.2		30 - 110					01/29/24 09:19	02/09/24 12:15	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.582	U	0.419	0.421	5.00	0.654	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_22&D

Lab Sample ID: 500-245277-3

Date Collected: 01/23/24 15:00

Matrix: Water

Date Received: 01/24/24 12:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.827		0.170	0.185	1.00	0.116	pCi/L	01/29/24 09:16	02/20/24 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		30 - 110					01/29/24 09:16	02/20/24 09:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.608	U F	0.422	0.425	1.00	0.629	pCi/L	01/29/24 09:19	02/09/24 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		30 - 110					01/29/24 09:19	02/09/24 12:15	1
Y Carrier	76.6		30 - 110					01/29/24 09:19	02/09/24 12:15	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.44		0.455	0.464	5.00	0.629	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_27

Date Collected: 01/23/24 10:45

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.138	U	0.115	0.116	1.00	0.174	pCi/L	01/29/24 09:16	02/20/24 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.4		30 - 110					01/29/24 09:16	02/20/24 09:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.374	U F	0.459	0.460	1.00	0.965	pCi/L	01/29/24 09:19	02/09/24 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.4		30 - 110					01/29/24 09:19	02/09/24 12:15	1
Y Carrier	78.5		30 - 110					01/29/24 09:19	02/09/24 12:15	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.138	U	0.473	0.474	5.00	0.965	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_32

Lab Sample ID: 500-245277-5

Date Collected: 01/23/24 09:30

Matrix: Water

Date Received: 01/24/24 12:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0920	U	0.109	0.109	1.00	0.179	pCi/L	01/29/24 09:16	02/20/24 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110					01/29/24 09:16	02/20/24 09:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.461	U F	0.537	0.539	1.00	0.883	pCi/L	01/29/24 09:19	02/09/24 12:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		30 - 110					01/29/24 09:19	02/09/24 12:15	1
Y Carrier	76.3		30 - 110					01/29/24 09:19	02/09/24 12:15	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.553	U	0.548	0.550	5.00	0.883	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_34

Lab Sample ID: 500-245277-6

Date Collected: 01/23/24 11:50

Matrix: Water

Date Received: 01/24/24 12:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.464		0.164	0.169	1.00	0.173	pCi/L	01/29/24 09:16	02/20/24 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.9		30 - 110					01/29/24 09:16	02/20/24 09:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.639	U F	0.561	0.564	1.00	0.883	pCi/L	01/29/24 09:19	02/09/24 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.9		30 - 110					01/29/24 09:19	02/09/24 12:16	1
Y Carrier	79.6		30 - 110					01/29/24 09:19	02/09/24 12:16	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.10		0.584	0.589	5.00	0.883	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Client Sample ID: HEN_35

Date Collected: 01/23/24 13:40

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-7

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0645	U	0.0696	0.0699	1.00	0.110	pCi/L	01/29/24 09:16	02/20/24 09:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.0		30 - 110					01/29/24 09:16	02/20/24 09:24	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.397	U F	0.451	0.453	1.00	0.738	pCi/L	01/29/24 09:19	02/09/24 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.0		30 - 110					01/29/24 09:19	02/09/24 12:16	1
Y Carrier	71.0		30 - 110					01/29/24 09:19	02/09/24 12:16	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.461	U	0.456	0.458	5.00	0.738	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_35_FD

Lab Sample ID: 500-245277-8

Date Collected: 01/23/24 13:40

Matrix: Water

Date Received: 01/24/24 12:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0863	U	0.0740	0.0744	1.00	0.110	pCi/L	01/29/24 09:16	02/20/24 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					01/29/24 09:16	02/20/24 09:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.298	U F	0.363	0.364	1.00	0.601	pCi/L	01/29/24 09:19	02/09/24 12:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.7		30 - 110					01/29/24 09:19	02/09/24 12:16	1
Y Carrier	78.9		30 - 110					01/29/24 09:19	02/09/24 12:16	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.384	U	0.370	0.372	5.00	0.601	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Client Sample ID: HEN_49

Lab Sample ID: 500-245277-9

Date Collected: 01/23/24 16:10

Matrix: Water

Date Received: 01/24/24 12:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.352		0.168	0.171	1.00	0.191	pCi/L	01/29/24 09:16	02/20/24 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.0		30 - 110					01/29/24 09:16	02/20/24 09:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.595	U G F	0.693	0.696	1.00	1.14	pCi/L	01/29/24 09:19	02/09/24 12:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.0		30 - 110					01/29/24 09:19	02/09/24 12:17	1
Y Carrier	80.0		30 - 110					01/29/24 09:19	02/09/24 12:17	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.947	U	0.713	0.717	5.00	1.14	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_50

Lab Sample ID: 500-245277-10

Date Collected: 01/23/24 16:10

Matrix: Water

Date Received: 01/24/24 12:20

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.426		0.124	0.130	1.00	0.105	pCi/L	01/29/24 09:16	02/20/24 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		30 - 110					01/29/24 09:16	02/20/24 09:23	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.348	U F	0.442	0.443	1.00	0.734	pCi/L	01/29/24 09:19	02/09/24 12:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		30 - 110					01/29/24 09:19	02/09/24 12:26	1
Y Carrier	75.1		30 - 110					01/29/24 09:19	02/09/24 12:26	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.774		0.459	0.462	5.00	0.734	pCi/L		02/21/24 16:16	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_12

Lab Sample ID: 500-245277-13

Date Collected: 01/24/24 11:55

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0457	U	0.0554	0.0555	1.00	0.0908	pCi/L	01/29/24 09:04	02/20/24 09:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		30 - 110					01/29/24 09:04	02/20/24 09:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.268	U	0.282	0.284	1.00	0.457	pCi/L	01/29/24 09:08	02/07/24 11:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		30 - 110					01/29/24 09:08	02/07/24 11:32	1
Y Carrier	81.5		30 - 110					01/29/24 09:08	02/07/24 11:32	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.313	U	0.287	0.289	5.00	0.457	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_13

Lab Sample ID: 500-245277-14

Date Collected: 01/24/24 12:41

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.104		0.0697	0.0703	1.00	0.0944	pCi/L	01/29/24 09:04	02/20/24 09:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		30 - 110					01/29/24 09:04	02/20/24 09:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.574		0.358	0.362	1.00	0.529	pCi/L	01/29/24 09:08	02/07/24 11:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		30 - 110					01/29/24 09:08	02/07/24 11:32	1
Y Carrier	84.9		30 - 110					01/29/24 09:08	02/07/24 11:32	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.678		0.365	0.369	5.00	0.529	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_16

Lab Sample ID: 500-245277-15

Date Collected: 01/24/24 10:55

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0833	U	0.0633	0.0638	1.00	0.0898	pCi/L	01/29/24 09:04	02/20/24 09:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		30 - 110					01/29/24 09:04	02/20/24 09:20	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.256	0.256	1.00	0.449	pCi/L	01/29/24 09:08	02/07/24 11:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		30 - 110					01/29/24 09:08	02/07/24 11:32	1
Y Carrier	86.7		30 - 110					01/29/24 09:08	02/07/24 11:32	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.198	U	0.264	0.264	5.00	0.449	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_16_FD

Lab Sample ID: 500-245277-16

Date Collected: 01/24/24 10:55

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0787		0.0575	0.0580	1.00	0.0773	pCi/L	01/29/24 09:04	02/20/24 09:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					01/29/24 09:04	02/20/24 09:21	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.188	U	0.258	0.258	1.00	0.433	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	85.2		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.266	U	0.264	0.264	5.00	0.433	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_17

Lab Sample ID: 500-245277-17

Date Collected: 01/24/24 11:55

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.132		0.0702	0.0712	1.00	0.0794	pCi/L	01/29/24 09:04	02/20/24 09:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					01/29/24 09:04	02/20/24 09:21	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.412	U	0.308	0.310	1.00	0.468	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	84.5		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.544		0.316	0.318	5.00	0.468	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_23
Date Collected: 01/24/24 08:35
Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-18
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0602	U	0.0554	0.0556	1.00	0.0815	pCi/L	01/29/24 09:04	02/20/24 09:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.2		30 - 110					01/29/24 09:04	02/20/24 09:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0436	U	0.286	0.286	1.00	0.547	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.2		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	87.1		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0602	U	0.291	0.291	5.00	0.547	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_46

Lab Sample ID: 500-245277-19

Date Collected: 01/24/24 13:10

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.151		0.0719	0.0732	1.00	0.0751	pCi/L	01/29/24 09:04	02/20/24 09:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					01/29/24 09:04	02/20/24 09:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.469	U	0.367	0.370	1.00	0.572	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	81.1		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.620		0.374	0.377	5.00	0.572	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_47

Lab Sample ID: 500-245277-20

Date Collected: 01/24/24 14:30

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0710	U	0.0615	0.0618	1.00	0.0920	pCi/L	01/29/24 09:04	02/20/24 09:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					01/29/24 09:04	02/20/24 09:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.268	U	0.262	0.263	1.00	0.419	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	85.6		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.339	U	0.269	0.270	5.00	0.419	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_51
Date Collected: 01/24/24 09:00
Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-21
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.06		0.260	0.277	1.00	0.175	pCi/L	01/29/24 09:04	02/20/24 09:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					01/29/24 09:04	02/20/24 09:22	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.871	U	0.640	0.645	1.00	0.962	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	81.1		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.93		0.691	0.702	5.00	0.962	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_52

