Environmental Consultants
and Contractors

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SCS ENGINEERS, PC

May 15, 2014
File No. 09204072.11

Ms. Jaclynne Drummond, Hydrogeologist
North Carolina Department of Environment and Natural Resources
Environmental Compliance Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

RE: Buncombe County Landfill – Permit # 11-07
MW-3 Gas Issue

Dear Ms. Drummond:

On behalf of Buncombe County Solid Waste Division, SCS Engineers, PC (SCS) submits the following information that relates to follow up efforts to address the issue associated with the contaminants from the semi-annual groundwater test results for MW-3.

The County has proceeded along the lines proposed in the letter to you dated September 3, 2013, which provided a timeline to address the proposed steps that the county included in the February 19, 2013, letter detailing the initiation of the Assessment Monitoring and a field study seeking the presence of methane gas outside of the disposal area footprint. The two month extension for the first phase of the effort is drawing to a close.

ASSESSMENT MONITORING/CORRECTIVE ACTION

Assessment Monitoring continues at MW-3 and MW-7 as well as the two background wells. The latest readings indicate a continuation of vinyl chloride in MW-3 along with other compounds from the Appendix II list. A copy of these results is attached. Abandonment of MW-3 and installation of a new well down gradient from MW-3 is being planned. If you have an objection to this alternative, please let us know.

MW-7 is still being monitored. The latest results are attached. Note that the Appendix I compounds are still below the exceedance level.

GAS MIGRATION/CORRECTIVE ACTION

SCS with the support of County Landfill staff has continued to monitor the gas migration issues at MW-3 and the three temporary gas monitoring probes in the vicinity of MW-3. For multiple readings, the gas appeared to be reducing at those locations with the exception of one of the temporary locations. The previous test indicated a reduction of the methane levels, however, the gas levels in some of the probes continues to vacillate.

The County excavated the soil above the primary liner at the anchor trench. The cover material included soil and rock seams. The methane readings were high at that location but based on the configuration of the cross-section of the cover it would appear to be a location where landfill gas could have more readily released into the air in lieu of traveling through the soil.

Discussion has been held concerning the development of a passive vent system immediately outside of the cell liner anchor trench in an attempt to capture and release the landfill gas before it has the opportunity to travel through the soil in the direction of MW -3.

We anticipate moving ahead with the abandonment and re-installation of the existing MW-3 at an increased distance from the waste upon acceptance of this approach by DENR. We will also proceed with the placement of the passive gas vent system upon concurrence that this approach is acceptable. Upon receipt of notice of your acceptance we will establish a time schedule and provide that to you prior to beginning the work.

Sincerely,

Ken E. Guilbeault, LEP
Senior Project Manager
SCS ENGINEERS, PC

C. Edward Hilton, Jr., P.E. 7909
Vice President
SCS ENGINEERS, PC

NORTH CAROLINA PROFESSIONAL SEAL 7909 ENGINEER C. EDWARD HILTON, JR.

