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20 October 2016

Bruce Rundell
Remedial Project Manager
USEPA – Region III
3HS23
1650 Arch Street
Philadelphia, PA 19103

Subject: Submittal of July 2016 Quarterly Sampling Data
Fike/Artel Superfund Site, Nitro, West Virginia

Dear Mr. Rundell:

The first of four quarterly sampling events of the 28 long-term monitoring network (LTMN) wells at the Fike/Artel Superfund Site in Nitro, West Virginia (Site) was performed in late July 2016. The July 2016 event was performed in accordance with the memorandum *Proposed Quarterly Groundwater Sampling* (Work Plan, dated 16 June 2016), which was approved by the United States Environmental Protection Agency (USEPA) on 28 June 2016.

Consistent with the Work Plan, sample information and validated data from the July 2016 event are attached for your records. Data collection will continue quarterly over the next nine months, per the Work Plan. The ongoing quarterly sampling is independent of and will continue beyond the Feasibility Study (FS) for the Site. The second quarterly event is scheduled for the week of 17 October 2016. Data submittals will occur following each quarterly event, while evaluation and analysis of the quarterly monitoring data will proceed as more data becomes available.

Please feel free to contact me if you have any questions on the quarterly sampling program.

Sincerely,

(b) (4) [redacted]

Senior Engineer

Attachments: Tables 1 and 2

GS5682GA160518/GA160518_July 2016 (Q1) Sample Results.docx

Copies to: Tracy Jeffries – WVDEP;
(b) (4) K&L Gates;
(b) (4)
[redacted];
(b) (4) Geosyntec; and
Fike/Artel Trustees

TABLES

Table 1. July 2016 LTMN Well Sample Information
Quarterly Groundwater Sampling
Fike/Artel Superfund Site, Nitro, West Virginia

Location	Sample ID	Sample Date	Sample Zone	Screen Depth (ft bgs)	Analysis (Method)
LTMN Wells					
IP-1	FC4-IP-1-01-2980	7/25/2016	Deep	54 - 56.5	VOCs (8260B); SVOCs (8270C)
IP-12	FC4-IP-12-01-2990	7/26/2016	Deep	57.5 - 60	VOCs (8260B); SVOCs (8270C)
IP-24	FC4-IP-24-01-2988	7/26/2016	Deep	53 - 55.5	VOCs (8260B); SVOCs (8270C)
MW-115D	FC4-MW-115D-01-2981	7/25/2016	Deep	50 2 - 59.2	VOCs (8260B); SVOCs (8270C)
MW-119D	FC4-MW-119D-01-2979	7/25/2016	Deep	47 5 - 57.5	VOCs (8260B); SVOCs (8270C)
MW-120D	FC4-MW-120D-01-2975	7/25/2016	Deep	44 - 54	VOCs (8260B); SVOCs (8270C)
MW-122D	FC4-MW-122D-01-3004	7/27/2016	Deep	50 5 - 60.5	VOCs (8260B); SVOCs (8270C)
MW-208I	FC4-MW-208I-01-2976	7/25/2016	Deep	36 - 46	VOCs (8260B); SVOCs (8270C)
MW-208I**	FC4-MW-208I-02-2978	7/25/2016	Deep	36 - 46	VOCs (8260B); SVOCs (8270C)
MW-219D	FC4-MW-219D-01-2996	7/27/2016	Deep	54.8 - 59.8	VOCs (8260B); SVOCs (8270C)
MW-277D	FC4-MW-277D-01-3001	7/27/2016	Deep	55 - 60	VOCs (8260B); SVOCs (8270C)
MW-401	FC4-MW-401-01-3005	7/27/2016	Deep	52 - 57	VOCs (8260B); SVOCs (8270C)
MW-412	FC4-MW-412-01-3002	7/27/2016	Deep	51 5 - 56.5	VOCs (8260B); SVOCs (8270C)
MW-414	FC4-MW-414-01-2994	7/26/2016	Deep	37 2 - 42.2	VOCs (8260B); SVOCs (8270C)
MW-422	FC4-MW-422-01-2989	7/26/2016	Deep	51.6 - 56.6	VOCs (8260B); SVOCs (8270C)
MW-423	FC4-MW-423-01-2982	7/25/2016	Deep	49.8 - 54.8	VOCs (8260B); SVOCs (8270C)
MW-423**	FC4-MW-423-02-2983	7/25/2016	Deep	49.8 - 54.8	VOCs (8260B); SVOCs (8270C)
MW-424	FC4-MW-424-01-2986	7/26/2016	Deep	50.6 - 55.6	VOCs (8260B); SVOCs (8270C)
MW-425	FC4-MW-425-01-2995	7/27/2016	Deep	47 - 52	VOCs (8260B); SVOCs (8270C)
MW-426	FC4-MW-426-01-2991	7/26/2016	Deep	48.8 - 53.8	VOCs (8260B); SVOCs (8270C)
PBW-2	FC4-PBW-2-01-2993	7/26/2016	Deep	53 - 58	VOCs (8260B); SVOCs (8270C)
PBW-6	FC4-PBW-6-01-2977	7/25/2016	Deep	54 - 59	VOCs (8260B); SVOCs (8270C)
PBW-7	FC4-PBW-7-01-2997	7/27/2016	Deep	47.5 - 53.5	VOCs (8260B); SVOCs (8270C)
PBW-8	FC4-PBW-8-01-2992	7/26/2016	Deep	57 - 62	VOCs (8260B); SVOCs (8270C)
PR-MW-50	FC4-PR-MW-50-01-3009	7/28/2016	Deep	53 - 58	VOCs (8260B); SVOCs (8270C)
PR-PEW-200	FC4-PR-PEW-200-01-3003	7/27/2016	Deep	54 - 56.5	VOCs (8260B); SVOCs (8270C)
PRR-MW-50	FC4-PRR-MW-50-01-3008	7/28/2016	Deep	53 - 58	VOCs (8260B); SVOCs (8270C)
PRR-PEW-200	FC4-PRR-PEW-200-01-3007	7/28/2016	Deep	52 - 57	VOCs (8260B); SVOCs (8270C)
R25-MW-50	FC4-R25-MW-50-01-2987	7/26/2016	Deep	54 - 59	VOCs (8260B); SVOCs (8270C)
R25-PEW-200	FC4-R25-PEW-200-01-3000	7/27/2016	Deep	53 - 58	VOCs (8260B); SVOCs (8270C)

