



City of Mountain View Water Department
ATTN: Ms. Debra Walker
Post Office Drawer 360
Mountain View, AR 72560

This report contains the analytical results and supporting information for the sample received on February 13, 2019. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Chief Operating Officer or a qualified designee.

A handwritten signature in black ink that reads 'Steve Bradford'.

Steve Bradford
Deputy Laboratory Director

This document has been distributed to the following:

PDF cc: City of Mountain View Water Department
ATTN: Ms. Debra Walker
mvwater@mvtel.net

City of Mountain View Water Department
ATTN: Mr. Keith Johnson
waterdepartment@cityofmntnview.com

City of Mountain View Water Department
Post Office Drawer 360
Mountain View, AR 72560

SAMPLE INFORMATION

Project Description:

One (1) soil sample(s) received on February 13, 2019
P.O. No. 486614

Receipt Details:

A Chain of Custody was provided. The samples were delivered in one (1) ice chest.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

Sample Identification:

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Sampled Date/Time</u>	<u>Notes</u>
231626-1	Mtn. View Sludge	13-Feb-2019 0843	

Qualifiers:

Q Analyte is not within quality control limits

Case Narrative:

Low recoveries for surrogate compounds in the Base/Neutral and Acid Compounds Laboratory Blank do not impact sample data as all surrogate recoveries for the sample were within QC acceptance criteria.

Analysis of soils/sludges are reported on a dry-weight basis unless specified.

References:

- "Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
- "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
- "Standard Methods for the Examination of Water and Wastewaters", (SM).
- "American Society for Testing and Materials" (ASTM).
- "Association of Analytical Chemists" (AOAC).

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ANALYTICAL RESULTS

AIC No. 231626-1

Sample Identification: Mtn. View Sludge 13-Feb-2019 0843

Analyte	Result	RL	Units	Qualifier
TCLP: Solids EPA 1311	100 Analyzed: 13-Feb-2019 1509 by 100	0.5	% Batch: S46529	
Arsenic EPA 3051A, 6010D Prep: 18-Feb-2019 0930 by 100	30 Analyzed: 27-Feb-2019 2044 by 328	5	mg/Kg Batch: S46622	
Barium EPA 3051A, 6010D Prep: 18-Feb-2019 0930 by 100	61 Analyzed: 27-Feb-2019 2044 by 328	0.2	mg/Kg Batch: S46622	
Cadmium EPA 3051A, 6010D Prep: 18-Feb-2019 0930 by 100	1.3 Analyzed: 27-Feb-2019 2044 by 328	0.4	mg/Kg Batch: S46622	
Chromium EPA 3051A, 6010D Prep: 18-Feb-2019 0930 by 100	11 Analyzed: 27-Feb-2019 2044 by 328	1	mg/Kg Batch: S46622	
Lead EPA 3051A, 6010D Prep: 18-Feb-2019 0930 by 100	9.4 Analyzed: 27-Feb-2019 2044 by 328	4	mg/Kg Batch: S46622	
Selenium EPA 3051A, 6010D Prep: 18-Feb-2019 0930 by 100	13 Analyzed: 27-Feb-2019 2044 by 328	7	mg/Kg Batch: S46622	
Silver EPA 3051A, 6010D Prep: 18-Feb-2019 0930 by 100	< 0.7 Analyzed: 19-Feb-2019 1411 by 328	0.7	mg/Kg Batch: S46622	
Mercury EPA 7471B Prep: 14-Feb-2019 1419 by 100	< 0.1 Analyzed: 15-Feb-2019 1159 by 313	0.1	mg/Kg Batch: S46611	
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D				
TCLP: 2,4,5-Trichlorophenol EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: 2,4,6-Trichlorophenol EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: 1,4-Dichlorobenzene EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: 2,4-Dinitrotoluene EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: Cresols EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.10 Analyzed: 21-Feb-2019 1506 by 271	0.10	mg/l Batch: B11296	
TCLP: Hexachlorobenzene EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: Hexachlorobutadiene EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: Hexachloroethane EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: Nitrobenzene EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: Pentachlorophenol EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	
TCLP: Pyridine EPA 3510C, 8270D Prep: 18-Feb-2019 0913 by 285	< 0.050 Analyzed: 21-Feb-2019 1506 by 271	0.050	mg/l Batch: B11296	

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ANALYTICAL RESULTS

AIC No. 231626-1 (Continued)