Attachments

cc: Jon Creighton, Kristy Smith, Donna Cottrell - Buncombe County

Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW3 **Lab ID: 92197182003** Collected: 04/11/14 11:25 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method:							
Collected By	**MPS**			1		04/21/14 09:57		
Collected Date	**04/11/14**			1		04/21/14 09:57		
Collected Time	**11:25**			1		04/21/14 09:57		
Field pH	**6.0**	Std. Units	0.10	1		04/21/14 09:57		
Field Temperature	**16.9**	deg C	0.50	1		04/21/14 09:57		
Static Water Level	**30.06**	feet		1		04/21/14 09:57		
Field Specific Conductance	**357**	umhos/cm	1.0	1		04/21/14 09:57		
Turbidity	**4.90**	NTU	1.0	1		04/21/14 09:57		
8081 Organochlorine Pesticides	Analytical Method: EPA 8081 Preparation Method: EPA 3510							
Aldrin	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	309-00-2	
alpha-BHC	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	319-84-6	
beta-BHC	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	319-85-7	
delta-BHC	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	319-86-8	
gamma-BHC (Lindane)	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	58-89-9	
Chlordane (Technical)	ND	ug/L	0.21	1	04/14/14 15:10	04/16/14 20:15	57-74-9	
4,4'-DDD	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	72-54-8	
4,4'-DDE	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	72-55-9	
4,4'-DDT	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	50-29-3	
Dieldrin	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	60-57-1	
Endosulfan I	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	959-98-8	
Endosulfan II	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	33213-65-9	
Endosulfan sulfate	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	1031-07-8	
Endrin	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	72-20-8	
Endrin aldehyde	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	7421-93-4	
Heptachlor	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	76-44-8	
Heptachlor epoxide	ND	ug/L	0.053	1	04/14/14 15:10	04/16/14 20:15	1024-57-3	
Methoxychlor	ND	ug/L	0.16	1	04/14/14 15:10	04/16/14 20:15	72-43-5	
Toxaphene	ND	ug/L	0.21	1	04/14/14 15:10	04/16/14 20:15	8001-35-2	
Surrogates								
Tetrachloro-m-xylene (S)	50	%	20-130	1	04/14/14 15:10	04/16/14 20:15	877-09-8	
Decachlorobiphenyl (S)	55	%	20-130	1	04/14/14 15:10	04/16/14 20:15	2051-24-3	
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510							
PCB-1016 (Aroclor 1016)	ND	ug/L	0.53	1	04/14/14 15:10	04/16/14 03:19	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.53	1	04/14/14 15:10	04/16/14 03:19	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.53	1	04/14/14 15:10	04/16/14 03:19	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.53	1	04/14/14 15:10	04/16/14 03:19	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.53	1	04/14/14 15:10	04/16/14 03:19	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.53	1	04/14/14 15:10	04/16/14 03:19	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.53	1	04/14/14 15:10	04/16/14 03:19	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	51	%	10-132	1	04/14/14 15:10	04/16/14 03:19	2051-24-3	
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151							
2,4-D	ND	ug/L	0.94	1	04/16/14 08:00	04/17/14 10:00	94-75-7	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW3 **Lab ID: 92197182003** Collected: 04/11/14 11:25 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151							
Dinoseb	ND	ug/L	0.19	1	04/16/14 08:00	04/17/14 10:00	88-85-7	
Pentachlorophenol	ND	ug/L	0.028	1	04/16/14 08:00	04/17/14 10:00	87-86-5	
2,4,5-T	ND	ug/L	0.19	1	04/16/14 08:00	04/17/14 10:00	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	0.19	1	04/16/14 08:00	04/17/14 10:00	93-72-1	
Surrogates								
2,4-DCAA (S)	89	%	42-142	1	04/16/14 08:00	04/17/14 10:00	19719-28-9	
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-36-0	
Arsenic	ND	ug/L	10.0	1	04/15/14 10:00	04/16/14 22:51	7440-38-2	
Barium	**188**	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-39-3	
Beryllium	ND	ug/L	1.0	1	04/15/14 10:00	04/16/14 22:51	7440-41-7	
Cadmium	ND	ug/L	1.0	1	04/15/14 10:00	04/16/14 22:51	7440-43-9	
Chromium	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-47-3	
Cobalt	**25.3**	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-48-4	
Copper	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-50-8	
Lead	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7439-92-1	
Nickel	**31.4**	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-02-0	
Selenium	ND	ug/L	10.0	1	04/15/14 10:00	04/16/14 22:51	7782-49-2	
Silver	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-22-4	
Thallium	ND	ug/L	5.4	1	04/15/14 10:00	04/16/14 22:51	7440-28-0	
Tin	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-31-5	
Vanadium	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:51	7440-62-2	
Zinc	ND	ug/L	10.0	1	04/15/14 10:00	04/16/14 22:51	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	04/15/14 20:30	04/22/14 19:46	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	208-96-8	
Acetophenone	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	98-86-2	
2-Acetylaminofluorene	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	53-96-3	
4-Aminobiphenyl	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	92-67-1	
Anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	207-08-9	
Benzyl alcohol	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	106-47-8	
Chlorobenzilate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	510-15-6	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW3 **Lab ID: 92197182003** Collected: 04/11/14 11:25 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	7005-72-3	
Chrysene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	218-01-9	
Diallate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	2303-16-4	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	120-83-2	
2,6-Dichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	87-65-0	
Diethylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	84-66-2	
Dimethoate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	60-51-5	
P-Dimethylaminoazobenzene	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 15:43	60-11-7	
7,12-Dimethylbenz(a)anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	57-97-6	
3,3'-Dimethylbenzidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	119-93-7	
2,4-Dimethylphenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	534-52-1	
1,3-Dinitrobenzene	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	99-65-0	
2,4-Dinitrophenol	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 15:43	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	117-84-0	
Diphenylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	122-39-4	
Disulfoton	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	298-04-4	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	1	04/15/14 11:01	04/16/14 15:43	117-81-7	
Ethyl methanesulfonate	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	62-50-0	
Famphur	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	52-85-7	
Fluoranthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	206-44-0	
Fluorene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	67-72-1	
Hexachloropropene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	1888-71-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	193-39-5	
Isodrin	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	465-73-6	
Isophorone	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	78-59-1	
Isosafrole	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	120-58-1	
Kepone	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	143-50-0	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW3 **Lab ID: 92197182003** Collected: 04/11/14 11:25 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Methapyrilene	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 15:43	91-80-5	
3-Methylcholanthrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	56-49-5	
Methyl methanesulfonate	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 15:43	66-27-3	
2-Methylnaphthalene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	91-57-6	
Methyl parathion	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	298-00-0	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43		
1-Naphthalenamine	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 15:43	134-32-7	
2-Naphthalenamine	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 15:43	91-59-8	
Naphthalene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	91-20-3	
1,4-Naphthoquinone	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 15:43	130-15-4	
2-Nitroaniline	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 15:43	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 15:43	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 15:43	100-02-7	
5-Nitro-o-toluidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	99-55-8	
N-Nitrosodiethylamine	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	55-18-5	
N-Nitrosodimethylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	62-75-9	
N-Nitroso-di-n-butylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	924-16-3	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	86-30-6	
N-Nitrosomethylethylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	10595-95-6	
N-Nitrosopiperidine	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	100-75-4	
N-Nitrosopyrrolidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	930-55-2	
O,O,O-Triethylphosphorothioate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	126-68-1	
Parathion (Ethyl parathion)	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	56-38-2	
Pentachlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	608-93-5	
Pentachloronitrobenzene	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	82-68-8	
Pentachlorophenol	ND	ug/L	25.0	1	04/15/14 11:01	04/16/14 15:43	87-86-5	
Phenacetin	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	62-44-2	
Phenanthrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	85-01-8	
Phenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	108-95-2	
p-Phenylenediamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	106-50-3	
Phorate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	298-02-2	
Pronamide	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	23950-58-5	
Pyrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	129-00-0	
Safrole	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	94-59-7	
1,2,4,5-Tetrachlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	95-94-3	
2,3,4,6-Tetrachlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	58-90-2	
Thionazin	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 15:43	297-97-2	
O-Toluidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	95-53-4	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	88-06-2	
1,3,5-Trinitrobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 15:43	99-35-4	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW3 **Lab ID: 92197182003** Collected: 04/11/14 11:25 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Surrogates								
Nitrobenzene-d5 (S)	80	%	21-110	1	04/15/14 11:01	04/16/14 15:43	4165-60-0	
2-Fluorobiphenyl (S)	78	%	27-110	1	04/15/14 11:01	04/16/14 15:43	321-60-8	
Terphenyl-d14 (S)	93	%	31-107	1	04/15/14 11:01	04/16/14 15:43	1718-51-0	
Phenol-d6 (S)	31	%	10-110	1	04/15/14 11:01	04/16/14 15:43	13127-88-3	
2-Fluorophenol (S)	40	%	12-110	1	04/15/14 11:01	04/16/14 15:43	367-12-4	
2,4,6-Tribromophenol (S)	85	%	27-110	1	04/15/14 11:01	04/16/14 15:43	118-79-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		04/15/14 03:43	67-64-1	
Acetonitrile	ND	ug/L	50.0	1		04/15/14 03:43	75-05-8	
Acrolein	ND	ug/L	10.0	1		04/15/14 03:43	107-02-8	
Acrylonitrile	ND	ug/L	10.0	1		04/15/14 03:43	107-13-1	
Allyl chloride	ND	ug/L	2.0	1		04/15/14 03:43	107-05-1	
