ENVIRONMENTAL ALLIANCE

- *Engineering*
- *Remediation*
- *Consulting*

February 27, 2012

Ms. Ruth Debrito
Smithfield Packing Co., Inc.
601 North Church Street
Smithfield, Virginia 23430

Reference: **2012 Annual Site Monitoring Report**
Former Hancock Country Hams
3484 NC Highway 22 North
Franklinville, North Carolina
Environmental Alliance, Inc. Project # 2719A

Dear Ms. Debrito:

Environmental Alliance, Inc. (Alliance) is pleased to present our report of the surface water, groundwater, and soil sampling which took place at the referenced location.

Copies of this report have been forwarded to Mr. John Walch of the North Carolina Department of Environment and Natural Resources (NCDENR), Mr. George House, and Mr. Stanford Baird. If you have any questions or require additional information, please do not hesitate to contact the undersigned at (804) 752-3558.

Sincerely,
ENVIRONMENTAL ALLIANCE, INC.

Matthew Richardson
Geologist

Jason S. Early, L.G. #2231
Project Manager

c: Mr. Stanford Baird
Mr. George House
Mr. John Walch, NCDENR

Attachment

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2012 ANNUAL SITE MONITORING REPORT
FORMER HANCOCK COUNTRY HAMS
3484 NC HIGHWAY 22 NORTH
FRANKLINVILLE, NORTH CAROLINA

February 27, 2012

Facility Owner/Operator, and Land Owner:

Smithfield Packing Company
601 North Church Street
Smithfield, VA 23430
(757) 356-3131

Consultant:

Environmental Alliance, Inc.
10993 S. Richardson Road, Suite 17
Ashland, VA 23005
(804) 752-3558

Matthew Richardson
Geologist

Jason S. Early, L.G. #2231
Project Manager

ENVIRONMENTAL ALLIANCE

HANCOCK COUNTRY HAMS
SITE MONITORING REPORT

Site Name and Location:	Hancock Country Hams 3484 NC Highway 22 North, Franklinville, NC
Latitude and Longitude:	35° 46' 49" North; 79° 41' 40" West
Land Use Category:	Commercial/Residential
Responsible Parties:	1. Gwaltney of Smithfield Ltd. 601 North Church Street, Smithfield, VA 23430 757.356.3131 Attn. Mr. Rob Bogaard, V.P. of Operations 2. Lance, Inc. Post Office Box 32368 Charlotte, NC 28232 704.554.1421 3. Ms. Julia Hancock 3456 NC Hwy 22 N. Franklinville, NC 27248
Current Land Owner:	Smithfield Packing Co., Inc. 601 North Church Street, Smithfield, VA 23430 757.356.3131 Attn. Mr. Rob Bogaard, Vice President of Operations
Consultant:	Environmental Alliance, Inc. 10993 S. Richardson Road, Suite 17, Ashland, VA 23005 Attn.: Mr. Jason S. Early, L.G. 804.752.3558
Date of Report:	February 27, 2012

Seal and Signature of Certifying Licensed Geologist

Jason S. Early, L.G. #2231
Project Manager

NORTH CAROLINA LICENSED SEAL 2231 GEOLOGIST JASON S. EARLY

ENVIRONMENTAL ALLIANCE

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1.0 BACKGROUND

Environmental Alliance, Inc. (Alliance) has prepared this Annual Monitoring Report to document site monitoring activities performed during January 2012 at the former Hancock Country Hams Facility (the site). The site is located on the east side of the NC Hwy 22 approximately three miles south of Grays Chapel, Randolph County, North Carolina (Figure 1). The site is located in a rural, mostly undeveloped, area. The majority of the houses in the area are located along NC Hwy 22, north and south of the site, and along Cedar Forest Road, located approximately a 1/3 mile south of the site.