Sample Identification: Mtn. View Sludge 13-Feb-2019 0843

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
TCLP Base/Neutral and Acid Compounds By EPA 3510C, 8270D (Continued)				
Surrogate: TCLP: 2,4,6-Tribromophenol (10.6-139%) EPA 3510C, 8270D	21.9		%	
Prep: 18-Feb-2019 0913 by 285	Analyzed: 21-Feb-2019 1506 by 271		Batch: B11296	
Surrogate: TCLP: 2-Fluorobiphenyl (45.0-101%) EPA 3510C, 8270D	65.1		%	
Prep: 18-Feb-2019 0913 by 285	Analyzed: 21-Feb-2019 1506 by 271		Batch: B11296	
Surrogate: TCLP: 2-Fluorophenol (10.0-119%) EPA 3510C, 8270D	31.8		%	
Prep: 18-Feb-2019 0913 by 285	Analyzed: 21-Feb-2019 1506 by 271		Batch: B11296	
Surrogate: TCLP: Nitrobenzene-D5 (36.8-115%) EPA 3510C, 8270D	65.1		%	
Prep: 18-Feb-2019 0913 by 285	Analyzed: 21-Feb-2019 1506 by 271		Batch: B11296	
Surrogate: TCLP: Terphenyl-D14 (56.0-111%) EPA 3510C, 8270D	65.3		%	
Prep: 18-Feb-2019 0913 by 285	Analyzed: 21-Feb-2019 1506 by 271		Batch: B11296	
TCLP Volatile Organic Compounds By EPA 5030C, 8260D				
TCLP: 1,2-Dichloroethane EPA 5030C, 8260D	< 0.50	0.50	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: 1,1-Dichloroethylene EPA 5030C, 8260D	< 0.50	0.50	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Benzene EPA 5030C, 8260D	< 0.50	0.50	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Carbon tetrachloride EPA 5030C, 8260D	< 0.20	0.20	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Chlorobenzene EPA 5030C, 8260D	< 0.50	0.50	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Chloroform EPA 5030C, 8260D	< 0.50	0.50	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Methyl ethyl ketone EPA 5030C, 8260D	< 1.0	1.0	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Tetrachloroethylene EPA 5030C, 8260D	< 0.50	0.50	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Trichloroethylene EPA 5030C, 8260D	< 0.50	0.50	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
TCLP: Vinyl chloride EPA 5030C, 8260D	< 0.20	0.20	mg/l	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
Surrogate: TCLP: 4-Bromofluorobenzene (75.0-120%) EPA 5030C, 8260D	99.5		%	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
Surrogate: TCLP: Dibromofluoromethane (85.0-115%) EPA 5030C, 8260D	88.5		%	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	
Surrogate: TCLP: Toluene-D8 (85.0-120%) EPA 5030C, 8260D	100		%	
Prep: 15-Feb-2019 1324 by 338	Analyzed: 15-Feb-2019 1720 by 271		Batch: V9574	