Notes:
- ft bgs = feet below ground surface
- VOCs = volatile organic compounds (i.e., the 10 site VOC constituents of concern [COCs]: 1,1,2-trichloroethane, 1,2-dichloroethane, 1,2-dichloropropane, benzene, carbon tetrachloride, chlorobenzene, chloroform, tetrachloroethene, trichloroethene and vinyl chloride)
- SVOCs = semi-volatile organic compounds (i.e., the 5 site SVOC COCs: HMPA, BCEE, 13DM2TU, bis (2-choroisopropyl) ether, and bis (2-ethylhexyl) phthalate)
- HMPA = hexamethylphosphoramide
- BCEE = bis-2-chloroethyl(ether)
- 13DM2TU = 1,3-dimethyl 2-thiourea
- ** = duplicate sample

Table 2. Select Historical and July 2016 LTMN Well Sampling Results
Quarterly Groundwater Sampling
Fike/Artel Superfund Site, Nitro, West Virginia

Location	Date	Top Depth (ft bgs)	Bottom Depth (ft bgs)	1,3-Dimethyl-2-Thiourea	bis(2-Chloroethyl) Ether	bis(2-Chloroisopropyl) Ether	bis(2-Ethylhexyl) Phthalate	Hexamethylphosphoramide	1,1,2-Trichloroethane	1,2-Dichloroethane	1,2-Dichloropropane	Benzene	Carbon Tetrachloride	Chlorobenzene	Chloroform	Tetrachloroethene	Trichloroethene	Vinyl Chloride
			Criterion →	*218*	*0.01*	*1.4*	*2.2*	*8.57*	*1.1*	*0.7*	*1.6*	*0.4*	*0.5*	*1.8*	*1.1*	*0.3*	*2.2*	*0.07*
LTMN Wells																		
IP-1	4/1/2009	54	56.5	**31**	0.22 U	0.22 U	5.6 U	**150**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-1	9/29/2011	54	56.5					**120**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-1	12/9/2015	54	56.5	50 UJ	0.5 UJ	1.25 UJ	12.5 UJ	**72 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-1	7/25/2016	54	56.5	106 UJ	1.06 UJ	2.66 UJ	26.6 UJ	**77.7 J-**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-12	4/2/2009	57.5	60	23 U	0.23 U	0.23 U	5.8 U	**580**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-12	9/29/2011	57.5	60					**160**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-12	12/9/2015	57.5	60	108 U	1.1 U	2.7 U	27 U	**244 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-12	7/26/2016	57.5	60	112 UJ	1.12 UJ	2.81 UJ	28.1 U	**202**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-24	4/2/2009	53	55.5	22 U	0.22 U	0.22 U	5.4 U	**1,100**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-24	9/30/2011	7	55.5					**1,200**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-24	12/10/2015	53	60	108 UJ	1.08 UJ	2.69 UJ	26.9 UJ	**357 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
IP-24	7/26/2016	53	60	216 U	2.16 UJ	5.41 UJ	54.1 U	**346**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-115D	9/29/2011	50.2	59.2					**98**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-115D	12/8/2015	50.2	59.2	**617**	4.3 U	11 U	108 U	**198**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-115D	7/25/2016	50.2	59.2	**146 J**	2.25 UJ	5.62 UJ	56.2 UJ	**158 J-**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.335 J**	**0.705 J**	1.0 U
MW-119D	4/1/2009	47.5	57.5	**83**	0.22 U	0.22 U	5.4 U	**53**	1.0 U	1.0 U	1.0 U	**1.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.0**
MW-119D	9/30/2011	47.5	57.5					**34**	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.7**
MW-119D	12/8/2015	47.5	57.5	**58 J**	0.51 UJ	2.6 U	13 UR	**31**	1.0 U	1.0 U	1.0 U	**1.9**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.72**
MW-119D	7/25/2016	47.5	57.5	**56.8 J**	1.12 UJ	2.81 UJ	28.1 U	**28.1**	1.0 U	1.0 U	1.0 U	**1.79**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.5**
MW-120D	3/31/2009	44	54	22 U	0.22 U	0.22 U	5.4 U	**1.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-120D	9/30/2011	44	54					**22**	1.0 U	1.0 U	1.0 U	**31**	1.0 U	**6.3**	1.0 U	1.0 U	1.0 U	1.0 U
MW-120D	12/7/2015	44	54	22 U	0.22 U	0.56 U	5.6 U	**1.8**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-120D	7/25/2016	44	54	20 UJ	0.2 UJ	0.5 UJ	5 UJ	**12.8 J-**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