Westinghouse Environmental Services reported that four USTs were installed at the site in 1971. The tanks consisted of one-1,000 gallon gasoline UST, two-3,000 gallon gasoline USTs (nested together), and one-1,500 gallon gasoline UST. The UST locations are shown in Figure 2. All of the USTs were reportedly removed in 1986. Limited soil analysis data was collected from the UST excavations. Russnow, Kane, and Andrews collected samples from the South Well (SW), Ed Rhodes well (ERW), and the block house well (BHW) in May/June 1988. Contaminants associated with petroleum and chlorides were detected in the groundwater samples. The chloride in the groundwater is believed to be from the ham curing facility which operated at the site from the mid 1950's to the mid 1970's.

In May 1989, Westinghouse Environmental Services (WES) submitted an Initial Site Assessment of the site. This assessment included the drilling of numerous soil test borings, drilling and installation of two monitoring wells and three piezometers, stream sampling, and associated sampling and analyses in the fall of 1988. The site assessment determined the location of contaminated soil and began to determine the extent of groundwater contamination. The assessment confirmed that petroleum and chloride contamination was present in the bedrock aquifer. Chlorides have been detected in the creek east of the site. Also during the assessment, WES removed and treated approximately 700 cubic yards of petroleum contaminated soil from the UST Pit B area.

In early 1991, Charles T. Main (CTM) was contracted to develop a remedial action plan (RAP). Their plan was submitted to the then North Carolina Department of Environment, Health, and Natural Resources (NC DEHNR) Groundwater Section Regional Office in Winston-Salem, North Carolina on April 17, 1991. The NC DEHNR is currently the Department of Environment and Natural Resources (DENR) and will be referred to in that way in this report. The NCDENR requested additional information, and a supplemental RAP was submitted to the NCDENR on September 27, 1991. Both RAPs proposed using a pump and treat system to remediate the groundwater. The groundwater was to be pumped from seven recovery wells, treated, and discharged under an Individual NPDES permit. CTM recommended that the chloride contaminated soil be allowed to naturally remediate over time. Because of difficulties in obtaining access to discharge the effluent, in 1996, Smithfield Foods requested that the NCDENR allow the groundwater and soil be remediated through a process of natural attenuation. Following this request, on August 26, 1996, the NCDENR requested additional assessment of the site. In March 1998, a Groundwater Monitoring Report with updated sampling data was sent to the NCDENR. Upon review of the monitoring report, on May 20, 1998 the NCDENR requested additional investigation of the bedrock aquifer. A follow-up report was issued on August 23, 1999.

On October 11, 2002, the NCDENR sent Smithfield Foods a Notice of Regulatory Requirements requiring the submittal of a corrective action plan (CAP) to treat the petroleum contaminated soil and groundwater. Because chloride contaminated groundwater is commingled with the petroleum contamination, the CAP addressed both contaminants. On December 20, 2002 the CAP was submitted to NCDENR by Trigon Engineering Consultants (now Trigon/Kleinfelder). The CAP called for additional soil sampling in the UST B area, with excavation and disposal of any remaining contaminated soil. Groundwater contamination would be addressed with a pump and treat system incorporating an air stripper to treat the petroleum contamination and a reverse osmosis (RO) system to deal with elevated chloride concentrations. The December 2002 CAP was developed under tight time constraints and was, thus, based on the data from the 1999 sampling events. The CAP called for a new round of sampling and re-evaluation of the CAP requirements based on the analytical results.

Groundwater sampling of the recovery wells, monitoring wells, water wells and stream, and soil sampling of the UST B pit area and the salt disposal area was conducted on June 12 and 13, 2003. The results of the sampling was reported to NCDENR in an October 3, 2003 Groundwater and Soil Sampling Report. On March 30, 2003 a meeting was held at the site between Smithfield Foods, Mr. Stephen Williams of NCDENR and Trigon/Kleinfelder. Based on the preliminary June 2003 sampling results and a review of the site conditions, NCDENR agreed to consider modifying the December 2002 CAP to allow remediation of remaining contamination at the site by monitored natural attenuation. The modified conditions were to be allowed only if continued monitoring indicated that the contaminant plume was stable or improving. Groundwater sampling of the recovery wells, monitoring wells, water wells and the stream conducted on October 8, 2003 confirmed that both the BTEX and chloride plumes were stable and that natural attenuation of petroleum and chloride contamination in the groundwater may be occurring.