Benzene	**1.1**	ug/L	1.0	1		04/15/14 03:43	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		04/15/14 03:43	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/15/14 03:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/15/14 03:43	75-25-2	
Bromomethane	ND	ug/L	2.0	1		04/15/14 03:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/15/14 03:43	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		04/15/14 03:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/15/14 03:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/15/14 03:43	108-90-7	
Chloroethane	**1.3**	ug/L	1.0	1		04/15/14 03:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/15/14 03:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/15/14 03:43	74-87-3	
Chloroprene	ND	ug/L	5.0	1		04/15/14 03:43	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		04/15/14 03:43	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/15/14 03:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/15/14 03:43	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		04/15/14 03:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:43	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		04/15/14 03:43	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		04/15/14 03:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		04/15/14 03:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/15/14 03:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/15/14 03:43	75-35-4	
cis-1,2-Dichloroethene	**2.2**	ug/L	1.0	1		04/15/14 03:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/15/14 03:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/15/14 03:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/15/14 03:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		04/15/14 03:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/15/14 03:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/15/14 03:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/15/14 03:43	10061-02-6	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW3 **Lab ID: 92197182003** Collected: 04/11/14 11:25 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260							
Ethylbenzene	ND	ug/L	1.0	1		04/15/14 03:43	100-41-4	
Ethyl methacrylate	ND	ug/L	1.0	1		04/15/14 03:43	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/15/14 03:43	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		04/15/14 03:43	591-78-6	
Iodomethane	ND	ug/L	5.0	1		04/15/14 03:43	74-88-4	
Isobutanol	ND	ug/L	100	1		04/15/14 03:43	78-83-1	
Methacrylonitrile	ND	ug/L	10.0	1		04/15/14 03:43	126-98-7	
Methylene Chloride	ND	ug/L	1.0	1		04/15/14 03:43	75-09-2	
Methyl methacrylate	ND	ug/L	2.0	1		04/15/14 03:43	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/15/14 03:43	108-10-1	
Naphthalene	ND	ug/L	1.0	1		04/15/14 03:43	91-20-3	
Propionitrile	ND	ug/L	20.0	1		04/15/14 03:43	107-12-0	
Styrene	ND	ug/L	1.0	1		04/15/14 03:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/15/14 03:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/15/14 03:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/15/14 03:43	127-18-4	
Toluene	ND	ug/L	1.0	1		04/15/14 03:43	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/15/14 03:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/15/14 03:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/15/14 03:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/15/14 03:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/15/14 03:43	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		04/15/14 03:43	108-05-4	
Vinyl chloride	**2.5**	ug/L	1.0	1		04/15/14 03:43	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		04/15/14 03:43	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		04/15/14 03:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/15/14 03:43	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	1		04/15/14 03:43	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		04/15/14 03:43	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		04/15/14 03:43	2037-26-5	
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	1		04/18/14 11:06	18496-25-8	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		04/21/14 12:20	57-12-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW7 **Lab ID: 92197182004** Collected: 04/11/14 12:30 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Monitoring Well Data	Analytical Method:							
Collected By	**MPS**			1		04/21/14 09:57		
Collected Date	**04/11/14**			1		04/21/14 09:57		
Collected Time	**12:30**			1		04/21/14 09:57		
Field pH	**6.4**	Std. Units	0.10	1		04/21/14 09:57		
Field Temperature	**17.2**	deg C	0.50	1		04/21/14 09:57		
Static Water Level	**43.66**	feet		1		04/21/14 09:57		
Field Specific Conductance	**772**	umhos/cm	1.0	1		04/21/14 09:57		
Turbidity	**6.36**	NTU	1.0	1		04/21/14 09:57		
8081 Organochlorine Pesticides	Analytical Method: EPA 8081 Preparation Method: EPA 3510							
Aldrin	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	309-00-2	
alpha-BHC	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	319-84-6	
beta-BHC	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	319-85-7	
delta-BHC	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	319-86-8	
gamma-BHC (Lindane)	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	58-89-9	
Chlordane (Technical)	ND	ug/L	0.20	1	04/14/14 15:10	04/16/14 20:33	57-74-9	
4,4'-DDD	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	72-54-8	
4,4'-DDE	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	72-55-9	
4,4'-DDT	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	50-29-3	
Dieldrin	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	60-57-1	
Endosulfan I	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	959-98-8	
Endosulfan II	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	33213-65-9	
Endosulfan sulfate	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	1031-07-8	
Endrin	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	72-20-8	
Endrin aldehyde	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	7421-93-4	
Heptachlor	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	76-44-8	
