

VIA ELECTRONIC MAIL

April 25, 2023

New York State Department of Environmental Conservation Division of Environmental Remediation, Region 7 615 Erie Boulevard West Syracuse, New York 13204-2400 Attn: Karen A. Cahill, Project Manager

Subject: Former Emerson Power Transmission (EPT), Ithaca, NY Site No. 755010

Quarterly Free Product Surveillance Report No. 030 – Third and Fourth Quarter 2022

620 South Aurora Street, Ithaca, New York

Dear Karen:

On behalf of Emerson, WSP USA Inc. is submitting Quarterly Free Product Surveillance Report No. 030 for the former Emerson Power Transmission site located in Ithaca, New York. This report summarizes the semi-annual free product monitoring and recovery activities for the third and fourth quarter (September through December) of 2022 at groundwater wells that have free product present in them which include MW-8B, LBA-MW-35, LBA-MW-39, MW-50-160D, and MW-47A as shown on enclosed Figure 1. The use of absorbent socks continuously collected free product throughout the quarter, and are replaced quarterly.

SUMMARY OF RELEVANT FINDINGS

Quarterly groundwater elevation and light-phase free product monitoring and recovery were conducted on September 16, and December 12, 2022. Free product recovery is conducted using free product absorbent socks at each location and bailers, where appropriate. Following the retrieval of the free product absorbent socks, a new free product absorbent sock is deployed at each location to collect the free product.

Free product was observed in MW-47A during site activities in September 2022, subsequently MW-47A was added to the free product survalience monitoring program. No absorbent sock is deployed in MW-50-160D due to no observed measurable free product to date.

MW-8B FREE PRODUCT MONITORING & RECOVERY

Free product was detected in MW-8B with an apparent thickness of 0.01-feet (September; Table 1). No free product was detected during the December event. In total, 0.87 gallons of the free product was recovered during this reporting period; a total of 20.07 gallons of the free product has been removed since recovery was initiated in August 2016 (Table 1).

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LBA-MW-35 FREE PRODUCT MONITORING & RECOVERY

Free product was detected in LBA-MW-35 with an apparent thickness of 0.02-feet (September; Table 2). No free product was detected during the December event. In total, 0.97 gallons of the free product was recovered during this reporting period; a total of 14.26 gallons of the free product have been removed since recovery was initiated in October 2018 (Table 2).

LBA-MW-39 FREE PRODUCT MONITORING & RECOVERY

Free product was detected in LBA-MW-39 with an apparent thickness of 0.05-feet (December; Table 3). No free product was detected during the September event. In total, 0.86 gallons of the free product was recovered during this reporting period; a total of 7.54 gallons of the free product have been removed since recovery was initiated in October 2018 (Table 3).

MW-50-160D FREE PRODUCT MONITORING & RECOVERY

Free product measuring was initiated on June 21, 2021 (Table 4), no free product was detected during the September or December 2022 monitoring event. No free product was recovered during this reporting period.

MW-47A FREE PRODUCT MONITORING & RECOVERY

Free product measuring was initiated on September 16, 2022 (Table 5). Free product was detected in MW-47A with an apparent thickness of 0.20 feet (September; Table 5) and 0.03 feet (December; Table 5). In total, 0.58 gallons of the free product was recovered during this reporting period; a total of 0.58 gallons of the free product have been removed since recovery was initiated in September 2022 (Table 5).

Subsequent semi-annual reports will continue to provide updates on the free product monitoring and recovery at groundwater wells that have free product present. As requested by the New York State Department of Environmental Conservation, free product measurements will also be reported in the semi-annual Progress Reports.

Please do not hesitate to contact me at (813) 520-4340 with any questions or concerns.