Following a review of the groundwater sampling data from the October 2003 sampling event, the NCDENR approved Smithfield's request on November 20, 2003 to modify the December 2002 CAP to provide for natural attenuation. On February 3, 2004, Trigon/Kleinfelder submitted a CAP to modify the December 2002 CAP, which will allow the existing petroleum and chloride contaminants in the site soil and groundwater to naturally attenuate. The February 3, 2004 natural attenuation CAP was approved by the NCDENR on March 16, 2004. As of July 2010, all residences in the site area except for the Norman residence (located up- and cross-gradient of the chloride and BTEX plumes) were connected to the public water supply. Subsequently, NCDENR's UST Branch closed the UST case in a No Further Action (NFA) letter dated November 19, 2010. Therefore, no additional monitoring of the BTEX plume is required.

On November 12, 2010, a conference call between Smithfield Packing Co., Inc. (Smithfield), Alliance, and the NCDENR Inactive Hazardous Waste Sites Branch was held to discuss future monitoring of the chloride plume in light of the closure of the UST case. During this conference call, it was decided that monitoring of the chloride plume would be reduced to an annual event until the chloride standards for groundwater and surface water have been met. At that point, quarterly monitoring will be resumed to demonstrate achievement of the chloride standards.

2.0 PURPOSE

On January 24 and January 25, 2012, groundwater, surface water, and soil samples were collected and analyzed to assess the current extent and magnitude of the chloride plume. It is the purpose of this report to present the results of this monitoring event.

3.0 RECEPTORS

A well survey of the area in October 1996 determined that there are approximately nine water supply wells within 1,500 feet of the site (Figure 3) and another seven wells within 1,750 feet of the site. Five of these wells are separated from the site by a stream valley (Figure 4). The names and addresses of water well users within 1,500 feet of the site are shown in Table 1. During the fall of 2007, a public water main was installed along NC Highway 22 to supply a proposed school north of the site. To date, all of the residences except for the Norman residence (located up- and cross-gradient of the chloride plume) have been connected to the public water system.

The owners of the properties located immediately adjacent to the site are listed in Table 2. Their locations are shown on Figure 3.

The hillside east of the site is dissected by numerous small gullies that feed a wet weather drainage feature located approximately 1,000 feet east of the site. This drainage feature flows into an unnamed tributary to Sandy Creek which is located approximately 1.3 miles east of the site (Figure 1).

4.0 METHODS

4.1 MONITORING WELL SAMPLING

Monitoring well MW-1S was sampled on January 24, 2012 and monitoring well MW-1D was sampled on January 25, 2012. The locations of the monitoring wells are shown on Figure 2. The samples were sent to REIC Laboratories in Beaver, West Virginia and analyzed for chloride using EPA Method 300.0.

Prior to collecting the samples, the water level in each well was measured and recorded and a minimum of three well volumes of water was removed or the well was bailed dry using either a bailer or a peristaltic pump After purging, the monitoring well samples were collected with a new disposable bailer. The samples were collected in laboratory supplied bottles, preserved, and picked up by a REIC courier under chain-of-custody to REIC Laboratories in Beaver, West Virginia.

4.2 RECOVERY WELL DISCRETE INTERVAL SAMPLING

Recovery wells RW-1, RW-3, RW-4, RW-5, RW-6, and RW-7 were sampled using a Solinst™ Model 425 Discrete Interval Sampler on January 24, 2012. The purpose of the discrete interval sampling method is to eliminate the needs for electrical power and purge water handling associated with purging three well volumes. The discrete interval sampler could not be deployed in well RW-2 due to downhole obstructions caused by pump wiring/tubing. Therefore, RW-2 was sampled on January 25, 2012 by activating the submersible pump in this well using a generator and purging the volume of water contained in the discharge piping.

