



BY ELECTRONIC MAIL

May 12, 2021

Ms. Rachel B. Patton, P.G.
Virginia Department of Environmental Quality – Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach, VA 23462
rachel.patton@deq.virginia.gov

**RE: Chesapeake Energy Center - Industrial Landfill, Solid Waste Permit No. 440:
Selenium Assessment of Corrective Measures Response to Comments**

Dear Ms. Patton:

Dominion Energy is providing updated information regarding the Chesapeake Energy Center Landfill August 2016 Assessment of Corrective Measures (ACM) Addendum for selenium. The Department's review dated April 12, 2021, indicated that the ACM Addendum did not contain plume maps and that horizontal and vertical plume maps delineating the selenium plume should be submitted in 30 days utilizing recent data to better reflect current conditions. To address the Department's comment, laboratory analytical results for selenium from the 2020 second semi-annual sampling event were utilized to create horizontal and vertical plume maps (see attached Figure 1 and Figure 2, respectively). In addition, Table 1 Historical Total Selenium Concentrations has been updated to include the most recent and historical sampling data from compliance and Corrective Action Plan (CAP) wells.

As presented in the attached figures and table, selenium has not been detected at concentrations above the Groundwater Protection Standard (GPS) in any compliance or CAP well since 2016, including well CECW-3. Note that well CECW-3 has been dry since 2017, presumably due to placement of temporary cover on the landfill, and has been unable to be sampled. The selenium GPS exceedance in well CECW-3 in 2016 therefore appears to be related to low water levels in CECW-3. Given that selenium has not be detected above GPS for approximately 4 years, Dominion Energy requests that this constituent not be included in the Station's CAP.

If you have any questions regarding this information, please contact Kelly Hicks at (804) 273-4903 or via email at kelly.a.hicks@dominionenergy.com.

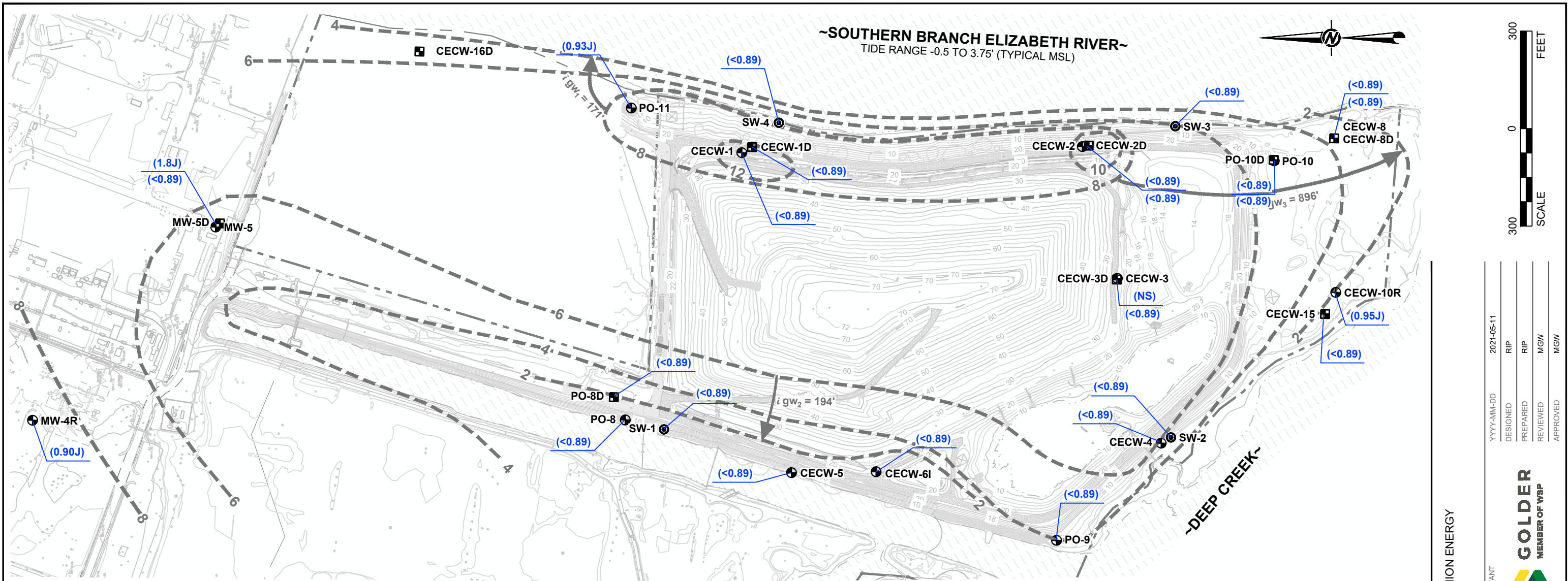
Sincerely,

A handwritten signature in blue ink that reads "Lisa C. Messinger".