Lab Sample ID: 500-245277-22

Date Collected: 01/24/24 10:25

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.106		0.0746	0.0752	1.00	0.104	pCi/L	01/29/24 09:04	02/20/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		30 - 110					01/29/24 09:04	02/20/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.272	U	0.273	0.274	1.00	0.438	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	85.2		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.378	U	0.283	0.284	5.00	0.438	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_54

Lab Sample ID: 500-245277-23

Date Collected: 01/24/24 13:57

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0984		0.0664	0.0670	1.00	0.0903	pCi/L	01/29/24 09:04	02/20/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					01/29/24 09:04	02/20/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.280	U	0.322	0.323	1.00	0.528	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	75.9		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.379	U	0.329	0.330	5.00	0.528	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_54_FD

Lab Sample ID: 500-245277-24

Date Collected: 01/24/24 13:57

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0507	U	0.0696	0.0697	1.00	0.117	pCi/L	01/29/24 09:04	02/20/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					01/29/24 09:04	02/20/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.430	U	0.356	0.358	1.00	0.554	pCi/L	01/29/24 09:08	02/07/24 11:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					01/29/24 09:08	02/07/24 11:31	1
Y Carrier	80.4		30 - 110					01/29/24 09:08	02/07/24 11:31	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.480	U	0.363	0.365	5.00	0.554	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Client Sample ID: HEN_FB

Lab Sample ID: 500-245277-25

Date Collected: 01/24/24 16:10

Matrix: Water

Date Received: 01/25/24 11:51

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0193	U	0.0668	0.0668	1.00	0.137	pCi/L	01/29/24 09:04	02/20/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					01/29/24 09:04	02/20/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.562		0.330	0.334	1.00	0.474	pCi/L	01/29/24 09:08	02/07/24 11:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.4		30 - 110					01/29/24 09:08	02/07/24 11:30	1
Y Carrier	84.9		30 - 110					01/29/24 09:08	02/07/24 11:30	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.562		0.337	0.341	5.00	0.474	pCi/L		02/21/24 16:02	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Client Sample ID: HEN_03R

Lab Sample ID: 500-245277-26

Date Collected: 01/25/24 12:15

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.154		0.0965	0.0975	1.00	0.134	pCi/L	01/30/24 10:07	02/21/24 09:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.4		30 - 110					01/30/24 10:07	02/21/24 09:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.165	U	0.274	0.274	1.00	0.468	pCi/L	01/30/24 10:19	02/12/24 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.4		30 - 110					01/30/24 10:19	02/12/24 12:10	1
Y Carrier	87.5		30 - 110					01/30/24 10:19	02/12/24 12:10	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.319	U	0.290	0.291	5.00	0.468	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_03R_FD

Lab Sample ID: 500-245277-27

Date Collected: 01/25/24 12:15

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0358	U	0.0550	0.0551	1.00	0.0950	pCi/L	01/30/24 10:07	02/21/24 09:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					01/30/24 10:07	02/21/24 09:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0519	U	0.248	0.248	1.00	0.451	pCi/L	01/30/24 10:19	02/12/24 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		30 - 110					01/30/24 10:19	02/12/24 12:10	1
Y Carrier	90.8		30 - 110					01/30/24 10:19	02/12/24 12:10	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0877	U	0.254	0.254	5.00	0.451	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_08&D

Lab Sample ID: 500-245277-30

Date Collected: 01/25/24 13:05

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.175		0.0968	0.0981	1.00	0.122	pCi/L	01/30/24 10:07	02/21/24 09:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					01/30/24 10:07	02/21/24 09:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.214	U	0.305	0.306	1.00	0.513	pCi/L	01/30/24 10:19	02/12/24 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					01/30/24 10:19	02/12/24 12:10	1
Y Carrier	93.8		30 - 110					01/30/24 10:19	02/12/24 12:10	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.389	U	0.320	0.321	5.00	0.513	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_18#S

Lab Sample ID: 500-245277-32

Date Collected: 01/25/24 13:30

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00865	U	0.0545	0.0545	1.00	0.109	pCi/L	01/30/24 10:07	02/21/24 09:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					01/30/24 10:07	02/21/24 09:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.753		0.402	0.408	1.00	0.567	pCi/L	01/30/24 10:19	02/12/24 12:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		30 - 110					01/30/24 10:19	02/12/24 12:10	1
Y Carrier	81.5		30 - 110					01/30/24 10:19	02/12/24 12:10	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.761		0.406	0.412	5.00	0.567	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Client Sample ID: HEN_18&D

Lab Sample ID: 500-245277-33

Date Collected: 01/25/24 14:40

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.207		0.139	0.141	1.00	0.203	pCi/L	01/30/24 10:07	02/21/24 09:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.6		30 - 110					01/30/24 10:07	02/21/24 09:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.679	U	0.473	0.477	1.00	0.713	pCi/L	01/30/24 10:19	02/12/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.6		30 - 110					01/30/24 10:19	02/12/24 12:09	1
Y Carrier	84.9		30 - 110					01/30/24 10:19	02/12/24 12:09	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.886		0.493	0.497	5.00	0.713	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_45#S

Lab Sample ID: 500-245277-35

Date Collected: 01/25/24 11:45

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.211		0.143	0.145	1.00	0.206	pCi/L	01/30/24 10:07	02/21/24 09:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					01/30/24 10:07	02/21/24 09:37	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.610	U	0.455	0.458	1.00	0.693	pCi/L	01/30/24 10:19	02/12/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		30 - 110					01/30/24 10:19	02/12/24 12:09	1
Y Carrier	89.7		30 - 110					01/30/24 10:19	02/12/24 12:09	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.821		0.477	0.480	5.00	0.693	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_XPW01_PORE

Lab Sample ID: 500-245277-36

Date Collected: 01/25/24 08:45

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00893	U	0.187	0.187	1.00	0.371	pCi/L	01/30/24 10:07	02/21/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	34.1		30 - 110					01/30/24 10:07	02/21/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.21	U G	1.14	1.14	1.00	1.80	pCi/L	01/30/24 10:19	02/12/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	34.1		30 - 110					01/30/24 10:19	02/12/24 12:09	1
Y Carrier	83.4		30 - 110					01/30/24 10:19	02/12/24 12:09	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.21	U	1.16	1.16	5.00	1.80	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_XPW02_PORE

Lab Sample ID: 500-245277-37

Date Collected: 01/25/24 09:30

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0873	U	0.0721	0.0725	1.00	0.106	pCi/L	01/30/24 10:07	02/21/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					01/30/24 10:07	02/21/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.39		0.449	0.467	1.00	0.525	pCi/L	01/30/24 10:19	02/12/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		30 - 110					01/30/24 10:19	02/12/24 12:09	1
Y Carrier	84.1		30 - 110					01/30/24 10:19	02/12/24 12:09	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.48		0.455	0.473	5.00	0.525	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_XPW03_PORE

Lab Sample ID: 500-245277-38

Date Collected: 01/25/24 10:30

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00643	U	0.0495	0.0495	1.00	0.0997	pCi/L	01/30/24 10:07	02/21/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		30 - 110					01/30/24 10:07	02/21/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.473	U	0.350	0.353	1.00	0.536	pCi/L	01/30/24 10:19	02/12/24 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		30 - 110					01/30/24 10:19	02/12/24 12:09	1
Y Carrier	84.5		30 - 110					01/30/24 10:19	02/12/24 12:09	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.480	U	0.353	0.356	5.00	0.536	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_07
Date Collected: 01/26/24 08:50
Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-39
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.241		0.0927	0.0952	1.00	0.0943	pCi/L	01/30/24 10:07	02/21/24 09:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		30 - 110					01/30/24 10:07	02/21/24 09:32	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.706		0.356	0.362	1.00	0.494	pCi/L	01/30/24 10:19	02/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		30 - 110					01/30/24 10:19	02/12/24 12:08	1
Y Carrier	81.9		30 - 110					01/30/24 10:19	02/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.947		0.368	0.374	5.00	0.494	pCi/L		02/22/24 13:59	1

Client Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
245 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_08

Lab Sample ID: 500-245277-40

Date Collected: 01/26/24 08:20

Matrix: Water

Date Received: 01/26/24 11:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.455		0.130	0.136	1.00	0.121	pCi/L	01/30/24 10:07	02/21/24 18:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					01/30/24 10:07	02/21/24 18:16	1

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.953		0.382	0.392	1.00	0.479	pCi/L	01/30/24 10:19	02/12/24 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					01/30/24 10:19	02/12/24 12:08	1
Y Carrier	87.5		30 - 110					01/30/24 10:19	02/12/24 12:08	1

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.41		0.404	0.415	5.00	0.479	pCi/L		02/22/24 13:59	1

Definitions/Glossary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2025-002-005
SDG: HEN_000_RAD

Qualifiers

Rad

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits
F1	MS and/or MSD recovery exceeds control limits.
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