Sincerely yours,

Jeffrey Baker

Lead Consultant

Senior Vice President, National Practice Lead

NTW: JRB

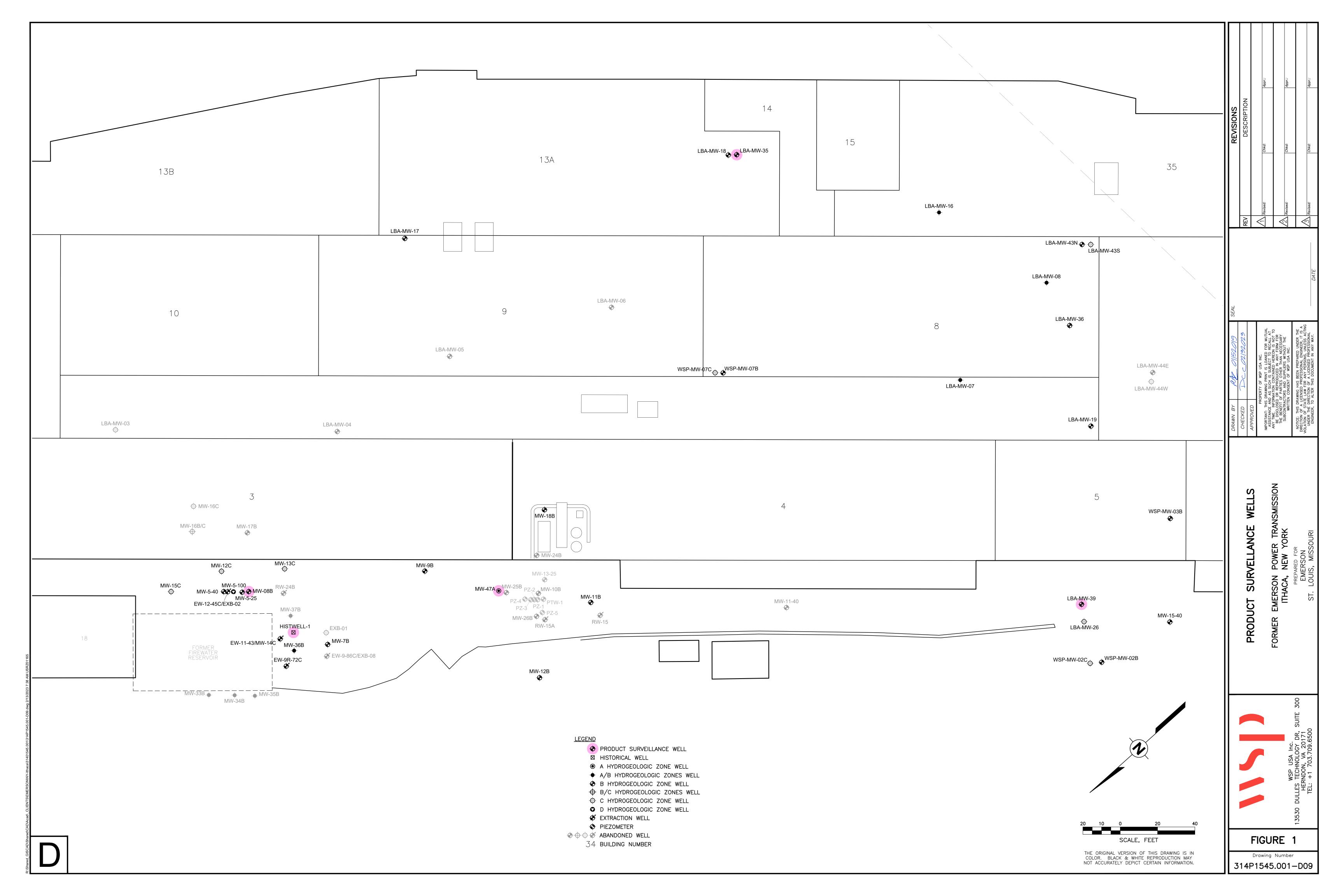
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Enclosures

cc/encl.:

Anthony Perretta, NYSDOH Steve Clarke, Emerson

FIGURE



TABLES

Table 1

Product Monitoring and Removal Summary - MW-8B Former Emerson Power Transmission Facility Ithaca, New York Third and Fourth Quarter 2022 (a)

Well Identification:			MW-8B]						
Casing Diameter (inches):			2.00									
Top of Casing (ft asml) (b):	586.08											
Total Depth (feet): 21.30												
Doto (a)	Depth to	Depth to Water (ft btoc, b)		Apparent Product	Apparent Product	Groundwater Elevation	Product Removal (gallons)				Water Removed (gallons)	
Date (e)	Product (ft btoc)	Measured	Corrected	Thickness (feet)	Volume (gallons)	(ft amsl)	Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to Third and Fourth Quarter 2022	-	-	-	-	-	-	-	-	-	19.21	0.05	1.90
September 16, 2022	9.19	9.20	9.19	0.01	0.00	577.45	0.00	0.43	0.43	19.64	0.04	1.95
December 12, 2022	NM	9.48	9.48	-	-	577.16	0.00	0.44	0.44	20.07	0.04	1.99

Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

e/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

Table 2

Product Monitoring and Removal Summary - LBA-MW-35 Former Emerson Power Transmission Facility Ithaca, New York Third and Fourth Quarter 2022 (a)

Well Identification:			LBA-MW-3	5]						
Casing Diameter (inches):			2.00									
Top of Casing (ft asml):		612.59										
Total Depth (feet): 32.00												
Date (c)	Depth to	Depth to Water (ft btoc, b)		Apparent Product	Apparent Product	Groundwater Elevation		Product Removal (gallons)			Water Removed (gallons)	
	Product (ft btoc)	Measured	Corrected	Thickness (feet)	Volume (gallons)	(ft amsl)	Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to Third and Fourth Quarter 2022	-	-	-	-	-	-	-	-	-	13.29	0.06	1.33
September 16, 2022	5.68	5.70	5.68	0.02	0.00	606.91	0.00	0.49	0.49	13.78	0.05	1.38
December 12, 2022	NM	5.66	5.66	1	-	606.93	0.00	0.49	0.49	14.26	0.05	1.43

Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

c/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

Table 3

Product Monitoring and Removal Summary - LBA-MW-39 Former Emerson Power Transmission Facility Ithaca, New York Third and Fourth Quarter 2022 (a)

Well Identification:			LBA-MW-39	9									
Casing Diameter (inches):			2.00										
Top of Casing (ft asml) (b):			583.06										
Total Depth (feet):	Total Depth (feet): 25.50												
Date (c)	Depth to	Depth to Water (ft btoc, b)		Apparent Product	Apparent Product	Groundwater Elevation	Product Removal (gallons)				Water Removed (gallons)		
	Product (ft btoc)	Measured	Corrected	Thickness (feet)	Volume (gallons)	(ft amsl)	Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed	
Previous to Third and Fourth Quarter 2022	-	-	-	-	-	-	-	-	-	6.68	0.04	0.67	
September 16, 2022	NM	18.40	18.40	-	-	564.66	0.00	0.40	0.40	7.09	0.04	0.71	
December 12, 2022	18.36	18.41	18.37	0.05	0.01	564.70	0.00	0.45	0.45	7.54	0.05	0.75	

a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

c/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

Table 4

Product Monitoring and Removal Summary - MW-50-160D Former Emerson Power Transmission Facility Ithaca, New York Third and Fourth Quarter 2022 (a)

Well Identification:			MW-50-160l	D									
Casing Diameter (inches):			4.00										
Top of Casing (ft asml) (b):	(b): 587.42												
Total Depth (feet):	Total Depth (feet): 163.53												
Data	Depth to	Depth to Water (ft btoc, b)		Apparent Apparent Product Product		Groundwater Elevation		Product Removal (gallons)				Water Removed (gallons)	
Date	Product (ft btoc)	Measured	Corrected	Thickness (feet)	Volume (gallons)	(ft amsl)	Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed	
Previous to Third and Fourth Quarter 2022	-	-	-	-	-	-	-	-	-	-	-	0.00	
September 16, 2022	NM	121.18	121.18	-	-	465.24	0.00	0.00	0.00	0.00	0.00	0.00	
December 12, 2022	NM	129.09	129.09	-	-	457.33	0.00	0.00	0.00	0.00	0.00	0.00	

Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

Table 5

Product Monitoring and Removal Summary - MW-47A Former Emerson Power Transmission Facility Ithaca, New York Third and Fourth Quarter 2022 (a)

Well Identification:			MW-47A]							
Casing Diameter (inches):		4.00											
Top of Casing (ft asml) (b):		586.70											
Total Depth (feet):	Total Depth (feet): 18.75												
Doto	Depth to	Depth to Water (ft btoc, b)		Apparent Product				Product Removal (gallons)				Water Removed (gallons)	
Date	Product (ft btoc)	Measured	Corrected	Thickness (feet)	Volume (gallons)	Elevation (ft amsl)	Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed	
Previous to Third and Fourth Quarter 2022	-	-	-	-	-	-	-	-	-	0.00	-	0.00	
September 16, 2022	11.77	11.97	11.79	0.20	0.033	574.91	0.00	0.00	0.00	0.00	0.00	0.00	
December 12, 2022	11.88	11.91	11.88	0.03	0.00	574.82	0.00	0.58	0.58	0.58	0.06	0.06	

Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.