Heptachlor epoxide	ND	ug/L	0.050	1	04/14/14 15:10	04/16/14 20:33	1024-57-3	
Methoxychlor	ND	ug/L	0.15	1	04/14/14 15:10	04/16/14 20:33	72-43-5	
Toxaphene	ND	ug/L	0.20	1	04/14/14 15:10	04/16/14 20:33	8001-35-2	
Surrogates								
Tetrachloro-m-xylene (S)	75	%	20-130	1	04/14/14 15:10	04/16/14 20:33	877-09-8	
Decachlorobiphenyl (S)	67	%	20-130	1	04/14/14 15:10	04/16/14 20:33	2051-24-3	
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510							
PCB-1016 (Aroclor 1016)	ND	ug/L	0.50	1	04/14/14 15:10	04/16/14 03:36	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.50	1	04/14/14 15:10	04/16/14 03:36	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.50	1	04/14/14 15:10	04/16/14 03:36	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.50	1	04/14/14 15:10	04/16/14 03:36	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.50	1	04/14/14 15:10	04/16/14 03:36	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.50	1	04/14/14 15:10	04/16/14 03:36	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.50	1	04/14/14 15:10	04/16/14 03:36	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	63	%	10-132	1	04/14/14 15:10	04/16/14 03:36	2051-24-3	
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151							
2,4-D	**11.3**	ug/L	1.9	2	04/16/14 08:00	04/17/14 17:52	94-75-7	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW7 **Lab ID: 92197182004** Collected: 04/11/14 12:30 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8151 Chlorinated Herbicides	Analytical Method: EPA 8151 Preparation Method: EPA 8151							
Dinoseb	ND	ug/L	0.19	1	04/16/14 08:00	04/17/14 10:31	88-85-7	
Pentachlorophenol	ND	ug/L	0.028	1	04/16/14 08:00	04/17/14 10:31	87-86-5	
2,4,5-T	ND	ug/L	0.19	1	04/16/14 08:00	04/17/14 10:31	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	0.19	1	04/16/14 08:00	04/17/14 10:31	93-72-1	
Surrogates								
2,4-DCAA (S)	108	%	42-142	1	04/16/14 08:00	04/17/14 10:31	19719-28-9	
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-36-0	
Arsenic	ND	ug/L	10.0	1	04/15/14 10:00	04/16/14 22:56	7440-38-2	
Barium	**143**	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-39-3	
Beryllium	ND	ug/L	1.0	1	04/15/14 10:00	04/16/14 22:56	7440-41-7	
Cadmium	ND	ug/L	1.0	1	04/15/14 10:00	04/16/14 22:56	7440-43-9	
Chromium	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-47-3	
Cobalt	**5.5**	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-48-4	
Copper	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-50-8	
Lead	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7439-92-1	
Nickel	**13.0**	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-02-0	
Selenium	ND	ug/L	10.0	1	04/15/14 10:00	04/16/14 22:56	7782-49-2	
Silver	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-22-4	
Thallium	ND	ug/L	5.4	1	04/15/14 10:00	04/16/14 22:56	7440-28-0	
Tin	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-31-5	
Vanadium	ND	ug/L	5.0	1	04/15/14 10:00	04/16/14 22:56	7440-62-2	
Zinc	ND	ug/L	10.0	1	04/15/14 10:00	04/16/14 22:56	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury	ND	ug/L	0.20	1	04/15/14 20:30	04/22/14 19:54	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	208-96-8	
Acetophenone	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	98-86-2	
2-Acetylaminofluorene	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	53-96-3	
4-Aminobiphenyl	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	92-67-1	
Anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	207-08-9	
Benzyl alcohol	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	106-47-8	
Chlorobenzilate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	510-15-6	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW7 **Lab ID: 92197182004** Collected: 04/11/14 12:30 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	7005-72-3	
Chrysene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	218-01-9	
Diallate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	2303-16-4	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	120-83-2	
2,6-Dichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	87-65-0	
Diethylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	84-66-2	
Dimethoate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	60-51-5	
P-Dimethylaminoazobenzene	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 16:17	60-11-7	
7,12-Dimethylbenz(a)anthracene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	57-97-6	
3,3'-Dimethylbenzidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	119-93-7	
2,4-Dimethylphenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	534-52-1	
1,3-Dinitrobenzene	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	99-65-0	
2,4-Dinitrophenol	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 16:17	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	117-84-0	
Diphenylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	122-39-4	
Disulfoton	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	298-04-4	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	1	04/15/14 11:01	04/16/14 16:17	117-81-7	
Ethyl methanesulfonate	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	62-50-0	
Famphur	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	52-85-7	
Fluoranthene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	206-44-0	
Fluorene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	67-72-1	
Hexachloropropene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	1888-71-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	193-39-5	
Isodrin	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	465-73-6	
Isophorone	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	78-59-1	
Isosafrole	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	120-58-1	
Kepone	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	143-50-0	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW7 **Lab ID: 92197182004** Collected: 04/11/14 12:30 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Methapyrilene	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 16:17	91-80-5	