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

QC Association Summary

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-000-0005
SDG: HEN_000_RAD

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Rad

Prep Batch: 645975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-13	HEN_12	Total/NA	Water	PrecSep-21	
500-245277-14	HEN_13	Total/NA	Water	PrecSep-21	
500-245277-15	HEN_16	Total/NA	Water	PrecSep-21	
500-245277-16	HEN_16_FD	Total/NA	Water	PrecSep-21	
500-245277-17	HEN_17	Total/NA	Water	PrecSep-21	
500-245277-18	HEN_23	Total/NA	Water	PrecSep-21	
500-245277-19	HEN_46	Total/NA	Water	PrecSep-21	
500-245277-20	HEN_47	Total/NA	Water	PrecSep-21	
500-245277-21	HEN_51	Total/NA	Water	PrecSep-21	
500-245277-22	HEN_52	Total/NA	Water	PrecSep-21	
500-245277-23	HEN_54	Total/NA	Water	PrecSep-21	
500-245277-24	HEN_54_FD	Total/NA	Water	PrecSep-21	
500-245277-25	HEN_FB	Total/NA	Water	PrecSep-21	
MB 160-645975/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-645975/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 645976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-13	HEN_12	Total/NA	Water	PrecSep_0	
500-245277-14	HEN_13	Total/NA	Water	PrecSep_0	
500-245277-15	HEN_16	Total/NA	Water	PrecSep_0	
500-245277-16	HEN_16_FD	Total/NA	Water	PrecSep_0	
500-245277-17	HEN_17	Total/NA	Water	PrecSep_0	
500-245277-18	HEN_23	Total/NA	Water	PrecSep_0	
500-245277-19	HEN_46	Total/NA	Water	PrecSep_0	
500-245277-20	HEN_47	Total/NA	Water	PrecSep_0	
500-245277-21	HEN_51	Total/NA	Water	PrecSep_0	
500-245277-22	HEN_52	Total/NA	Water	PrecSep_0	
500-245277-23	HEN_54	Total/NA	Water	PrecSep_0	
500-245277-24	HEN_54_FD	Total/NA	Water	PrecSep_0	
500-245277-25	HEN_FB	Total/NA	Water	PrecSep_0	
MB 160-645976/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-645976/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 645979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-1	HEN_21R	Total/NA	Water	PrecSep-21	
500-245277-2	HEN_22	Total/NA	Water	PrecSep-21	
500-245277-3	HEN_22&D	Total/NA	Water	PrecSep-21	
500-245277-4	HEN_27	Total/NA	Water	PrecSep-21	
500-245277-5	HEN_32	Total/NA	Water	PrecSep-21	
500-245277-6	HEN_34	Total/NA	Water	PrecSep-21	
500-245277-7	HEN_35	Total/NA	Water	PrecSep-21	
500-245277-8	HEN_35_FD	Total/NA	Water	PrecSep-21	
500-245277-9	HEN_49	Total/NA	Water	PrecSep-21	
500-245277-10	HEN_50	Total/NA	Water	PrecSep-21	
MB 160-645979/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-645979/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-245277-1 MS	HEN_21R_MS	Total/NA	Water	PrecSep-21	
500-245277-1 MSD	HEN_21R_MSD	Total/NA	Water	PrecSep-21	
500-245277-9 MS	HEN_49_MS	Total/NA	Water	PrecSep-21	

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QC Association Summary

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Rad (Continued)

Prep Batch: 645979 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-9 MSD	HEN_49_MSD	Total/NA	Water	PrecSep-21	

Prep Batch: 645980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-1	HEN_21R	Total/NA	Water	PrecSep_0	
500-245277-2	HEN_22	Total/NA	Water	PrecSep_0	
500-245277-3	HEN_22&D	Total/NA	Water	PrecSep_0	
500-245277-4	HEN_27	Total/NA	Water	PrecSep_0	
500-245277-5	HEN_32	Total/NA	Water	PrecSep_0	
500-245277-6	HEN_34	Total/NA	Water	PrecSep_0	
500-245277-7	HEN_35	Total/NA	Water	PrecSep_0	
500-245277-8	HEN_35_FD	Total/NA	Water	PrecSep_0	
500-245277-9	HEN_49	Total/NA	Water	PrecSep_0	
500-245277-10	HEN_50	Total/NA	Water	PrecSep_0	
MB 160-645980/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-645980/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-245277-1 MS	HEN_21R_MS	Total/NA	Water	PrecSep_0	
500-245277-1 MSD	HEN_21R_MSD	Total/NA	Water	PrecSep_0	
500-245277-9 MS	HEN_49_MS	Total/NA	Water	PrecSep_0	
500-245277-9 MSD	HEN_49_MSD	Total/NA	Water	PrecSep_0	

Prep Batch: 646070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	PrecSep-21	
500-245277-27	HEN_03R_FD	Total/NA	Water	PrecSep-21	
500-245277-30	HEN_08&D	Total/NA	Water	PrecSep-21	
500-245277-32	HEN_18#S	Total/NA	Water	PrecSep-21	
500-245277-33	HEN_18&D	Total/NA	Water	PrecSep-21	
500-245277-35	HEN_45#S	Total/NA	Water	PrecSep-21	
500-245277-36	HEN_XPW01_PORE	Total/NA	Water	PrecSep-21	
500-245277-37	HEN_XPW02_PORE	Total/NA	Water	PrecSep-21	
500-245277-38	HEN_XPW03_PORE	Total/NA	Water	PrecSep-21	
500-245277-39	HEN_07	Total/NA	Water	PrecSep-21	
500-245277-40	HEN_08	Total/NA	Water	PrecSep-21	
MB 160-646070/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-646070/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 646071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-245277-26	HEN_03R	Total/NA	Water	PrecSep_0	
500-245277-27	HEN_03R_FD	Total/NA	Water	PrecSep_0	
500-245277-30	HEN_08&D	Total/NA	Water	PrecSep_0	
500-245277-32	HEN_18#S	Total/NA	Water	PrecSep_0	
500-245277-33	HEN_18&D	Total/NA	Water	PrecSep_0	
500-245277-35	HEN_45#S	Total/NA	Water	PrecSep_0	
500-245277-36	HEN_XPW01_PORE	Total/NA	Water	PrecSep_0	
500-245277-37	HEN_XPW02_PORE	Total/NA	Water	PrecSep_0	
500-245277-38	HEN_XPW03_PORE	Total/NA	Water	PrecSep_0	
500-245277-39	HEN_07	Total/NA	Water	PrecSep_0	
500-245277-40	HEN_08	Total/NA	Water	PrecSep_0	
MB 160-646071/1-A	Method Blank	Total/NA	Water	PrecSep_0	

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QC Association Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 590-245277-2
HEN-24-002905
SDG: HEN_000_RAD

Rad (Continued)

Prep Batch: 646071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-646071/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 590-245277-2
HEN-24Q1-005
SDG: HEN_000_RAD

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-645975/1-A
Matrix: Water
Analysis Batch: 648921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 645975

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.001936	U	0.0429	0.0429	1.00	0.0908	pCi/L	01/29/24 09:04	02/20/24 09:19	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110					01/29/24 09:04	02/20/24 09:19	1

Lab Sample ID: LCS 160-645975/2-A
Matrix: Water
Analysis Batch: 648921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 645975

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		11.3	11.19		1.14	1.00	0.104	pCi/L	99	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	96.9		30 - 110							

Lab Sample ID: MB 160-645979/1-A
Matrix: Water
Analysis Batch: 648923

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 645979

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04712	U	0.0692	0.0693	1.00	0.118	pCi/L	01/29/24 09:16	02/20/24 07:30	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.7		30 - 110					01/29/24 09:16	02/20/24 07:30	1

Lab Sample ID: LCS 160-645979/2-A
Matrix: Water
Analysis Batch: 648923

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 645979

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		11.3	11.03		1.14	1.00	0.0951	pCi/L	97	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Ba Carrier	93.4		30 - 110							

Lab Sample ID: 500-245277-1 MS
Matrix: Water
Analysis Batch: 648923

Client Sample ID: HEN_21R_MS
Prep Type: Total/NA
Prep Batch: 645979

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	0.989		22.9	25.36		2.88	1.00	0.584	pCi/L	106	60 - 140

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QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 500-245277-1 MS
Matrix: Water
Analysis Batch: 648923

Client Sample ID: HEN_21R_MS
Prep Type: Total/NA
Prep Batch: 645979

	MS	MS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	39.4		30 - 110

Lab Sample ID: 500-245277-1 MSD
Matrix: Water
Analysis Batch: 648923

Client Sample ID: HEN_21R_MSD
Prep Type: Total/NA
Prep Batch: 645979

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	0.989		22.6	22.21		2.36	1.00	0.314	pCi/L	94	60 - 140	0.60	1
	MSD	MSD											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	76.3		30 - 110										

Lab Sample ID: 500-245277-9 MS
Matrix: Water
Analysis Batch: 648923

Client Sample ID: HEN_49_MS
Prep Type: Total/NA
Prep Batch: 645979

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226	0.352		15.2	16.29		1.80	1.00	0.226	pCi/L	105	60 - 140		
	MS	MS											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	47.1		30 - 110										

Lab Sample ID: 500-245277-9 MSD
Matrix: Water
Analysis Batch: 648923

Client Sample ID: HEN_49_MSD
Prep Type: Total/NA
Prep Batch: 645979

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226	0.352		15.0	13.19		1.40	1.00	0.181	pCi/L	85	60 - 140	0.97	1
	MSD	MSD											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	87.0		30 - 110										

Lab Sample ID: MB 160-646070/1-A
Matrix: Water
Analysis Batch: 649031

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 646070

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0007762	U	0.0540	0.0540	1.00	0.112	pCi/L	01/30/24 10:07	02/21/24 09:26	1
	MB	MB								
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		30 - 110					01/30/24 10:07	02/21/24 09:26	1

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QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 590-245277-2
HEN-24Q1-2905
SDG: HEN_000_RAD

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-646070/2-A
Matrix: Water
Analysis Batch: 649031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 646070

					Total								
			Spike	LCS	LCS	Uncert.							
Analyte			Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	%Rec		
Radium-226			11.3	12.38		1.28	1.00	0.0957	pCi/L	109	75 - 125		
		LCS	LCS										
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	86.3		30 - 110										

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-645976/1-A
Matrix: Water
Analysis Batch: 647133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 645976