Lisa C. Messinger
Director, Environmental Services

Attachments

ecc Geoff Christe, VA DEQ – geoff.christe@deq.virginia.gov
TRO Land Protection Mailbox – TRO.LandProtection@deq.virginia.gov



LEGEND

	PROPERTY LINE
	ADJACENT PARCEL PROPERTY LINE
	MAJOR TOPOGRAPHIC CONTOUR
	MINOR TOPOGRAPHIC CONTOUR
	GROUNDWATER SURFACE CONTOUR [FEET ABOVE MEAN SEA LEVEL (AMSL)]
	PO-8 MONITORING WELL LOCATION AND IDENTIFICATION
	(NS) NOT SAMPLED
	CW-12S CCR WELL
	CECW-15 OBSERVATION WELL
	SW-3 SURFACE WATER POINTS
	(<0.89) SHALLOW WELL SELENIUM RESULTS (TOP)
	(<0.89) DEEP WELL SELENIUM RESULTS (BOTTOM)

NOTES

- EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED APRIL, 2016. BOTTOM ASH GRADES SHOWN ARE FROM FIELD SURVEY COMPLETED ON JANUARY 15, 2018 BY D & M SURVEYORS, P.C.
- NORTH SHOWN IN REFERENCE TO VIRGINIA STATE PLANE, NAD27 DATUM, VIRGINIA SOUTH ZONE. VERTICAL DATUM IS NGVD 29.
- GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATUM, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
- GROUNDWATER CONTOUR LINES SHOW THE WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.
- SELENIUM RESULTS FROM SEPTEMBER 2020 EVENT.
- ALL ANALYTICAL RESULTS IN OR PARTS PER BILLION ug/L. J FLAG INDICATES ESTIMATED CONCENTRATION.
- DATA NOT CONTOURED AS ALL RESULTS LESS THEN GPS BASED ON THE MAXIMUM CONTAMINANT LEVEL OF 50 ug/L.