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			Criterion →	*218*	*0.01*	*1.4*	*2.2*	*8.57*	*1.1*	*0.7*	*1.6*	*0.4*	*0.5*	*1.8*	*1.1*	*0.3*	*2.2*	*0.07*
LTMN Wells																		
MW-122D	9/30/2011	50.5	60.5					**1,600**	1.0 U	1.0 U	1.0 U	**17**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.28 J**
MW-122D	12/8/2015	50.5	60.5	**1,690**	**11**	2.7 U	27 U	**2,290**	1.0 U	1.0 U	1.0 U	**18**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.603**
MW-122D	3/24/2016	50.5	60.5					**1,040**										
MW-122D	7/27/2016	50.5	60.5	**904 J**	**5.06 J**	5.88 UJ	58.8 U	**1180**	1.0 U	**0.553 J**	1.0 U	**14.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.266 J**
MW-208I	9/30/2011	36	46					**15**	1.0 U	**5.4**	**4.3**	**52**	1.0 U	**93**	**2.3**	**7.4**	**58**	**170**
MW-208I	12/7/2015	36	46	106 U	**10**	**117**	27 U	2.7 U	1.0 U	**2.7**	**1.8**	**28**	1.0 U	**67**	**1.2**	**3.1**	**19**	**53**
MW-208I	7/25/2016	36	46	100 U	**15.2 J**	**194 J**	25 U	2.5 UJ	1.0 U	**2.25**	**1.33**	**29.1 J**	1.0 U	**70.6 J**	1.0 U	**2.86**	**14.7 J**	**36.7 J**
MW-208I*	7/25/2016	36	46	112 U	**10.1 J**	**120 J**	28.1 U	**13.7 J**	1.0 U	**2.12**	**1.31**	**25.9 J**	1.0 U	**64.6**	1.0 U	**2.52**	**12.8**	**31.7**
MW-219D	3/31/2009	54.8	59.8	**1,100**	0.22 U	0.22 U	5.5 U	**1,300**	1.0 U	1.0 U	1.0 U	**0.29 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.4**
MW-219D	9/30/2011	54.8	59.8					**450**	1.0 U	1.0 U	1.0 U	**0.27 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.52 J**
MW-219D	12/15/2015	54.8	59.8	**829**	2.0 U	5.0 U	50 U	**1,130**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-219D	3/24/2016	54.8	59.8					**709**										
MW-219D	7/27/2016	54.8	59.8	**708 J**	0.217 UJ	0.543 UJ	5.43 U	**789**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-277D	3/30/2009	55	60	**500**	0.23 U	0.23 U	5.7 U	**1,700**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.81 J**	1.0 U	1.0 U	1.0 U
MW-277D	9/28/2011	55	60					**1,100**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-277D	12/9/2015	55	60	**1,170**	2.0 U	5.0 U	50 U	**1,680 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-277D	7/27/2016	55	60	**1,060 J**	2.17 UJ	5.43 UJ	54.3 UJ	**1,270**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-401	9/29/2011	52	57					**890**	1.0 U	**0.54 J**	1.0 U	**4.2**	1.0 U	1.0 U	**0.68 J**	1.0 U	1.0 U	**1.7**
MW-401	12/9/2015	52	57	**845**	**34**	5.5 U	55 U	**1,420 J**	1.0 U	**0.51 J**	1.0 U	**2.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.9**
MW-401	3/24/2016	52	57					**752**										
MW-401	7/27/2016	52	57	**453 J**	**13.1 J**	5 UJ	50 U	**722**	1.0 U	**0.375 J**	1.0 U	**1.23**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.72**
MW-412	9/27/2011	51.5	56.5					**1,200**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.34 J**	1.0 U	1.0 U	1.0 U
MW-412	12/9/2015	51.5	56.5	**405**	2.2 U	5.5 U	55 U	**1,900 J**	1.0 U	1.0 U	**0.28 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-412	7/27/2016	51.5	56.5	**563 J**	2.07 UJ	5.18 UJ	51.8 U	**1630**	1.0 U	1.0 U	**0.358 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

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Fike/Artel Superfund Site, Nitro, West Virginia