The samples were sent to REIC Laboratories in Beaver, West Virginia and analyzed for chloride using EPA Method 300.0.

4.3 WATER WELL SAMPLING

Because all of the residences except for the Norman residence (located up- and cross-gradient of the chloride plume) have been connected to public water and the UST case has been closed by NCDENR, sampling of the water wells is no longer conducted.

4.4 STREAM SAMPLING

The stream located east of the site was sampled on January 25, 2012, at the upper (S-1), mid (S-2), and lower (S-3) stream locations. The samples were sent to REIC Laboratories and analyzed for chloride via EPA Method 300.0.

4.5 SOIL SAMPLING

On January 25, 2012, Alliance personnel collected soil samples from the salt/brine disposal area to determine current chloride concentrations. The results of the January 25, 2012 sample analyses are summarized in Table 4. A shallow (1 foot deep) and a deep (4 foot deep) sample were collected at locations SS-1, SS-2, SS-3, and SS-4. The samples were analyzed for chloride via EPA Method 300.0. Each sample was a composite sample made by combining soil from four different borings located approximately five feet apart. The locations of the soil samples are shown in Figure 6. Each sample was collected using a stainless steel hand auger. The samples were placed in an iced cooler and were picked up by a REIC courier under chain-of-custody to REIC Laboratories in Beaver, West Virginia.

4.6 FIELD MEASUREMENTS

The static water level in monitoring wells MW-1D and MW-1S and in recovery wells RW-1, RW-2, RW-3, RW-4, RW-5, RW-6, and RW-7 was gauged on January 24, 2012. The water level was measured using an electronic water level meter accurate to 0.01 feet. The water level measurement data are recorded on Table 6.

5.0 RESULTS

5.1 MONITORING WELLS

Chloride was detected in wells MW-1S (670 mg/L) and MW-1D (1,200 mg/L) above the State's 2L .0202 Standard of 250 mg/L. The laboratory results are summarized in Table 3 and the complete laboratory reports are included as Appendix A.

5.2 DISCRETE SAMPLING OF RECOVERY WELLS

Chloride was detected in recovery wells RW-2 (1,050 mg/L), RW-3 (1,750 mg/L), and RW-6 (251 mg/L) above the State's 2L .0202 Standard of 250 mg/L. The laboratory results are summarized in Table 3 and the complete laboratory reports are included as Appendix A.

5.3 SOIL SAMPLING

Concentrations of chloride in the soil samples collected on January 25, 2012 were below detection limits (BDL) in the 1-foot samples from SS-1, SS-2, and SS-3. The 1-foot soil sample collected from SS-4 indicated a chloride concentration of 20.2 mg/kg. Chloride concentrations at SS-2 and SS-4 in the 4-foot samples were detected at 28.0 mg/kg and 27.8 mg/kg, respectively. The SS-1 and SS-3 4-foot samples were reported as BDL. The soil sampling analytical data is summarized on Table 4, and the accompanying laboratory analyses and chain-of-custody can be found in Appendix A.

5.4 GROUNDWATER FLOW DIRECTION

The groundwater measurements collected on January 24, 2012 were used to prepare a groundwater surface contour map (Figure 8). The data shows groundwater in both the residuum and bedrock are moving generally to the southeast toward the stream. The water level data are summarized in Table 6.

5.5 PLUME GEOMETRY

Based on the data collected during the January 2012 sampling event, chloride is concentrated in the area immediately behind (east-southeast of) the plant (MW-1S, RW-2, and RW-3) and along a line extending to the southeast toward the stream (MW-1D). A diffuse plume of chloride extends to the north, southwest, and west of the plant. Groundwater chloride results from the January 2012 sampling event are plotted on Figure 9.

Review of historical chloride concentrations from the site monitoring and recovery wells in Table 3 reveals the following general trends. MW-1S has shown an obvious decreasing trend, indicating a reduction in the core of the chloride plume. Wells RW-3, RW-4, and RW-5 show possible decreasing concentrations with gradual negative sloping trends and wells MW-1D, RW-1, RW-2, RW-6, and RW-7 show generally stable concentrations with no easily-recognizable trend.