			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2216	U	0.242	0.243	1.00	0.394	pCi/L	01/29/24 09:08	02/07/24 11:32	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		30 - 110					01/29/24 09:08	02/07/24 11:32	1
Y Carrier	84.5		30 - 110					01/29/24 09:08	02/07/24 11:32	1

Lab Sample ID: LCS 160-645976/2-A
Matrix: Water
Analysis Batch: 647133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 645976

					Total								
Analyte			Spike Added	LCS Result	LCS Qual	Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.23	9.352		1.24	1.00	0.429	pCi/L	101	75 - 125		
		LCS %Yield	LCS Qualifier										
Carrier													
Ba Carrier		96.9		30 - 110									
Y Carrier		84.1		30 - 110									

Lab Sample ID: MB 160-645980/1-A
Matrix: Water
Analysis Batch: 647494

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 645980

			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08091	U	0.321	0.321	1.00	0.583	pCi/L	01/29/24 09:19	02/09/24 12:13	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.7		30 - 110					01/29/24 09:19	02/09/24 12:13	1
Y Carrier	82.6		30 - 110					01/29/24 09:19	02/09/24 12:13	1

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-645980/2-A
Matrix: Water
Analysis Batch: 647494

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 645980

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.23	9.609		1.31	1.00	0.474	pCi/L	104	75 - 125		
	LCS	LCS											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	93.4		30 - 110										
Y Carrier	83.4		30 - 110										

Lab Sample ID: 500-245277-1 MS
Matrix: Water
Analysis Batch: 647494

Client Sample ID: HEN_21R_MS
Prep Type: Total/NA
Prep Batch: 645980

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228	-0.277	U F G	18.7	33.06	F1	5.16	1.00	2.69	pCi/L	177	60 - 140		
	MS	MS											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	39.4		30 - 110										
Y Carrier	77.4		30 - 110										

Lab Sample ID: 500-245277-1 MSD
Matrix: Water
Analysis Batch: 647494

Client Sample ID: HEN_21R_MSD
Prep Type: Total/NA
Prep Batch: 645980

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	-0.277	U F G	18.4	23.84		3.39	1.00	1.47	pCi/L	129	60 - 140	1.08	1
	MSD	MSD											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	76.3		30 - 110										
Y Carrier	71.4		30 - 110										

Lab Sample ID: 500-245277-9 MS
Matrix: Water
Analysis Batch: 647494

Client Sample ID: HEN_49_MS
Prep Type: Total/NA
Prep Batch: 645980

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228	0.595	U G F	12.4	17.66		2.80	1.00	1.38	pCi/L	138	60 - 140		
	MS	MS											
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	47.1		30 - 110										
Y Carrier	75.9		30 - 110										

QC Sample Results

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 590-245277-2
HEN-24Q1-2405
SDG: HEN_000_RAD

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 500-245277-9 MSD
Matrix: Water
Analysis Batch: 647494

Client Sample ID: HEN_49_MSD
Prep Type: Total/NA
Prep Batch: 645980

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228	0.595	U G F	12.2	12.23	F	1.75	1.00	0.748	pCi/L	95	60 - 140	1.20	1
Carrier	%Yield	MSD Qualifier	MSD Limits										
Ba Carrier	87.0		30 - 110										
Y Carrier	80.0		30 - 110										

Lab Sample ID: MB 160-646071/1-A
Matrix: Water
Analysis Batch: 647898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 646071

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2745	U	0.275	0.276	1.00	0.441	pCi/L	01/30/24 10:19	02/12/24 11:55	1
Carrier	%Yield	MB Qualifier	MB Limits							
Ba Carrier	88.0		30 - 110							
Y Carrier	88.2		30 - 110							

Lab Sample ID: LCS 160-646071/2-A
Matrix: Water
Analysis Batch: 647898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 646071

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	9.22	10.05		1.34	1.00	0.482	pCi/L	109	75 - 125
Carrier	%Yield	LCS Qualifier	LCS Limits						
Ba Carrier	86.3		30 - 110						
Y Carrier	87.9		30 - 110						

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_21R

Date Collected: 01/23/24 12:40

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 07:30
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_22

Date Collected: 01/23/24 15:20

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648924	FLC	EET SL	02/20/24 07:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_22&D

Date Collected: 01/23/24 15:00

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_27

Date Collected: 01/23/24 10:45

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_32

Date Collected: 01/23/24 09:30

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_34

Date Collected: 01/23/24 11:50

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_35

Date Collected: 01/23/24 13:40

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:24
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_35_FD

Date Collected: 01/23/24 13:40

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_49

Date Collected: 01/23/24 16:10

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647494	SCB	EET SL	02/09/24 12:17
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_50

Date Collected: 01/23/24 16:10

Date Received: 01/24/24 12:20

Lab Sample ID: 500-245277-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645979	KAC	EET SL	01/29/24 09:16
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:23
Total/NA	Prep	PrecSep_0			645980	KAC	EET SL	01/29/24 09:19
Total/NA	Analysis	904.0		1	647515	SCB	EET SL	02/09/24 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	649062	SCB	EET SL	02/21/24 16:16

Client Sample ID: HEN_12

Date Collected: 01/24/24 11:55

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:20
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:32
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_13

Date Collected: 01/24/24 12:41

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:20
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:32
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-000-005
SDG: HEN_000_RAD

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Client Sample ID: HEN_16

Date Collected: 01/24/24 10:55

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:20
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:32
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_16_FD

Date Collected: 01/24/24 10:55

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:21
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_17

Date Collected: 01/24/24 11:55

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:21
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_23

Date Collected: 01/24/24 08:35

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:22
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
HEN-000-2405
SDG: HEN_000_RAD

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Client Sample ID: HEN_46

Date Collected: 01/24/24 13:10

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:22
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_47

Date Collected: 01/24/24 14:30

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:22
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_51

Date Collected: 01/24/24 09:00

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648921	FLC	EET SL	02/20/24 09:22
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_52

Date Collected: 01/24/24 10:25

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:32
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_54

Date Collected: 01/24/24 13:57

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:32
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_54_FD

Date Collected: 01/24/24 13:57

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:32
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_FB

Date Collected: 01/24/24 16:10

Date Received: 01/25/24 11:51

Lab Sample ID: 500-245277-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			645975	KAC	EET SL	01/29/24 09:04
Total/NA	Analysis	903.0		1	648923	FLC	EET SL	02/20/24 09:32
Total/NA	Prep	PrecSep_0			645976	KAC	EET SL	01/29/24 09:08
Total/NA	Analysis	904.0		1	647133	FLC	EET SL	02/07/24 11:30
Total/NA	Analysis	Ra226_Ra228 Pos		1	649061	SCB	EET SL	02/21/24 16:02

Client Sample ID: HEN_03R

Date Collected: 01/25/24 12:15

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649033	FLC	EET SL	02/21/24 09:37
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_03R_FD

Lab Sample ID: 500-245277-27

Date Collected: 01/25/24 12:15

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649033	FLC	EET SL	02/21/24 09:37
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Client Sample ID: HEN_08&D

Lab Sample ID: 500-245277-30

Date Collected: 01/25/24 13:05

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649033	FLC	EET SL	02/21/24 09:37
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Client Sample ID: HEN_18#S

Lab Sample ID: 500-245277-32

Date Collected: 01/25/24 13:30

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649033	FLC	EET SL	02/21/24 09:37
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Client Sample ID: HEN_18&D

Lab Sample ID: 500-245277-33

Date Collected: 01/25/24 14:40

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649033	FLC	EET SL	02/21/24 09:37
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-2
SDG: HEN_000_RAD

Client Sample ID: HEN_45#S

Lab Sample ID: 500-245277-35

Date Collected: 01/25/24 11:45

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649033	FLC	EET SL	02/21/24 09:37
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Client Sample ID: HEN_XPW01_PORE

Lab Sample ID: 500-245277-36

Date Collected: 01/25/24 08:45

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649035	FLC	EET SL	02/21/24 09:32
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Client Sample ID: HEN_XPW02_PORE

Lab Sample ID: 500-245277-37

Date Collected: 01/25/24 09:30

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649035	FLC	EET SL	02/21/24 09:32
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Client Sample ID: HEN_XPW03_PORE

Lab Sample ID: 500-245277-38

Date Collected: 01/25/24 10:30

Matrix: Water

Date Received: 01/26/24 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649035	FLC	EET SL	02/21/24 09:32
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:09
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Lab Chronicle

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

Job ID: 500-245277-2
HEN-24Q1-005
SDG: HEN_000_RAD

Client Sample ID: HEN_07

Date Collected: 01/26/24 08:50

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-39

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649035	FLC	EET SL	02/21/24 09:32
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Client Sample ID: HEN_08

Date Collected: 01/26/24 08:20

Date Received: 01/26/24 11:45

Lab Sample ID: 500-245277-40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			646070	KAC	EET SL	01/30/24 10:07
Total/NA	Analysis	903.0		1	649035	FLC	EET SL	02/21/24 18:16
Total/NA	Prep	PrecSep_0			646071	KAC	EET SL	01/30/24 10:19
Total/NA	Analysis	904.0		1	647880	SCB	EET SL	02/12/24 12:08
Total/NA	Analysis	Ra226_Ra228 Pos		1	649305	SCB	EET SL	02/22/24 13:59

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
15 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 590-245277-2
HEN-24-002905
SDG: HEN_000_RAD

Laboratory: Eurofins St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	200023	11-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
903.0	PrecSep-21	Water	Radium-226
904.0	PrecSep_0	Water	Radium-228
Ra226_Ra228 Pos		Water	Radium 226 and 228

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Page 1 of 3

500-245277 COC

Temp = 2.6 → 2.1, 3.7 → 3.2,
1.8 → 2.3

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Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Vistra Corp-Hennepin		Report To: Brian Voelker		Attention: Dave McCoy	
Address: 13498 E 800th St Hennepin, IL 61327		Copy To: Jason Stuckey Jason.Stuckey@vistracorp.com Sam Davies samantha.davies@vistracorp.com		Company Name: A3 Environmental	
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.		Address: 3030 Warrenville Rd , Suite 418 Warrenville, IL 60532	
Phone: (217) 753-8911 Fax:		Project Name:		Project Manager	
Requested Due Date/TAT: 10 day		Project Number: 50022619		Profile #:	
				REGULATORY AGENCY	
				NPDES GROUND WATER DRINKING WATER	
				UST RCRA OTHER	
				Site Location IL	
				STATE.	