Location	Date	Top Depth (ft bgs)	Bottom Depth (ft bgs)	1,3-Dimethyl-2-Thiourea	bis(2-Chloroethyl) Ether	bis(2-Chloroisopropyl) Ether	bis(2-Ethylhexyl) Phthalate	Hexamethylphosphoramide	1,1,2-Trichloroethane	1,2-Dichloroethane	1,2-Dichloropropane	Benzene	Carbon Tetrachloride	Chlorobenzene	Chloroform	Tetrachloroethene	Trichloroethene	Vinyl Chloride
			Criterion →	*218*	*0.01*	*1.4*	*2.2*	*8.57*	*1.1*	*0.7*	*1.6*	*0.4*	*0.5*	*1.8*	*1.1*	*0.3*	*2.2*	*0.07*
LTMN Wells																		
MW-414	9/28/2011	37.25	42.25					**87**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-414	1/27/2015	37.25	42.25	**89.3**	0.233 U			**296**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-414	12/9/2015	37.25	42.25	227 U	2.3 U	5.7 U	57 U	**288 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-414	7/26/2016	37.25	42.25	**115 J**	2 UJ	5 UJ	50 U	**360**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-422	9/28/2011	51.58	56.58					**260**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.64 J**	1.0 U	1.0 U	**0.42 J**
MW-422	12/9/2015	51.58	56.58	**484**	4.4 U	11 U	109 U	**351 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.914 J**
MW-422	7/26/2016	51.58	56.58	**424**	2.17 UJ	5.43 UJ	54.3 U	**389**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.499 J**
MW-423	9/27/2011	49.8	54.8					**68**	1.0 U	1.0 U	1.0 U	**0.16 J**	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	1.0 U
MW-423	12/7/2015	49.8	54.8	40 U	0.4 U	1.0 U	10 U	**230**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-423	3/24/2016	49.8	54.8					**80.3**										
MW-423	7/25/2016	49.8	54.8	40 U	0.4 UJ	1.0 U	10 U	**158**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-423*	7/25/2016	49.8	54.8	20 U	0.2 UJ	0.5 UJ	5 U	**189**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-424	9/29/2011	50.58	55.58					**5.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.2**	1.0 U	1.0 U	1.0 U
MW-424	1/27/2015	50.58	55.58	21.3 U	0.213 U			**50.8**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-424	12/7/2015	50.58	55.58	200 U	2.0 U	5.0 U	50 U	**73.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-424	3/24/2016	50.58	55.58					**65.2 J**										
MW-424	7/26/2016	50.58	55.58	200 U	2 UJ	5 UJ	50 U	**60**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-425	9/28/2011	47	52					**880**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.70 J**	1.0 U	1.0 U	1.0 U
MW-425	1/27/2015	47	52	**200 J**	2.11 U			**1,300**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-425	12/9/2015	47	52	**140 J**	2.0 U	5.0 U	50 U	**927 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.70 J**	1.0 U	1.0 U	1.0 U
MW-425	7/27/2016	47	52	**168 J**	2 UJ	5 UJ	50 U	**653**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 2. Select Historical and July 2016 LTMN Well Sampling Results
Quarterly Groundwater Sampling
Fike/Artel Superfund Site, Nitro, West Virginia