6.0 CONCLUSIONS

Based on the results of the January 2012 monitoring at the site, the following conclusions can be drawn:

The shallow residuum and deep bedrock aquifers are contaminated with chlorides. All the residential water wells in the immediate area except for the Norman residence (located up- and cross-gradient of the chloride plume) have been connected to the public water system and therefore are no longer sampled. The concentrations of chlorides in the samples have remained fairly constant over the sampling history at the site, with possible slow attenuation rates in some of the source area monitoring wells (e.g., MW-1S, RW-4, RW-5, and RW-6).

Because the UST case has been closed by NCDENR, it was agreed during the November 12, 2010 conference call with the Inactive Hazardous Waste Sites Branch that monitoring of the chloride plume will be reduced to an annual basis until the North Carolina standards for chloride have been met. After these standards have been met, quarterly monitoring will be resumed to demonstrate attainment.

Because the groundwater chloride concentrations are currently above the 2L standard of 250 mg/L, Alliance recommends continued annual monitoring of the site.

TABLES

TABLE 1: PROPERTIES WITHIN 1,500 FEET OF THE SITE WITH WATER WELLS

Parcel ID No.	Property Owner	Property Address
7794400682	Sherry J. Norman	3575 NC Hwy 22N, Franklinville, NC 27248
7794403084	William E. & Jane P. Rhodes	3520 NC Hwy 22 N., Franklinville, NC 27248
7794308034	Joseph & Anne Sue Beal	3511 NC Hwy 22 N., Franklinville, NC 27248
7793491793	Hancock Old Fashion Ctry Ham	3482 NC Hwy 22N., Franklinville, NC 27248
7793491252	Julia S. Hancock	3456 NC Hwy 22 N., Franklinville, NC 27248
7793395540	Wilbert L. Hancock	1716 Academy Rd. Ext., Franklinville, NC 27248
7793394490	Terry Wesley	P. O. Box 1300, Ramseur, NC 27316
7793393252	Raymond Jester, Jr.	3419 NC Hwy 22 N., Franklinville, NC 27248
7793392064	Peggy J. Brown	3399 NC Hwy 22N., Franklinville, NC 27248
7793381857	James T. & Charlotte Kivett	3367 NC Hwy 22 N., Franklinville, NC 27248
7793582180	Richard Wallace	3519 Cedar Forest Rd, Franklinville, Nc 27248
7793580431	Irene C. Garrett	3521 Cedar Forest Rd, Franklinville, NC 27248
7793487411	Steven E. & Loretta Thompson	3505 Cedar Forest Rd, Franklinville, NC 27248

Ms. Ruth Debrito,
Smithfield Foods, Inc.
Hancock Country Hams,
Franklinville, North Carolina

TABLE 2: ADJACENT PROPERTY OWNERS

Parcel ID No.	Property Owner	Property Address
7794403084	William E. & Jane P. Rhodes	3520 NC Hwy 22 N., Franklinville, NC 27248
7794308034	Joseph & Anne Sue Beal	3511 NC Hwy 22 N., Franklinville, NC 27248
7793491252	Julia S. Hancock	3456 NC Hwy 22 N., Franklinville, NC 27248
7793593950	George H. & Barbara Poe	3862 HardinEllison Rd., Franklinville, NC 27248
7793597552	Mark A. & Marcia Coponen	3896 HardinEllison Rd., Franklinville, NC 27248
7793395540	Wilbert L. Hancock	1716 Academy Rd. Ext., Franklinville, NC 27248

Note: Locations shown on Figure 3.