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL WP WIPE AR AIR OT OTHER TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test 1	Requested Analysis Filtered (Y/N)															Residual Chlorine (Y/N)	Project No./ Lab I D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Y	N		Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y			N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER, Allison Beckett					
SIGNATURE OF SAMPLER, Beckett					
DATE Signed (MM/DD/YYYY) 1/23/24					

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
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- 1
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02/22/24

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A

Required Client Information:

Section B

Required Project Information

Section C

Invoice Information

Page 1 of 3

Company: Vistra Corp-Hennepin		Report To: Brian Voelker	Attention: Dave McCoy			
Address: 13498 E 800th St		Copy To: Jason Stuckey Jason.Stuckey@visstracorp.com Sam Davies samanlha.davies@visstracorp.com	Company Name: A3 Environmental	REGULATORY AGENCY		
Hennepin, IL 61327			Address: 3030 Warrenville Rd , Suite 418	NPDES GROUND WATER DRINKING WATER		
Email To: Brian.Voelker@VistraCorp.com		Purchase Order No.	Warrenville, IL 60532		UST RCRA OTHER	
Phone: (217) 753-8911	Fax:	Project Name:	Project Manager:	Site Location		IL
Requested Due Date/TAT: 10 day		Project Number: 50022619	Profile #:	STATE:		
						



500-245277 COC

ITEM #	Section D Required Client Information	Valid Matrix Codes <u>MATRIX</u> <u>CODE</u> DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOLID/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives									Y/N ↓ Analysis Test ↓	Y/N						Residual Chlorine (Y/N)	Project No./ Lab I.D.											
					DATE	TIME			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	HEN-257-801										HEN-257-802	HEN-257-803	HEN-257-804	HEN-811-801	HEN-845-802-805	HEN-845-803	HEN-845-804	HEN-WPCP-EAST	HEN-WPCP-WEST	HEN_000_RAD	HEN_000
11	HEN-02		WT G		1/24/24	1510		10	✓	✓	✓	✓	✓										A		SHORT HOLDS - NO2												
	HEN-03R															X				X		B		SHORT HOLDS - NO2													
	HEN-051R														X							E		SHORT HOLDS - NO2													
	HEN-05&DR														X							E		SHORT HOLDS - NO2													
	HEN-07															X	X		X		X	B		SHORT HOLDS - NO2													
	HEN-08															X	X	X		X	X	C		SHORT HOLDS - NO2													
	HEN-08&D															X	X	X		X	X	C		SHORT HOLDS - NO2													
12	HEN-10		WT G		1/24/24	1600		13	✓	✓	✓	✓	✓			X						D		SHORT HOLDS - NO2													
13	HEN-12		WT G		1/24/24	1155		13	✓	✓	✓	✓	✓				X	X			X	F		SHORT HOLDS - NO2													
14	HEN-13		WT G		1/24/24	1241		14	✓	✓	✓	✓	✓				X	X			X	F		SHORT HOLDS - NO2													
15/16	HEN-16		WT G		1/24/24	1055		12	✓	✓	✓	✓	✓			X	X			X	G			DUPE													
17	HEN-17		WT G		1/24/24	1155		6	✓	✓	✓	✓	✓			X	X			X	G																
	HEN-18#S															X			X		X	B		SHORT HOLDS - NO2													
	HEN-18&D															X			X		X	B		SHORT HOLDS - NO2													
	HEN-21R																X		X	X	H																
	HEN-22																X		X	X	H																
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION			DATE		TIME		ACCEPTED BY / AFFILIATION					DATE		TIME		SAMPLE CONDITIONS																			
HEN-24Q1 Rev 2		Allison Beck PH A3E			1/25/24		0700		Jill Ellen					1/25/25		0940																					
		M.O. Elhar			1/25/24		1151		Stephanie Hernandez EEA					1/25/24		1151																					

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER Allison Beckwith					
SIGNATURE of SAMPLER [Signature]	DATE Signed (MM/DD/YY) 1/24/24				

Temp: 4.4+3.9, 5.7+5.2, 5.6+5.1,
4.9+4.4

Section A
Required Client Information:

Company	Visira Corp-Hennepin	
Address	13498 E 800th St Hennepin, IL 61327	
Email To	Brian.Voelker@VisiraCorp.com	
Phone	(217) 753-8911	Fax
Requested Due Date/TAT*	10 day	

Section B
Required Project Information

Report To	Brian Voelker	
Copy To	Jason Stuckey Jason.Stuckey@visiracorp.com Sam Davies samantha.davies@visiracorp.com	
Purchase Order No		
Project Name		
Project Number	50022619	

Section C
Invoice Information

Attention	Dave McCoy	
Company Name	A3 Environmental	
Address	3030 Warrenville Rd, Suite 418 Warrenville, IL 60532	
Project Manager		
Profile #		

REGULATORY AGENCY

NPDES	GROUND WATER	DRINKING WATER
UST	RCRA	OTHER

Site Location

STATE

IL

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test	Y/N	Residual Chlorine (Y/N)	Project No./ Lab I.D.
							Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other						
	SAMPLE ID (A-Z, 0-9 /) Sample IDs MUST BE UNIQUE	DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS																		
18	HEN-22&D																			
	HEN-23	WT G	1/24/24	0835		8														
	HEN-25																			
	HEN-26																			
	HEN-27																			
	HEN-30																			
	HEN-31																			
	HEN-32																			
	HEN-33																			
	HEN-34																			
	HEN-35																			
	HEN-36																			
	HEN-40#S																			
	HEN-45#S																			
19	HEN-46	WT G	1/24/24	1310		6														
20	HEN-47	WT G	1/24/24	1430		6														

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

DATE

TIME

ACCEPTED BY / AFFILIATION

DATE

TIME

SAMPLE CONDITIONS

HEN-24Q1 Rev 2

Allison Beckett A3E

1/25/24 0700

J.G. Egan

1/25/24 0840

J.G. Egan

1/25/24 1151

Stephanie Hemminger EEA

1/25/24 1151

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER

Allison Beckett

SIGNATURE of SAMPLER

Beckett

DATE Signed

(MM/DD/YY) 1/24/24

Temp in °C

Received on

Ice (Y/N)

Custody

Sealed Cooler

(Y/N)

Samples

Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A

Section B

Section C

Page 1 of 3

Required Client Information:		Required Project Information:		Invoice Information:		HENNEPIN POWER PLANT, ASH POND NO. 2 AND NO. 4		
Company	Vistra Energy Corp-Hennepin	Report To:	Brian Voelker	Attention:	Dave McCoy	HEN-845-802-805		
Address	13498 E 800th St	Copy To	Jason Stuckey Jason.Stuckey@vistracorp.com Sam Davies samantha.davies@vistracorp.com	Company Name	A3 Environmental	REGULATORY AGENCY		
	Hennepin, IL 61327			Address	3030 Warrenville Rd , Suite 418	NPDES	GROUND WATER	DRINKING WATER
Email To	Brian.Voelker@VistraCorp.com	Purchase Order No.			Warrenville, IL 60532	UST	RCRA	OTHER
Phone	(217) 753-8911	Project Name		Project Manager:		Site Location	IL	
Fax:		Project Number:	50022619	Profile #:		STATE		
Requested Due Date/TAT		10 day						

[illegible]

CHAIN-OF-CUSTODY / Analytical Request Document

Section A Required Client Information:		Section B Required Project Information:	
Company Vistra Corp-Hennepin	Report To Brian Veilker	Attention: Dave McCoy	Invoice Information
Address 13498 E 800th St	Copy To Jason Stuckey Jason Stuckey@vistracorp.com	Company Name A3 Environmental	
Hennepin, IL 61327		Address 3030 Warrenville Rd, Suite 418	
Email To Brian.Veilker@VistraCorp.com	Purchase Order No.	Warrenville, IL 60532	
Phone (217) 753-8911	Project Name		
Requested Due Date/TAT 10 day		Project Manager	Profile #
Valid Matrix Codes Matrix Code DRAINAGE WATER WASTE WATER PRODUCT SOLVENT CL WP AR OTHER TS Sample IDs MUST BE UNIQUE (A-Z 0-9 /)			
MATRIX CODE (see valid codes to left)		SAMPLE TYPE (G=GRAB C=COMP)	
DATE		TIME	
500-245277 COC			
SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	
		Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other	
Y/N		Preservatives	
Requested Analysis Filtered (Y/N)		Analysis Test	
		HEN-257-801 HEN-257-802 HEN-257-803 HEN-257-804 HEN-811-801 HEN-845-802-805 HEN-845-803 HEN-845-804 HEN-WPCP-EAST HEN-WPCP-WEST HEN_000_RAD HEN_000	
Residual Chlorine (Y/N)		Project No./Lab I.D.	
Regulatory Agency		Ground Water Drinking Water Other	
NPDES		UST RCRA	
Site Location		STATE IL	
Page 1 of 3		500-245277	