Location	Date	Top Depth (ft bgs)	Bottom Depth (ft bgs)	1,3-Dimethyl-2-Thiourea	bis(2-Chloroethyl) Ether	bis(2-Chloroisopropyl) Ether	bis(2-Ethylhexyl) Phthalate	Hexamethylphosphoramide	1,1,2-Trichloroethane	1,2-Dichloroethane	1,2-Dichloropropane	Benzene	Carbon Tetrachloride	Chlorobenzene	Chloroform	Tetrachloroethene	Trichloroethene	Vinyl Chloride
			Criterion →	*218*	*0.01*	*1.4*	*2.2*	*8.57*	*1.1*	*0.7*	*1.6*	*0.4*	*0.5*	*1.8*	*1.1*	*0.3*	*2.2*	*0.07*
LTMN Wells																		
MW-426	9/29/2011	48.75	53.75					**20**	1.0 U	1.0 U	1.0 U	**0.21 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-426	1/27/2015	48.75	53.75	21.3 U	0.213 U			**69**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-426	12/7/2015	48.75	53.75	22 U	0.22 U	0.55 U	5.49 U	**74.8**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-426	7/26/2016	48.75	53.75	40 U	0.4 UJ	1.0 UJ	10 U	**79**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-2	3/30/2009	53	58	22 U	0.22 U	0.22 U	5.4 U	**330**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-2	9/27/2011	53	58					**290**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-2	12/8/2015	53	58	215 U	2.2 U	5.4 U	54 U	**346**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-2	7/26/2016	53	58	221 U	2.21 UJ	5.52 UJ	55.2 U	**570**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-6	9/27/2011	54	59					**4.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	**1.8**
PBW-6	12/8/2015	54	59	20 U	**0.13 J**	0.5 U	5.0 U	**5.1 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.629 J**	**1.09**
PBW-6	7/25/2016	54	59	20 U	**0.18 J**	**0.46 J**	5 U	**2.39**	1.0 U	**0.778 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.682 J**	1.0 U	**1.7**
PBW-7	9/28/2011	47.5	53.5					**380**	1.0 U	**0.39 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-7	12/8/2015	47.5	53.5	208 U	2.1 U	5.2 U	52 U	**600**	1.0 U	**0.299 J**	**0.221 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-7	3/24/2016	47.5	53.5					**449**										
PBW-7	7/27/2016	47.5	53.5	217 UJ	2.17 UJ	5.43 UJ	54.3 UJ	**279**	1.0 U	**0.346 J**	**0.229 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PBW-8	9/28/2011	57	62					**440**	1.0 U	**5.9**	**30**	**0.70 J**	1.0 U	1.0 U	**0.17 J**	1.0 U	1.0 U	**30**
PBW-8	12/8/2015	57	62	**656**	**23**	5.3 U	53 U	**1,160**	1.0 U	**7.2**	**26.9**	**0.852 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**20.7**
PBW-8	3/24/2016	57	62					**673**										
PBW-8	7/26/2016	57	62	**469**	**39.8 J**	5.49 UJ	54.9 U	**698**	1.0 U	**6.84**	**32.4**	**0.948 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**18.8**
PR-MW-50	5/13/2009	53	58	**180**	0.43 U	0.43 U	11 U	**3,200**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**
PR-MW-50	9/29/2011	53	58					**1,300**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.73 J**
PR-MW-50	12/10/2015	53	58	**262**	2.0 U	5.1 U	51 U	**2,420 J**	1.0 U	**0.58**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.7**
PR-MW-50	7/28/2016	53	58	**162 J**	2 UJ	5 UJ	50 U	**1280**	1.0 U	**0.407 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**