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
TCLP Base/Neutral and Acid Compounds								
TCLP: 2,4,5-Trichlorophenol	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	30.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: 2,4,6-Trichlorophenol	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	58.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: 1,4-Dichlorobenzene	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	30.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: 2,4-Dinitrotoluene	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	42.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Cresols	231626-1	< 0.10 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.10 mg/l	0.00	18.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Hexachlorobenzene	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	55.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Hexachlorobutadiene	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	62.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Hexachloroethane	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	52.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Nitrobenzene	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	62.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Pentachlorophenol	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	86.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Pyridine	231626-1	< 0.050 mg/l			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	< 0.050 mg/l	0.00	30.0	18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: 2,4,6-Tribromophenol (10.6-139%)	231626-1	21.9 %			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	23.8 %			18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: 2-Fluorobiphenyl (45.0-101%)	231626-1	65.1 %			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	63.6 %			18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: 2-Fluorophenol (10.0-119%)	231626-1	31.8 %			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	27.8 %			18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Nitrobenzene-D5 (36.8-115%)	231626-1	65.1 %			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	63.6 %			18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP: Terphenyl-D14 (56.0-111%)	231626-1	65.3 %			18Feb19 0913 by 285	21Feb19 1506 by 271		
Batch: B11296	Duplicate	66.6 %			18Feb19 0914 by 285	21Feb19 1432 by 271		
TCLP Volatile Organic Compounds								
TCLP: 1,2-Dichloroethane	231626-1	< 0.50 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.50 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: 1,1-Dichloroethylene	231626-1	< 0.50 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.50 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Benzene	231626-1	< 0.50 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.50 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Carbon tetrachloride	231626-1	< 0.20 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.20 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Chlorobenzene	231626-1	< 0.50 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.50 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Chloroform	231626-1	< 0.50 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.50 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Methyl ethyl ketone	231626-1	< 1.0 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 1.0 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
TCLP Volatile Organic Compounds (Continued)								
TCLP: Tetrachloroethylene	231626-1	< 0.50 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.50 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Trichloroethylene	231626-1	< 0.50 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.50 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Vinyl chloride	231626-1	< 0.20 mg/l			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	< 0.20 mg/l	0.00	30.0	15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: 4-Bromofluorobenzene (75.0-120%)	231626-1	99.5 %			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	97.1 %			15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Dibromofluoromethane (85.0-115%)	231626-1	88.5 %			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	89.3 %			15Feb19 1324 by 338	15Feb19 1638 by 271		
TCLP: Toluene-D8 (85.0-120%)	231626-1	100 %			15Feb19 1324 by 338	15Feb19 1720 by 271		
Batch: V9574	Duplicate	101 %			15Feb19 1324 by 338	15Feb19 1638 by 271		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Arsenic	200 mg/Kg	109	85.0-115			S46622	18Feb19 0930 by 100	27Feb19 2016 by 328		
Barium	20.0 mg/Kg	99.6	85.0-115			S46622	18Feb19 0930 by 100	27Feb19 2016 by 328		
Cadmium	200 mg/Kg	102	85.0-115			S46622	18Feb19 0930 by 100	27Feb19 2016 by 328		
Chromium	20.0 mg/Kg	106	85.0-115			S46622	18Feb19 0930 by 100	27Feb19 2016 by 328		
Lead	200 mg/Kg	104	85.0-115			S46622	18Feb19 0930 by 100	27Feb19 2016 by 328		
Selenium	200 mg/Kg	106	85.0-115			S46622	18Feb19 0930 by 100	27Feb19 2016 by 328		
Silver	4.00 mg/Kg	101	85.0-115			S46622	18Feb19 0930 by 100	19Feb19 1358 by 328		
Mercury	1.25 mg/Kg	110	85.0-115			S46611	14Feb19 1419 by 100	15Feb19 1128 by 313		
TCLP Volatile Organic Compounds										
Benzene	20 ug/l	95.0	80.0-120			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
2-Butanone	40 ug/l	80.5	30.0-150			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Carbon tetrachloride	20 ug/l	94.4	65.0-140			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Chlorobenzene	20 ug/l	94.0	80.0-120			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Chloroform	20 ug/l	86.8	65.0-135			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
1,2-Dichloroethane	20 ug/l	97.4	70.0-130			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
1,1-Dichloroethene	20 ug/l	81.2	70.0-130			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Tetrachloroethene	20 ug/l	102	45.0-150			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Trichloroethene	20 ug/l	92.8	70.0-125			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Vinyl chloride	20 ug/l	76.0	50.0-145			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
TCLP Volatile Organic Compounds Surrogates:										
4-Bromofluorobenzene	50 ug/l	101	75.0-120			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Dibromofluoromethane	50 ug/l	90.4	85.0-115			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
Toluene-D8	50 ug/l	105	85.0-120			V9574	15Feb19 1324 by 338	15Feb19 1351 by 271		
TCLP Base/Neutral and Acid Compounds										
TCLP: 2,4,5-Trichlorophenol	20 ug/l	67.2	61.5-115			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: 2,4,6-Trichlorophenol	20 ug/l	65.4	37.0-144			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: 1,4-Dichlorobenzene	20 ug/l	59.6	52.6-92.6			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: 2,4-Dinitrotoluene	20 ug/l	69.8	39.0-139			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Cresols	40 ug/l	55.7	32.7-112			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Hexachlorobenzene	20 ug/l	68.6	10.0-152			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Hexachlorobutadiene	20 ug/l	54.0	24.0-120			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Hexachloroethane	20 ug/l	58.0	40.0-120			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Nitrobenzene	20 ug/l	67.6	35.0-180			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Pentachlorophenol	20 ug/l	20.7	14.0-176			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Pyridine	20 ug/l	43.1	5.40-78.6			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP Base/Neutral and Acid Compounds Surrogates:										
TCLP: 2,4,6-Tribromophenol	20 ug/l	69.2	25.8-122			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: 2-Fluorobiphenyl	20 ug/l	69.2	59.9-97.3			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: 2-Fluorophenol	20 ug/l	52.6	16.2-96.6			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Nitrobenzene-D5	20 ug/l	68.2	60.2-96.6			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		
TCLP: Terphenyl-D14	20 ug/l	69.1	67.0-98.2			B11296	18Feb19 0914 by 285	21Feb19 1324 by 271		