CLIENT
DOMINION ENERGY

DESIGNED	2021-05-11	RIP
PREPARED		RIP
REVIEWED		MGW
APPROVED		MGW

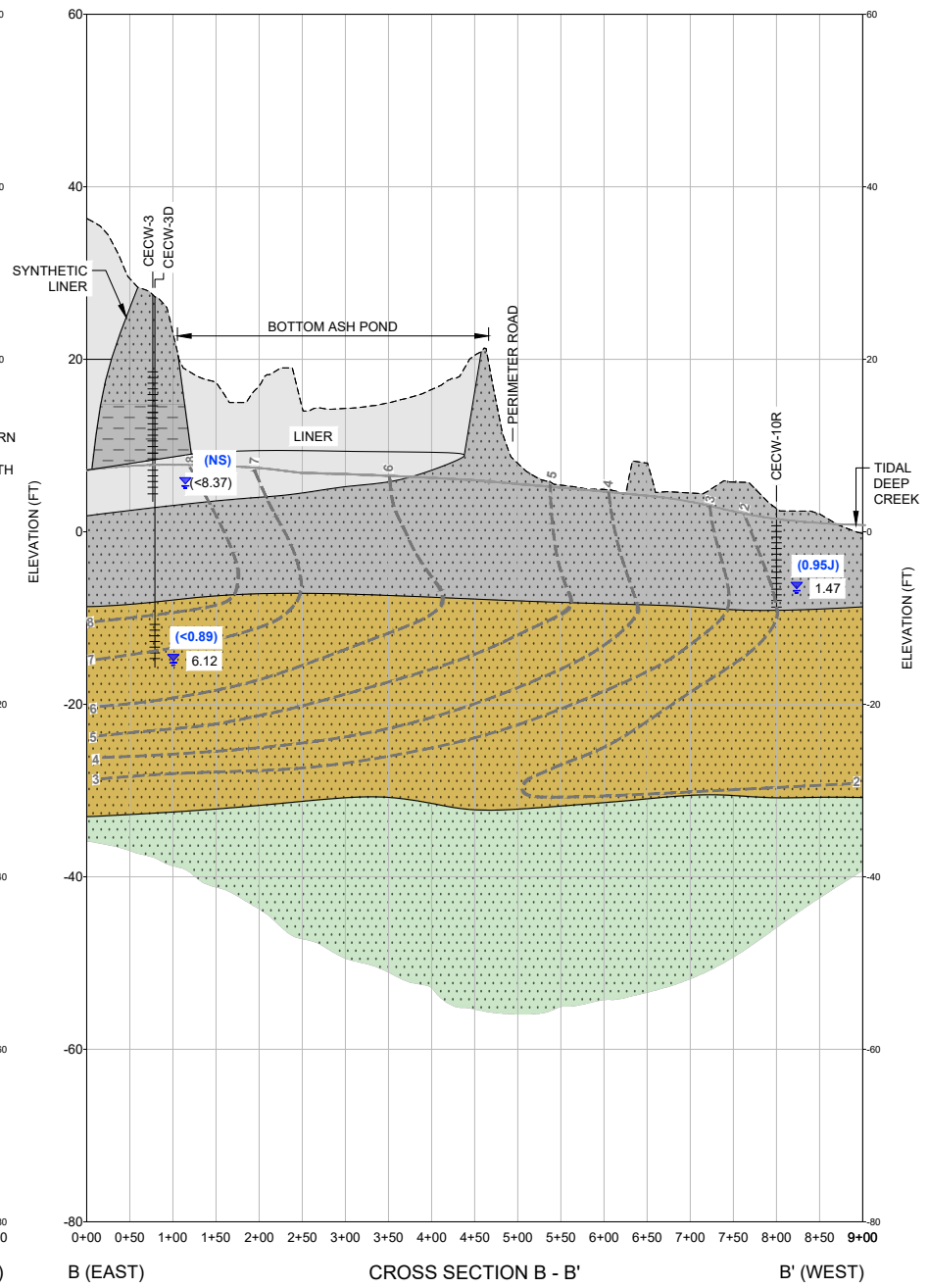
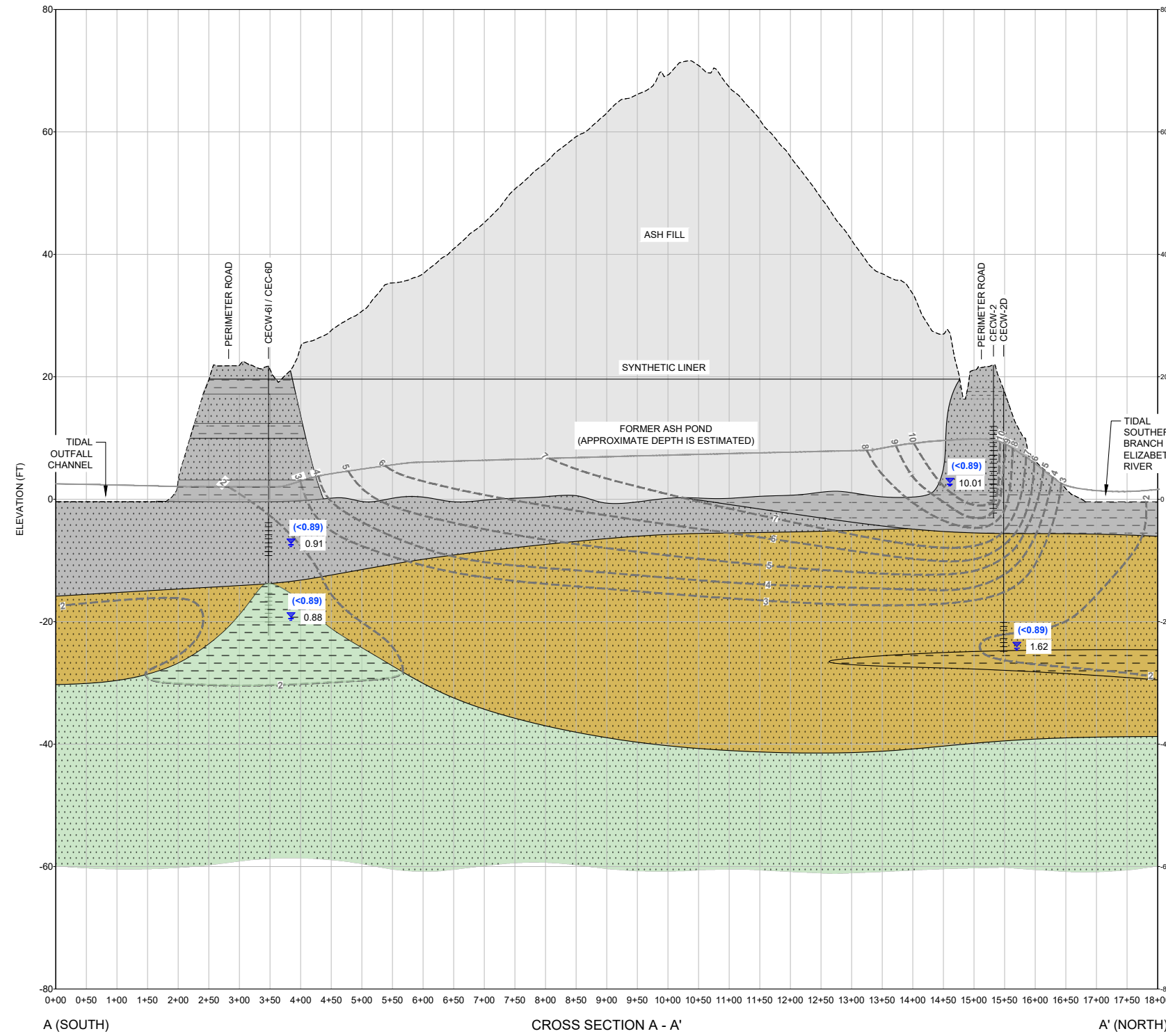