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			Criterion →	*218*	*0.01*	*1.4*	*2.2*	*8.57*	*1.1*	*0.7*	*1.6*	*0.4*	*0.5*	*1.8*	*1.1*	*0.3*	*2.2*	*0.07*
LTMN Wells																		
PR-PEW-200	5/13/2009	54	56.5	**340**	0.22 U	0.22 U	5.4 U	**1,700**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PR-PEW-200	9/29/2011	54	56.5					**1,800**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**
PR-PEW-200	12/10/2015	54	56.5	**185 J**	2.0 U	5.0 U	50 U	**2,250 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.7**
PR-PEW-200	7/27/2016	54	56.5	**245 J**	2 UJ	5 UJ	50 UJ	**1490**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.47**
PRR-MW-50	5/12/2009	53	58	**120**	0.40 U	0.40 U	10 U	**1,200**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PRR-MW-50	9/28/2011	53	58					**700**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**
PRR-MW-50	12/10/2015	53	58	**144 J**	2.0 U	5.0 U	50 U	**2,440 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.60 J**
PRR-MW-50	7/28/2016	53	58	**173 J**	2.15 UJ	5.38 UJ	53.8 U	**1880**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.03**
PRR-PEW-200	5/12/2009	52	57	**180**	1.1 U	1.1 U	27 U	**500**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PRR-PEW-200	9/28/2011	52	57					**1,200**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**
PRR-PEW-200	12/10/2015	52	57	**381**	2.2 U	5.5 U	55 U	**2,780 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.4**
PRR-PEW-200	7/28/2016	52	57	**263 J**	2.15 UJ	5.38 UJ	53.8 U	**2320**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.78**
R25-MW-50	5/12/2009	54	59	**130**	0.43 U	0.43 U	11 U	**1,800**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
R25-MW-50	9/27/2011	54	59					**290**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
R25-MW-50	12/10/2015	54	59	200 U	2.0 U	5.0 U	50 U	**237 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
R25-MW-50	7/26/2016	54	59	214 U	2.14 UJ	5.35 UJ	53.5 UJ	**295**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
R25-PEW-200	5/12/2009	53	58	**140**	0.43 U	0.43 U	11 U	**510**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
R25-PEW-200	9/27/2011	53	58					**380**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
R25-PEW-200	12/10/2015	53	58	200 U	2.0 U	5.0 U	50 U	**580 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
R25-PEW-200	7/27/2016	53	58	200 UJ	2 UJ	5 UJ	50 UJ	**277**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
1. Qualifiers: J = estimated value; J- = estimated with low bias; U = non-detect; UR = rejected value.
2. All results presented in micrograms per liter (µg/L).
3. Bold values indicate a detection and underlined values denote exceedances of the PRG.
4. PRG criteria based on Amended 2006 ROD.
5. Blanks indicate no results.
6. ft bgs = feet below ground surface.
7. * = field duplicate
8. LTMN = long-term monitoring network