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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Arsenic	231626-1	200 mg/Kg	100	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2025 by 328		
	231626-1	199 mg/Kg	107	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2035 by 328		
	Relative Percent Difference:		6.13	20.0	S46622				
Barium	231626-1	20.0 mg/Kg	91.1	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2025 by 328		
	231626-1	19.9 mg/Kg	116	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2035 by 328		
	Relative Percent Difference:		5.96	20.0	S46622				
Cadmium	231626-1	200 mg/Kg	87.4	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2025 by 328		
	231626-1	199 mg/Kg	91.9	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2035 by 328		
	Relative Percent Difference:		4.95	20.0	S46622				
Chromium	231626-1	20.0 mg/Kg	91.5	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2025 by 328		
	231626-1	19.9 mg/Kg	107	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2035 by 328		
	Relative Percent Difference:		10.3	20.0	S46622				
Lead	231626-1	200 mg/Kg	87.4	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2025 by 328		
	231626-1	199 mg/Kg	91.8	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2035 by 328		
	Relative Percent Difference:		4.69	20.0	S46622				
Selenium	231626-1	200 mg/Kg	96.7	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2025 by 328		
	231626-1	199 mg/Kg	103	75.0-125	S46622	18Feb19 0930 by 100	27Feb19 2035 by 328		
	Relative Percent Difference:		5.90	20.0	S46622				
Silver	231626-1	3.99 mg/Kg	98.9	75.0-125	S46622	18Feb19 0930 by 100	19Feb19 1402 by 328		
	231626-1	3.98 mg/Kg	101	75.0-125	S46622	18Feb19 0930 by 100	19Feb19 1407 by 328		
	Relative Percent Difference:		1.65	20.0	S46622				
Mercury	231470-1	2.46 mg/Kg	107	75.0-125	S46611	14Feb19 1419 by 100	15Feb19 1133 by 313		
	231470-1	2.45 mg/Kg	104	75.0-125	S46611	14Feb19 1419 by 100	15Feb19 1135 by 313		
	Relative Percent Difference:		2.57	20.0	S46611				

TCLP Volatile Organic Compounds

Benzene	231626-1	20 ug/l	98.8	80.0-120	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
2-Butanone	231626-1	40 ug/l	83.5	30.0-150	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Carbon tetrachloride	231626-1	20 ug/l	97.4	65.0-140	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Chlorobenzene	231626-1	20 ug/l	96.6	80.0-120	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Chloroform	231626-1	20 ug/l	90.6	65.0-135	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
1,2-Dichloroethane	231626-1	20 ug/l	105	70.0-130	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
1,1-Dichloroethene	231626-1	20 ug/l	85.4	70.0-130	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Tetrachloroethene	231626-1	20 ug/l	99.6	45.0-150	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Trichloroethene	231626-1	20 ug/l	98.2	70.0-125	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Vinyl chloride	231626-1	20 ug/l	79.0	50.0-145	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		

TCLP Volatile Organic Compounds Surrogates:

4-Bromofluorobenzene	231626-1	50 ug/l	99.9	75.0-120	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Dibromofluoromethane	231626-1	50 ug/l	87.2	85.0-115	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		
Toluene-D8	231626-1	50 ug/l	101	85.0-120	V9574	15Feb19 1324 by 338	15Feb19 1433 by 271		

TCLP Base/Neutral and Acid Compounds

TCLP: 2,4,5-Trichlorophenol	231626-1	20 ug/l	67.4	38.6-120	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: 2,4,6-Trichlorophenol	231626-1	20 ug/l	61.0	37.0-144	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: 1,4-Dichlorobenzene	231626-1	20 ug/l	59.8	48.4-92.6	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: 2,4-Dinitrotoluene	231626-1	20 ug/l	70.0	39.0-139	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Cresols	231626-1	40 ug/l	60.7	0.00-126	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		