3-Methylcholanthrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	56-49-5	
Methyl methanesulfonate	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 16:17	66-27-3	
2-Methylnaphthalene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	91-57-6	
Methyl parathion	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	298-00-0	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17		
1-Naphthalenamine	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 16:17	134-32-7	
2-Naphthalenamine	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 16:17	91-59-8	
Naphthalene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	91-20-3	
1,4-Naphthoquinone	ND	ug/L	5.0	1	04/15/14 11:01	04/16/14 16:17	130-15-4	
2-Nitroaniline	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 16:17	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 16:17	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	1	04/15/14 11:01	04/16/14 16:17	100-02-7	
5-Nitro-o-toluidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	99-55-8	
N-Nitrosodiethylamine	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	55-18-5	
N-Nitrosodimethylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	62-75-9	
N-Nitroso-di-n-butylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	924-16-3	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	86-30-6	
N-Nitrosomethylethylamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	10595-95-6	
N-Nitrosopiperidine	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	100-75-4	
N-Nitrosopyrrolidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	930-55-2	
O,O,O-Triethylphosphorothioate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	126-68-1	
Parathion (Ethyl parathion)	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	56-38-2	
Pentachlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	608-93-5	
Pentachloronitrobenzene	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	82-68-8	
Pentachlorophenol	ND	ug/L	25.0	1	04/15/14 11:01	04/16/14 16:17	87-86-5	
Phenacetin	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	62-44-2	
Phenanthrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	85-01-8	
Phenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	108-95-2	
p-Phenylenediamine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	106-50-3	
Phorate	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	298-02-2	
Pronamide	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	23950-58-5	
Pyrene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	129-00-0	
Safrole	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	94-59-7	
1,2,4,5-Tetrachlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	95-94-3	
2,3,4,6-Tetrachlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	58-90-2	
Thionazin	ND	ug/L	20.0	1	04/15/14 11:01	04/16/14 16:17	297-97-2	
O-Toluidine	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	95-53-4	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	88-06-2	
1,3,5-Trinitrobenzene	ND	ug/L	10.0	1	04/15/14 11:01	04/16/14 16:17	99-35-4	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW7 **Lab ID: 92197182004** Collected: 04/11/14 12:30 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510							
Surrogates								
Nitrobenzene-d5 (S)	81	%	21-110	1	04/15/14 11:01	04/16/14 16:17	4165-60-0	
2-Fluorobiphenyl (S)	75	%	27-110	1	04/15/14 11:01	04/16/14 16:17	321-60-8	
Terphenyl-d14 (S)	93	%	31-107	1	04/15/14 11:01	04/16/14 16:17	1718-51-0	
Phenol-d6 (S)	31	%	10-110	1	04/15/14 11:01	04/16/14 16:17	13127-88-3	
2-Fluorophenol (S)	41	%	12-110	1	04/15/14 11:01	04/16/14 16:17	367-12-4	
2,4,6-Tribromophenol (S)	87	%	27-110	1	04/15/14 11:01	04/16/14 16:17	118-79-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		04/15/14 03:59	67-64-1	
Acetonitrile	ND	ug/L	50.0	1		04/15/14 03:59	75-05-8	
Acrolein	ND	ug/L	10.0	1		04/15/14 03:59	107-02-8	
Acrylonitrile	ND	ug/L	10.0	1		04/15/14 03:59	107-13-1	
Allyl chloride	ND	ug/L	2.0	1		04/15/14 03:59	107-05-1	
Benzene	ND	ug/L	1.0	1		04/15/14 03:59	71-43-2	
Bromochloromethane	ND	ug/L	1.0	1		04/15/14 03:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		04/15/14 03:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		04/15/14 03:59	75-25-2	
Bromomethane	ND	ug/L	2.0	1		04/15/14 03:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		04/15/14 03:59	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1		04/15/14 03:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		04/15/14 03:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		04/15/14 03:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		04/15/14 03:59	75-00-3	
Chloroform	ND	ug/L	1.0	1		04/15/14 03:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		04/15/14 03:59	74-87-3	
Chloroprene	ND	ug/L	5.0	1		04/15/14 03:59	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		04/15/14 03:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		04/15/14 03:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/15/14 03:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		04/15/14 03:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:59	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1		04/15/14 03:59	110-57-6	
Dichlorodifluoromethane	ND	ug/L	1.0	1		04/15/14 03:59	75-71-8	
1,1-Dichloroethane	**2.5**	ug/L	1.0	1		04/15/14 03:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		04/15/14 03:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		04/15/14 03:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/15/14 03:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/15/14 03:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		04/15/14 03:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		04/15/14 03:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		04/15/14 03:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		04/15/14 03:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/15/14 03:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/15/14 03:59	10061-02-6	