PROJECT
CHESAPEAKE ENERGY CENTER
CHESAPEAKE, VIRGINIA
NATURE AND EXTENT STUDY ADDENDUM

TITLE
SELENIUM ISOCONCENTRATION CONTOUR MAP

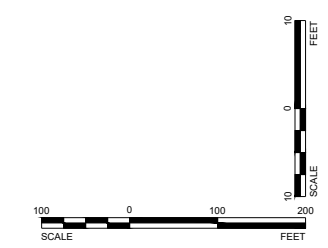
PROJECT NO.
20-13992921

REV. 0 DRAWING 1



LEGEND

- | | | | |
|------|---|--|--|
| | EXISTING GROUND | | MONITORING WELL IDENTIFICATION WITH GROUND SURFACE ELEVATION |
| | YORKTOWN FORMATION | | STATIC WATER LEVEL ELEVATION |
| | NORFOLK FORMATION | | SCREENED INTERVAL |
| | ALLUVIUM / FILL | | SELENIUM (UG/L) |
| | ASH | | <0.89 |
| (NS) | NOT SAMPLED | | |
| | POTENTIOMETRIC SURFACE ELEVATION (ASSUMED SEMI-CONFINED CONDITIONS) | | |
| | EQUIPOTENTIAL LINES OF EQUAL PRESSURE | | |



PROJECT: CHESAPEAKE ENERGY CENTER
CHESAPEAKE, VIRGINIA
NATURE AND EXTENT STUDY ADDENDUM

TITLE: VERTICAL ISOCONCENTRATION
CROSS-SECTIONS SELENIUM

PROJECT NO: 20-13992921

CLIENT: DOMINION ENERGY

CONSULTANT: GOLDER ASSOCIATES
2108 WEST LABURNUM AVENUE
SUITE 200
RICHMOND, VA 23227
(804) 368-7900
www.golder.com

GOLDER
MEMBER OF WSP

REV.	DATE	DESCRIPTION	DESIGN	CADD	CHECK	REVIEW
0	2021-05-11	DRAFT	RIP	RIP	MGW	MGW
			MMIDDY			

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1:16 IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ARCH D