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The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

500-245277

Company: Vista Corp-Hennepin		Report To: Brian Voelker	Attention: Dave McCoy
Address: 13498 E 800th St		Copy To: Jason Stuckey, Jason Stuckey@vistracorp.com	Company Name: A3 Environmental
Email To: Brian.Voelker@VistaCorp.com		Purchase Order No.	Address: 3030 Warrenville Rd, Suite 418
Phone: (217) 753-8911		Project Name	Project: Warrenville, IL 60532
Requested Due Date/TAT: 10 day		Project Number: 50022619	Profile #: _____

REGULATORY AGENCY		NPDES		GROUND WATER		DRINKING WATER		OTHER	
RCRA		UST		RCRA		OTHER			
STATE		IL							

Section A Required Client Information:		Section B Required Project Information		Section C Invoice Information	
Valid Matrix Codes MATRIX CODE (see valid codes to left)		SAMPLE TYPE (G=GRAB C=COMP)		DATE	
Sample IDs MUST BE UNIQUE (A-Z, 0-9 /)		DATE		TIME	
COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	
Unpreserved		H ₂ SO ₄		HNO ₃	
HCl		NaOH		Na ₂ S ₂ O ₃	
Methanol		Other		Analysis Test 1	
Preservatives		Y/N		Requested Analysis Filtered (Y/N)	
HEN-228D		HEN-23		HEN-25	
HEN-26		HEN-27		HEN-30	
HEN-31		HEN-32		HEN-33	
HEN-34		HEN-35		HEN-36	
HEN-40#S		WT G 12/5/24 1415		1122 N	
HEN-45#S		WT G 12/5/24 1145		1522 N	
HEN-46					
HEN-47					
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	
TIME		ACCEPTED BY / AFFILIATION		DATE	
TIME		SAMPLE CONDITIONS		SAMPLES	
Intact (Y/N)		Custody Sealed Cooler (Y/N)		Received on Ice (Y/N)	
Temp in °C		DATE SIGNED (MM/DD/YY)		SIGNATURE OF SAMPLER	
PRINT NAME OF SAMPLER		DATE SIGNED (MM/DD/YY)		SIGNATURE OF SAMPLER	

Page 2 of 3

Σ 70 Σ 200

500-245277

Page 1 of 1

Company Vistra Corp-Hennepin		Address 13498 E 800th St Hennepin, IL 61327		Email To Brian Voelker@vistracorp.com		Phone (217) 753-8911		Requested Due Date/TAT 10 day	
Report To Brian Voelker		Copy To Jason Stuckey Jason Stuckey@vistracorp.com Sam Davies samantha.davies@vistracorp.com		Purchase Order No		Project Name		Project Number 50022619	
Attention Dave McCoy		Company Name A3 Environmental		Address 3030 Warrenville Rd , Suite 418 Warrenville, IL 60532		Project Manager		Profile #:	
Regulatory Agency		NPDES		GROUND WATER		RCRA		OTHER	
Site Location		STATE		IL		Requested Analysis Filtered (Y/N)			

Section D Required Client Information		Valid Matrix Codes		Matrix Code (see valid codes to left)		Sample Type (G=GRAV C=COMP)		DATE		TIME		COLLECTED		SAMPLE TEMP AT COLLECTION		# OF CONTAINERS		Preservatives		Y/N		Analysis Test		Requested Analysis Filtered (Y/N)		Project No./ Lab I.D.		HEN-02		HEN-03R		HEN-05IR		HEN-05&BR		HEN-07		HEN-08		HEN-08&D		HEN-10		HEN-12		HEN-13		HEN-16		HEN-17		HEN-18#S		HEN-18&D		HEN-21R		HEN-22		ADDITIONAL COMMENTS		HEN-24Q1 Rev 2		Allison Beckett A3E		1/26/24 0600		1/26/24 1145		1-26-24 1000		1/13/24 1145		SAMPLE NAME AND SIGNATURE		PRINT Name of SAMPLER		DATE Signed (MM/DD/YY)		1/26/24		SIGNATURE of SAMPLER		Allison Beckett		1/26/24		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)	
ITEM #		39		40		41		HEN-10		HEN-12		HEN-13		HEN-16		HEN-17		HEN-18#S		HEN-18&D		HEN-21R		HEN-22		ADDITIONAL COMMENTS		HEN-24Q1 Rev 2		Allison Beckett A3E		1/26/24 0600		1/26/24 1145		1-26-24 1000		1/13/24 1145		SAMPLE NAME AND SIGNATURE		PRINT Name of SAMPLER		DATE Signed (MM/DD/YY)		1/26/24		SIGNATURE of SAMPLER		Allison Beckett		1/26/24		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)																																			
HEN-02		HEN-03R		HEN-05IR		HEN-05&BR		HEN-07		HEN-08		HEN-08&D		HEN-10		HEN-12		HEN-13		HEN-16		HEN-17		HEN-18#S		HEN-18&D		HEN-21R		HEN-22		ADDITIONAL COMMENTS		HEN-24Q1 Rev 2		Allison Beckett A3E		1/26/24 0600		1/26/24 1145		1-26-24 1000		1/13/24 1145		SAMPLE NAME AND SIGNATURE		PRINT Name of SAMPLER		DATE Signed (MM/DD/YY)		1/26/24		SIGNATURE of SAMPLER		Allison Beckett		1/26/24		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)																													
HEN-02		HEN-03R		HEN-05IR		HEN-05&BR		HEN-07		HEN-08		HEN-08&D		HEN-10		HEN-12		HEN-13		HEN-16		HEN-17		HEN-18#S		HEN-18&D		HEN-21R		HEN-22		ADDITIONAL COMMENTS		HEN-24Q1 Rev 2		Allison Beckett A3E		1/26/24 0600		1/26/24 1145		1-26-24 1000		1/13/24 1145		SAMPLE NAME AND SIGNATURE		PRINT Name of SAMPLER		DATE Signed (MM/DD/YY)		1/26/24		SIGNATURE of SAMPLER		Allison Beckett		1/26/24		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)																													
HEN-02		HEN-03R		HEN-05IR		HEN-05&BR		HEN-07		HEN-08		HEN-08&D		HEN-10		HEN-12		HEN-13		HEN-16		HEN-17		HEN-18#S		HEN-18&D		HEN-21R		HEN-22		ADDITIONAL COMMENTS		HEN-24Q1 Rev 2		Allison Beckett A3E		1/26/24 0600		1/26/24 1145		1-26-24 1000		1/13/24 1145		SAMPLE NAME AND SIGNATURE		PRINT Name of SAMPLER		DATE Signed (MM/DD/YY)		1/26/24		SIGNATURE of SAMPLER		Allison Beckett		1/26/24		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)																													
HEN-02		HEN-03R		HEN-05IR		HEN-05&BR		HEN-07		HEN-08		HEN-08&D		HEN-10		HEN-12		HEN-13		HEN-16		HEN-17		HEN-18#S		HEN-18&D		HEN-21R		HEN-22		ADDITIONAL COMMENTS		HEN-24Q1 Rev 2		Allison Beckett A3E		1/26/24 0600		1/26/24 1145		1-26-24 1000		1/13/24 1145		SAMPLE NAME AND SIGNATURE		PRINT Name of SAMPLER		DATE Signed (MM/DD/YY)		1/26/24		SIGNATURE of SAMPLER		Allison Beckett		1/26/24		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)																													
HEN-02		HEN-03R		HEN-05IR		HEN-05&BR		HEN-07		HEN-08		HEN-08&D		HEN-10		HEN-12		HEN-13		HEN-16		HEN-17		HEN-18#S		HEN-18&D		HEN-21R		HEN-22		ADDITIONAL COMMENTS		HEN-24Q1 Rev 2		Allison Beckett A3E		1/26/24 0600		1/26/24 1145		1-26-24 1000		1/13/24 1145		SAMPLE NAME AND SIGNATURE		PRINT Name of SAMPLER		DATE Signed (MM/DD/YY)		1/26/24		SIGNATURE of SAMPLER		Allison Beckett		1/26/24		Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)																													
HEN-02		HEN-03R		HEN-05IR		HEN-05&BR		HEN-07		HEN-08		HEN-08&D		HEN-10		HEN-12</																																																																															



Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax:

Chain of Custody Record



Environment Testing

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4

ATTACHMENT B.