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ANALYTICAL RESULTS

Project: BUNCOMBE CO NEW LF
Pace Project No.: 92197182

Sample: 1107-MW7 **Lab ID: 92197182004** Collected: 04/11/14 12:30 Received: 04/11/14 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260							
Ethylbenzene	ND	ug/L	1.0	1		04/15/14 03:59	100-41-4	
Ethyl methacrylate	ND	ug/L	1.0	1		04/15/14 03:59	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/15/14 03:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		04/15/14 03:59	591-78-6	
Iodomethane	ND	ug/L	5.0	1		04/15/14 03:59	74-88-4	
Isobutanol	ND	ug/L	100	1		04/15/14 03:59	78-83-1	
Methacrylonitrile	ND	ug/L	10.0	1		04/15/14 03:59	126-98-7	
Methylene Chloride	ND	ug/L	1.0	1		04/15/14 03:59	75-09-2	
Methyl methacrylate	ND	ug/L	2.0	1		04/15/14 03:59	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/15/14 03:59	108-10-1	
Naphthalene	ND	ug/L	1.0	1		04/15/14 03:59	91-20-3	
Propionitrile	ND	ug/L	20.0	1		04/15/14 03:59	107-12-0	
Styrene	ND	ug/L	1.0	1		04/15/14 03:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/15/14 03:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/15/14 03:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		04/15/14 03:59	127-18-4	
Toluene	ND	ug/L	1.0	1		04/15/14 03:59	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/15/14 03:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/15/14 03:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/15/14 03:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		04/15/14 03:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		04/15/14 03:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/15/14 03:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		04/15/14 03:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		04/15/14 03:59	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		04/15/14 03:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		04/15/14 03:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		04/15/14 03:59	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		04/15/14 03:59	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		04/15/14 03:59	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		04/15/14 03:59	2037-26-5	
4500S2D Sulfide Water	Analytical Method: SM 4500-S2D							
Sulfide	ND	mg/L	0.10	1		04/18/14 11:06	18496-25-8	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		04/21/14 12:23	57-12-5	