City of Mountain View Water Department
Post Office Drawer 360
Mountain View, AR 72560

MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP Base/Neutral and Acid Compounds (Continued)									
TCLP: Hexachlorobenzene	231626-1	20 ug/l	69.9	10.0-152	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Hexachlorobutadiene	231626-1	20 ug/l	53.6	24.0-120	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Hexachloroethane	231626-1	20 ug/l	57.2	40.0-120	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Nitrobenzene	231626-1	20 ug/l	65.4	35.0-180	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Pentachlorophenol	231626-1	20 ug/l	27.0		B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Pyridine	231626-1	20 ug/l	28.8		B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP Base/Neutral and Acid Compounds Surrogates:									
TCLP: 2,4,6-Tribromophenol	231626-1	20 ug/l	63.8	10.6-139	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: 2-Fluorobiphenyl	231626-1	20 ug/l	66.4	45.0-101	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: 2-Fluorophenol	231626-1	20 ug/l	44.9	10.0-119	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Nitrobenzene-D5	231626-1	20 ug/l	65.4	36.8-115	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		
TCLP: Terphenyl-D14	231626-1	20 ug/l	69.7	56.0-111	B11296	18Feb19 0914 by 285	21Feb19 1358 by 271		

City of Mountain View Water Department
Post Office Drawer 360
Mountain View, AR 72560

LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Arsenic	< 5 mg/Kg	5	5	S46622-1	18Feb19 0930 by 100	27Feb19 2008 by 328	
Barium	< 0.2 mg/Kg	0.2	0.2	S46622-1	18Feb19 0930 by 100	27Feb19 2008 by 328	
Cadmium	< 0.4 mg/Kg	0.4	0.4	S46622-1	18Feb19 0930 by 100	27Feb19 2008 by 328	
Chromium	< 1 mg/Kg	1	1	S46622-1	18Feb19 0930 by 100	27Feb19 2008 by 328	
Lead	< 4 mg/Kg	4	4	S46622-1	18Feb19 0930 by 100	27Feb19 2008 by 328	
Selenium	< 7 mg/Kg	7	7	S46622-1	18Feb19 0930 by 100	27Feb19 2008 by 328	
Silver	< 0.7 mg/Kg	0.7	0.7	S46622-1	18Feb19 0930 by 100	19Feb19 1354 by 328	
Mercury	< 0.1 mg/Kg	0.1	0.1	S46611-1	14Feb19 1419 by 100	15Feb19 1126 by 313	
TCLP Base/Neutral and Acid Compounds							
TCLP: 2,4,5-Trichlorophenol	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: 2,4,6-Trichlorophenol	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: 1,4-Dichlorobenzene	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: 2,4-Dinitrotoluene	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: Cresols	< 0.10 mg/l	0.10	0.10	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: Hexachlorobenzene	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: Hexachlorobutadiene	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: Hexachloroethane	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: Nitrobenzene	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: Pentachlorophenol	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP: Pyridine	< 0.050 mg/l	0.050	0.050	B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	
TCLP Base/Neutral and Acid Compounds Surrogates:							
TCLP: 2,4,6-Tribromophenol (25.8-122%)	2.80 %			B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	Q
TCLP: 2-Fluorobiphenyl (59.9-97.3%)	55.0 %			B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	Q
TCLP: 2-Fluorophenol (16.2-96.6%)	11.0 %			B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	Q
TCLP: Nitrobenzene-D5 (60.2-96.6%)	55.1 %			B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	Q
TCLP: Terphenyl-D14 (67.0-98.2%)	62.3 %			B11296-1	18Feb19 0914 by 285	21Feb19 1251 by 271	Q
TCLP Volatile Organic Compounds							
TCLP: 1,2-Dichloroethane	< 0.0050 mg/l	0.0050	0.0050	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: 1,1-Dichloroethene	< 0.0050 mg/l	0.0050	0.0050	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: 2-Butanone	< 0.010 mg/l	0.010	0.010	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Benzene	< 0.0050 mg/l	0.0050	0.0050	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Carbon tetrachloride	< 0.0020 mg/l	0.0020	0.0020	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Chlorobenzene	< 0.0050 mg/l	0.0050	0.0050	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Chloroform	< 0.0050 mg/l	0.0050	0.0050	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Tetrachloroethene	< 0.0050 mg/l	0.0050	0.0050	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Trichloroethene	< 0.0050 mg/l	0.0050	0.0050	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Vinyl chloride	< 0.0020 mg/l	0.0020	0.0020	V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP Volatile Organic Compounds Surrogates:							
TCLP: 4-Bromofluorobenzene (75.0-120%)	98.3 %			V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Dibromofluoromethane (85.0-115%)	87.9 %			V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	
TCLP: Toluene-D8 (85.0-120%)	99.2 %			V9574-1	15Feb19 1324 by 338	15Feb19 1556 by 271	