Client Information (Sub Contract Lab)				Lab PM: Campbell, Donna L		Carrier Tracking No(s): 500-184062.1		COC No: 500-184062.1										
Client Contact Shipping/Receiving Company: TestAmerica Laboratories, Inc.				E-Mail: Donna.Campbell@et.eurofins.com		State of Origin: Illinois		Page Page 1 of 2										
Address 13715 Rider Trail North, City: Earth City State, Zip: MO. 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:				PO # WFO # Project # 50022619 SSOW#		Accreditations Required (See note) NELAP - Illinois		Job # 500-245277-1										
Due Date Requested: 2/22/2024				TAT Requested (days):		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:												
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wetwater, Sealed, Overstabilized BT-Tissue, AAR)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 AN	904.0/PrecSep_0 AN	Ra226_228GFPC_P/AN	903.0/PrecSep_21 AU	904.0/PrecSep_0 AU	Ra226_228GFPC_P/AU	903.0/PrecSep_21 BB	904.0/PrecSep_0 BB	Ra226_228GFPC_P/BB	Total Number of containers	Special Instructions/Note:
HEN_21R (500-245277-1)		1/23/24	12:40 Central		Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_21R_MS (500-245277-1MS)		1/23/24	12:40 Central	MS	Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_21R_MSD (500-245277-1MSD)		1/23/24	12:40 Central	MSD	Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_22 (500-245277-2)		1/23/24	15:20 Central		Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_22&D (500-245277-3)		1/23/24	15:00 Central		Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_27 (500-245277-4)		1/23/24	10:45 Central		Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_32 (500-245277-5)		1/23/24	09:30 Central		Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_34 (500-245277-6)		1/23/24	11:50 Central		Water	X		X	X	X	X	X	X	X	X	X	2	
HEN_35 (500-245277-7)		1/23/24	13:40 Central		Water	X		X	X	X	X	X	X	X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

Possible Hazard Identification
Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
 Special Instructions/QC Requirements: _____

Date/Time: 1/24/24 13:25	Date/Time: 1/24/24 13:25	Date/Time: 1/24/24 13:25	Date/Time: 1/24/24 13:25
Relinquished by: [Signature]	Relinquished by: [Signature]	Relinquished by: [Signature]	Relinquished by: [Signature]
Company: TestAmerica	Company: TestAmerica	Company: TestAmerica	Company: TestAmerica
Custody Seal No.: Δ Yes Δ No	Custody Seal No.: Δ Yes Δ No	Custody Seal No.: Δ Yes Δ No	Custody Seal No.: Δ Yes Δ No

Ver: 06/08/2021

Cooler Temperature(s) °C and Other Remarks:

[illegible]



Client Information (Sub Contract Lab)				Lab PM: Campbell, Donna L	Carrier Tracking No(s): 500-184098.1	COC No: 500-184098.1								
Client Contact: Shipping/Receiving				E-Mail: Donna.Campbell@et.eurofins.com	State of Origin: Illinois	Page Page 1 of 2								
Company: TestAmerica Laboratories, Inc.				Accreditations Required (See note): NELAP - Illinois	Job # 500-245277-1									
Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:				Due Date Requested: 2/6/2024 TAT Requested (days):	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:									
Project Name: HEN-24Q1 Site:				PO # WO # Project # 50022619 SSOW#	Analysis Requested									
Sample Identification - Client ID (Lab ID)				Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Overstabil, ET+Tissue, Anal)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PreSep, 21 BB	904.0/PreSep, 0 BB	Ra226, 228GFP, P/BB	Total Number of Containers	Special Instructions/Note:
HEN_12 (500-245277-13)				1/24/24	11:55 Central		Water			X	X	X	2	
HEN_13 (500-245277-14)				1/24/24	12:41 Central		Water			X	X	X	2	
HEN_16 (500-245277-15)				1/24/24	10:55 Central		Water			X	X	X	2	
HEN_16_FD (500-245277-16)				1/24/24	10:55 Central		Water			X	X	X	2	
HEN_17 (500-245277-17)				1/24/24	11:55 Central		Water			X	X	X	2	
HEN_23 (500-245277-18)				1/24/24	08:35 Central		Water			X	X	X	2	
HEN_46 (500-245277-19)				1/24/24	13:10 Central		Water			X	X	X	2	
HEN_47 (500-245277-20)				1/24/24	14:30 Central		Water			X	X	X	2	
HEN_51 (500-245277-21)				1/24/24	09:00 Central		Water			X	X	X	2	
Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.														
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by: Relinquished by: <i>Donna Campbell</i> Date: <i>1/25/24</i> 1440 Relinquished by: <i>Donna Campbell</i> Date: <i>1/25/24</i> 1440 Relinquished by: <i>Donna Campbell</i> Date: <i>1/25/24</i> 1440 Relinquished by: <i>Donna Campbell</i> Date: <i>1/25/24</i> 1440 Custody Seal No.: Δ Yes Δ No														
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QC Requirements:														
Received by: Richard Thomley Date/Time: JAN 26 2024 0830 Company: ETA STL Received by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks:														

Eurofins Chicago

2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking Note(s)		COC No:						
Shipping/Receiving		Phone:	E-Mail:	State of Origin:		500-184098.2						
Company		Donna.Campbell@et.eurofins.com				Page 2 of 2						
TestAmerica Laboratories, Inc.		Accreditations Required (See note):				Job #:						
Address:		NELAP - Illinois				500-245277-1						
City		Due Date Requested:				Preservation Codes:						
State/Zip		TAT Requested (days):				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 X - Trizma Y - other (specify)						
Phone:		PO #:				Other:						
Email:		WO #:										
Project Name		Project #:										
Site:		SSOW#:										
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Overhead, BT Tissue, AAU)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 BB	904.0/PrecSep_0 BB	Ra226_228GFPc_P/ BB	Analysis Requested	Total Number of Containers	Special Instructions/Note:
HEN_52 (500-245277-22)	1/24/24	10:25 Central		Water			X	X	X		2	
HEN_54 (500-245277-23)	1/24/24	13:57 Central		Water			X	X	X		2	
HEN_54_FD (500-245277-24)	1/24/24	13:57 Central		Water			X	X	X		2	
HEN_FB (500-245277-25)	1/24/24	16:10 Central		Water			X	X	X		2	
Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.												
Possible Hazard Identification												
Unconfirmed												
Deliverable Requested: I, II, III, IV, Other (specify)												
Primary Deliverable Rank: 2												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months												
Special Instructions/QC Requirements:												
Method of Shipment:												
Time:												
Date:												
Relinquished by: <i>[Signature]</i>												
Relinquished by: <i>[Signature]</i>												
Relinquished by: <i>[Signature]</i>												
Custody Seals Intact: ☐ Yes ☐ No												
Custody Seal No.:												
Cooler Temperature(s) °C and Other Remarks:												

Ver: 06/08/2021

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
HEN-845-802-805

Login Sample Receipt Checklist

Client: Vistra Energy Corp

Job Number: 500-245277-2
SDG Number: HEN_000_RAD

Login Number: 245277

List Number: 1

Creator: Scott, Sherri L

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1,3.2,2.3,3.9,5.2,5.1,4.4,4.1,3.3,2.6,2.7,4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
HEN-845-802-805

Login Sample Receipt Checklist

Client: Vistra Energy Corp

Job Number: 500-245277-2
SDG Number: HEN_000_RAD

Login Number: 245277

List Number: 2

Creator: Pinette, Meadow L

List Source: Eurofins St. Louis

List Creation: 01/25/24 01:24 PM

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

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
HEN-845-802-805

Login Sample Receipt Checklist

Client: Vistra Energy Corp

Job Number: 500-245277-2
SDG Number: HEN_000_RAD

Login Number: 245277

List Number: 4

Creator: Thornley, Richard W

List Source: Eurofins St. Louis

List Creation: 01/26/24 02:19 PM

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

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
HEN-845-802-805

Login Sample Receipt Checklist

Client: Vistra Energy Corp

Job Number: 500-245277-2
SDG Number: HEN_000_RAD

Login Number: 245277

List Number: 6

Creator: Korrinhizer, Micha L

List Source: Eurofins St. Louis

List Creation: 01/29/24 11:23 AM

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

Tracer/Carrier Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)					
		Ba					
Lab Sample ID	Client Sample ID	(30-110)					
500-245277-1	HEN_21R	61.8					
500-245277-1 MS	HEN_21R_MS	39.4					
500-245277-1 MSD	HEN_21R_MSD	76.3					
500-245277-2	HEN_22	90.1					
500-245277-3	HEN_22&D	81.7					
500-245277-4	HEN_27	78.4					
500-245277-5	HEN_32	81.2					
500-245277-6	HEN_34	77.9					
500-245277-7	HEN_35	73.0					
500-245277-8	HEN_35_FD	82.7					
500-245277-9	HEN_49	55.0					
500-245277-9 MS	HEN_49_MS	47.1					
500-245277-9 MSD	HEN_49_MSD	87.0					
500-245277-10	HEN_50	80.2					
500-245277-13	HEN_12	96.2					
500-245277-14	HEN_13	90.6					
500-245277-15	HEN_16	95.9					
500-245277-16	HEN_16_FD	93.9					
500-245277-17	HEN_17	92.4					
500-245277-18	HEN_23	84.2					
500-245277-19	HEN_46	95.4					
500-245277-20	HEN_47	101					
500-245277-21	HEN_51	85.8					
500-245277-22	HEN_52	96.2					
500-245277-23	HEN_54	98.5					
500-245277-24	HEN_54_FD	85.0					
500-245277-25	HEN_FB	92.4					
500-245277-26	HEN_03R	96.4					
500-245277-27	HEN_03R_FD	98.5					
500-245277-30	HEN_08&D	88.0					
500-245277-32	HEN_18#S	87.0					
500-245277-33	HEN_18&D	89.6					
500-245277-35	HEN_45#S	85.0					
500-245277-36	HEN_XPW01_PORE	34.1					
500-245277-37	HEN_XPW02_PORE	90.1					
500-245277-38	HEN_XPW03_PORE	94.9					
500-245277-39	HEN_07	98.2					
500-245277-40	HEN_08	88.0					
LCS 160-645975/2-A	Lab Control Sample	96.9					
LCS 160-645979/2-A	Lab Control Sample	93.4					
LCS 160-646070/2-A	Lab Control Sample	86.3					
MB 160-645975/1-A	Method Blank	97.2					
MB 160-645979/1-A	Method Blank	83.7					
MB 160-646070/1-A	Method Blank	88.0					