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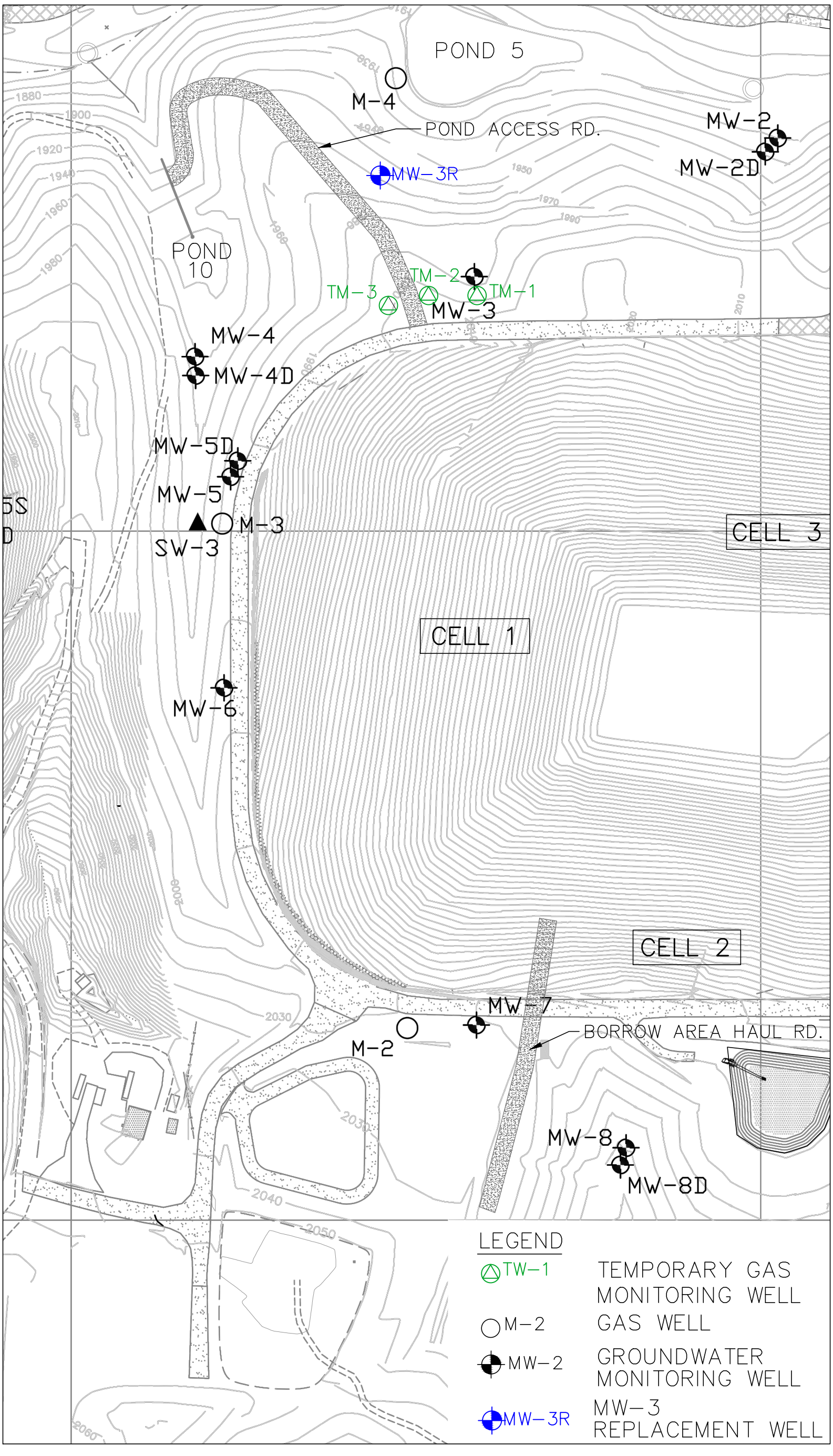

BASE MAP PROVIDED BY: CDM SMITH

SCS ENGINEERS

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FIGURE 1. MW-3 GAS IMPACT STUDY