Blackmon, Amanda

From: Yates, Adam
Sent: Wednesday, October 2, 2019 4:46 PM
To: gjhwater@icloud.com
Subject: Filter Backwash Sludge Disposal, ARG640093 / AR0020117

Keith,

Per our phone conversation earlier today, the disposal of filter backwash sludge from the City of Mountain View water treatment plant to the City of Mountain View wastewater treatment plant is considered a “new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the [Clean Water] Act if it were directly discharging those pollutants” according to Part II.7.C.1 of NPDES Permit No. AR0020117. Therefore, the disposal of filter backwash sludge is subject to the notification requirements of AR0020117, Part II.7.C, which states:

“Any notice shall include information on (i) the **quality** and **quantity** of effluent to be introduced into the treatment works, and (ii) **any anticipated impact** of the change on the quality or quantity of effluent to be discharged from the POTW.”

As for the quality of the sludge, I would recommend sampling for the Metals pollutants listed in the monitoring requirements table of ARG640093 (Iron, Manganese, and Aluminum) as well as the following toxic pollutants from Table III of 40 CFR 122 (Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Zinc, Cyanide and Phenols).

If you have any questions or concerns, please feel free to contact me.

Kindly,

Adam Yates | State Pretreatment Coordinator
Office of Water Quality | Pretreatment Program
Arkansas Energy and Environment | [Environmental Quality](#)
5301 Northshore Drive, North Little Rock, AR 72118
t: (501) 682-0617 | e: yates@adeq.state.ar.us



Blackmon, Amanda

-----Original Message-----

From: Keith Johnson [<mailto:gjhwater@icloud.com>]

Sent: Thursday, October 3, 2019 4:36 PM

To: Yates, Adam

Subject: 1308115.pdf

Adam,

We had this sludge sampled earlier this year. It covered several of the items you wanted tested. I was hoping this would be enough for you to let us start hauling. We will have the other items tested also.

The pond volume is about 150,000 gallons. We would like to haul 8-12,000 gallons a day until the pond was cleaned out.

We do use a aluminum based coagulate. Our supplier thought this might even help the wastewater treatment plant with phosphorus removal if needed.

According to the states consumer confidence report our copper was reported at <0.003 ppm. His was in the drinking water, but should be a good indication of what is in the sludge.

I don't expect any impact on the wastewater plant due to the fact we are not planing on adding a major amount of sludge compared to the plants capacity.

I hope this will help. If not please email me back.

Thank you

Keith Johnson

Mtn View Water Plant

Blackmon, Amanda

From: Yates, Adam
Sent: Friday, October 4, 2019 2:40 PM
To: Keith Johnson
Subject: RE: Filter Backwash Sludge Disposal, ARG640093 / AR0020117

Keith,

Thank you for your submittal. The sludge sampling data, estimated quantity, and statement of expected impact on the wastewater plant satisfies the notification requirements of Part II.7.C of NPDES Permit No. AR0020117.

After review of the subject information, the Office of Water Quality has no objection to the disposal of filter backwash sludge from the City of Mountain View water treatment plant (ARG640093) to the City of Mountain View wastewater treatment plant (AR0020117) provided the City maintains compliance with all applicable permit requirements. **This determination is made with the understanding that the remaining sampling will be completed and the test results submitted as soon as possible.**

Thank you for your cooperation in this matter. If you have any questions or concerns, please feel free to contact me.

Kindly,

Adam Yates | State Pretreatment Coordinator
Office of Water Quality | Pretreatment Program
Arkansas Energy and Environment | [Environmental Quality](#)
5301 Northshore Drive, North Little Rock, AR 72118
t: (501) 682-0617 | e: yates@adeq.state.ar.us



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Keith Johnson

Mtn View Water Plant