Tracer/Carrier Legend

Ba = Ba Carrier

Tracer/Carrier Summary

Client: Vistra Energy Corp
Project/Site: HEN-24Q1

ATTACHMENT B.
845 QUARTERLY REPORT - QUARTER 1, 2024
HENNEPIN POWER PLANT, ASH PONDS NO. 2 AND NO. 4
Job ID: 500-245277-2
SDG: HEN_000_RAD

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
500-245277-1	HEN_21R	61.8	84.1
500-245277-1 MS	HEN_21R_MS	39.4	77.4
500-245277-1 MSD	HEN_21R_MSD	76.3	71.4
500-245277-2	HEN_22	90.1	82.2
500-245277-3	HEN_22&D	81.7	76.6
500-245277-4	HEN_27	78.4	78.5
500-245277-5	HEN_32	81.2	76.3
500-245277-6	HEN_34	77.9	79.6
500-245277-7	HEN_35	73.0	71.0
500-245277-8	HEN_35_FD	82.7	78.9
500-245277-9	HEN_49	55.0	80.0
500-245277-9 MS	HEN_49_MS	47.1	75.9
500-245277-9 MSD	HEN_49_MSD	87.0	80.0
500-245277-10	HEN_50	80.2	75.1
500-245277-13	HEN_12	96.2	81.5
500-245277-14	HEN_13	90.6	84.9
500-245277-15	HEN_16	95.9	86.7
500-245277-16	HEN_16_FD	93.9	85.2
500-245277-17	HEN_17	92.4	84.5
500-245277-18	HEN_23	84.2	87.1
500-245277-19	HEN_46	95.4	81.1
500-245277-20	HEN_47	101	85.6
500-245277-21	HEN_51	85.8	81.1
500-245277-22	HEN_52	96.2	85.2
500-245277-23	HEN_54	98.5	75.9
500-245277-24	HEN_54_FD	85.0	80.4
500-245277-25	HEN_FB	92.4	84.9
500-245277-26	HEN_03R	96.4	87.5
500-245277-27	HEN_03R_FD	98.5	90.8
500-245277-30	HEN_08&D	88.0	93.8
500-245277-32	HEN_18#S	87.0	81.5
500-245277-33	HEN_18&D	89.6	84.9
500-245277-35	HEN_45#S	85.0	89.7
500-245277-36	HEN_XPW01_PORE	34.1	83.4
500-245277-37	HEN_XPW02_PORE	90.1	84.1
500-245277-38	HEN_XPW03_PORE	94.9	84.5
500-245277-39	HEN_07	98.2	81.9
500-245277-40	HEN_08	88.0	87.5
LCS 160-645976/2-A	Lab Control Sample	96.9	84.1
LCS 160-645980/2-A	Lab Control Sample	93.4	83.4
LCS 160-646071/2-A	Lab Control Sample	86.3	87.9
MB 160-645976/1-A	Method Blank	97.2	84.5
MB 160-645980/1-A	Method Blank	83.7	82.6
MB 160-646071/1-A	Method Blank	88.0	88.2

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

**ATTACHMENT C
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND
QUARTER 1, 2024**

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
03R	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.001
03R	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	100	All ND - Last	0.001	0.001
03R	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CI around mean	0.0622	0.212
03R	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.001
03R	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	0.447	0.163
03R	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	93	CB around T-S line	0.000644	0.00230
03R	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	77.9	435
03R	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	26	92	CB around T-S line	0.0015	0.00100
03R	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	27	96	CI around median	0.001	0.0380
03R	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CI around median	0.27	0.120
03R	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	100	All ND - Last	0.0005	0.00150
03R	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	31	0	CI around mean	0.0236	0.0190
03R	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.0002
03R	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0826	0.00170
03R	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	35	0	CI around median	7.2/7.3	6.6/7.5
03R	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around median	0.28	1.50
03R	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	28	7	CB around T-S line	0.00171	0.00140
03R	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	72.9	215
03R	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.001
03R	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	32	0	CI around mean	512	1,620
18S	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.001
18S	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	97	CI around median	0.001	0.001
18S	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.0502	0.212
18S	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.001
18S	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	0.935	0.163
18S	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	77	CB around T-S line	0.00054	0.00230
18S	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	32	0	CB around linear reg	69.8	435

ATTACHMENT C.
COMPARISON OF STATISTICAL RESULTS TO BACKGROUND - QUARTER 1, 2024
845 QUARTERLY REPORT
HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
18S	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	27	58	CI around median	0.0015	0.00100
18S	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	27	84	CI around median	0.001	0.0380
18S	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CB around T-S line	0.171	0.120
18S	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	100	All ND - Last	0.0005	0.00150
18S	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0351	0.0190
18S	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.0002
18S	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0871	0.00170
18S	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	35	0	CI around median	7.3/7.4	6.6/7.5
18S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around mean	0.344	1.50
18S	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	28	3	CB around T-S line	0.000606	0.00140
18S	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	77.5	215
18S	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.001
18S	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	476	1,620
18D	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.001
18D	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	97	CI around median	0.001	0.001
18D	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around T-S line	0.0638	0.212
18D	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.001
18D	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	32	0	CB around linear reg	1.2	0.163
18D	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	94	CB around T-S line	0.000891	0.00230
18D	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	32	0	CI around mean	75.9	435
18D	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	26	93	CB around T-S line	0.0015	0.00100
18D	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	28	3	CB around linear reg	0.000118	0.0380
18D	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CI around median	0.15	0.120
18D	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	93	CI around median	0.001	0.00150
18D	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	31	0	CB around linear reg	0.0228	0.0190
18D	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.0002
18D	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	31	0	CI around median	0.0315	0.00170

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845 QUARTERLY REPORT
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HENNEPIN, IL

Well ID	HSU	Event	Parameter	Units	Date Range	Sample Count	Percent ND	Statistical Calculation	Statistical Result	Background
18D	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	35	0	CI around median	7.1/7.2	6.6/7.5
18D	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around mean	0.544	1.50
18D	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	27	94	CB around T-S line	0.001	0.00140
18D	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	32	0	CB around linear reg	87.2	215
18D	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.001
18D	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	32	0	CB around T-S line	468	1,620
45S	UA	E004	Antimony, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.003	0.001
45S	UA	E004	Arsenic, total	mg/L	12/09/15 - 01/25/24	26	92	CI around median	0.001	0.001
45S	UA	E004	Barium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.0787	0.212
45S	UA	E004	Beryllium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.001	0.001
45S	UA	E004	Boron, total	mg/L	12/09/15 - 01/25/24	29	0	CB around linear reg	0.211	0.163
45S	UA	E004	Cadmium, total	mg/L	12/09/15 - 01/25/24	27	44	CB around linear reg	0.000569	0.00230
45S	UA	E004	Chloride, total	mg/L	12/09/15 - 01/25/24	29	0	CB around linear reg	86.1	435
45S	UA	E004	Chromium, total	mg/L	12/09/15 - 01/25/24	27	93	CB around T-S line	0.0015	0.00100
45S	UA	E004	Cobalt, total	mg/L	12/09/15 - 01/25/24	28	14	CI around geomean	0.00139	0.0380
45S	UA	E004	Fluoride, total	mg/L	12/09/15 - 01/25/24	29	3	CB around T-S line	0.24	0.120
45S	UA	E004	Lead, total	mg/L	12/09/15 - 01/25/24	26	81	CI around median	0.001	0.00150
45S	UA	E004	Lithium, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.0106	0.0190
45S	UA	E004	Mercury, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.0002	0.0002
45S	UA	E004	Molybdenum, total	mg/L	12/09/15 - 01/25/24	28	0	CB around linear reg	0.042	0.00170
45S	UA	E004	pH (field)	SU	12/09/15 - 01/25/24	29	0	CI around mean	7.1/7.2	6.6/7.5
45S	UA	E004	Radium 226 + Radium 228, total	pCi/L	12/09/15 - 01/25/24	26	0	CI around geomean	0.527	1.50
45S	UA	E004	Selenium, total	mg/L	12/09/15 - 01/25/24	27	100	All ND - Last	0.0025	0.00140
45S	UA	E004	Sulfate, total	mg/L	12/09/15 - 01/25/24	29	0	CI around median	70	215
45S	UA	E004	Thallium, total	mg/L	12/09/15 - 01/25/24	25	100	All ND - Last	0.002	0.001
45S	UA	E004	Total Dissolved Solids	mg/L	12/09/15 - 01/25/24	29	0	CI around mean	526	1,620

ATTACHMENT C.
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HENNEPIN POWER PLANT
ASH POND NO. 2 AND ASH POND NO. 4
HENNEPIN, IL

Notes:
Lower Confidence Limit (LCL) or Upper Confidence Limit (UCL) exceeded the statistical background value

HSU = hydrostratigraphic unit:

UA = Uppermost Aquifer

mg/L = milligrams per liter

ND = non-detect

pCi/L = picocuries per liter

SU = standard units

Sample Count = number of samples from Sampled Date Range used to calculate the Statistical Result

Statistical Calculation = method used to calculate the statistical result:

All ND - Last = All results were below the reporting limit, and the last determined reporting limit is shown

CB around T-S line = Confidence band around Thiel-Sen line

CB around linear reg = Confidence band around linear regression

CI around geomean = Confidence interval around the geometric mean

CI around mean = Confidence interval around the mean

CI around median = Confidence interval around the median

Statistical Result = calculated in accordance with the Statistical Analysis Plan using constituent concentrations observed at each monitoring well during all sampling events within the specified date range
For pH, the values presented are the lower / upper limits of the background determination