Ms. Ruth Debrito,
Smithfield Foods, Inc.
Hancock Country Hams,
Franklinville, North Carolina

TABLE 3
HISTORICAL MONITORING AND RECOVERY WELL CHLORIDE SAMPLE RESULTS

2L Standards: 250 ppm Chloride									
Monitoring Wells				Recovery Wells					
MW-1S		MW-1D		RW-1		RW-2		RW-3	
10/23/88	NA	10/23/88	740	5/26/93	473	5/26/93	429	5/26/93	1,219
11/30/88	3,800	2/29/96	1,387	2/17/98	284	2/17/98	255	3/17/98	4,250
10/1/96	9,844	10/11/96	1,781	3/23/99	492	3/23/99	419	2/17/98	3,800
2/17/98	4,590	2/19/98	851	6/12/03	553	6/12/03	575	10/20/98	NA
6/12/03	3,150	6/12/03	NS	10/8/03	550	10/8/03	370	10/20/98	4,250
10/8/03	3,200	10/8/03	1,100	1/8/04	525	1/8/04	765	10/20/98	6,400
1/8/04	2,710	1/8/04	1,080	4/7/04	612	4/7/04	627	3/23/99	3,423
4/7/04	2,800	4/7/04	1,040	7/20/04	643	12/15/04	755	6/12/03	4,230
7/20/04	2,700	7/20/04	987	12/15/04	594	3/24/05	773	10/8/03	3,800
12/15/04	2,351	12/15/04	1,029	10/12/06	486	8/23/05	659	1/8/04	4,210
3/24/05	2,620	3/24/05	1,150	1/3/07	665	12/1/05	783	4/7/04	4,850
8/23/05	2,210	8/23/05	1,480	3/22/07	308	3/8/06	560	7/20/04	2,720
12/1/05	1,990	12/1/05	1,370	7/18/07	704	6/20/06	783	12/15/04	3,705
3/8/06	1,700	3/8/06	1,260	1/24/08	692	10/12/06	519	3/24/05	4,010
6/20/06	1,541	6/20/06	1,394	3/20/08	670	1/3/07	641	8/23/05	3,290
10/12/06	1,662	10/12/06	1,297	6/24/08	753	3/22/07	445	12/1/05	4,600
1/3/07	1,496	1/3/07	1,449	1/14/09	711	7/18/07	440	3/8/06	4,400
3/22/07	1,346	3/22/07	1,184	4/22/09	800	1/24/08	498	6/20/06	NS
7/18/07	1,362	7/18/07	1,329	7/16/09	599	3/20/08	656	10/12/06	NS
1/24/08	1,440	1/24/08	1,000	10/14/09	520	6/24/08	420	1/3/07	1,758
3/20/08	1,362	3/20/08	1,220	1/13/10	460	1/14/09	472	3/22/07	3,261
6/24/08	1,680	6/24/08	1,320	4/15/10	558	4/22/09	528	7/18/07	3,767
1/14/09	1,040	1/14/09	1,010	7/22/10	345	7/16/09	473	1/24/08	2,940
4/21/09	1,110	4/21/09	1,380	10/26/2010	383	10/14/09	649	3/20/08	2,730
7/16/09	84.3	7/16/09	1,240	1/18/2011	428	1/13/10	698	6/24/08	2,690
10/14/09	850	10/14/09	1,260	1/18/2011** (Depth of 200 ft)	485	4/15/10	521	1/14/09	1,230
1/14/10	885	1/13/10	1,230	1/24/2012	174	7/22/09	588	4/22/09	873
4/16/10	888	4/16/10	1,220			10/26/2010	860	7/16/09	2,990
7/21/2010	943	7/21/2010	866			1/18/2011	1,010	10/14/09	3,090
10/26/2010	356	10/26/10	1,240			1/18/2011** (Depth of Sample 38.0 Ft)	815	1/13/10	2,840
1/17/2011	717	1/18/2011	984			1/24/2012	1,050	4/15/10	1,880
1/24/2012	670	1/25/2012	1,200					7/22/10	2,490
								10/26/2010	2,160
								1/18/2011	2,160
								1/18/2011** (Depth of 135 ft)	2,490
								1/18/2011** (Depth of 225 ft)	2,480
								1/18/2011** (Depth of 325 ft)	2,410
								1/24/2012	1,750

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TABLE 3
HISTORICAL MONITORING AND RECOVERY WELL CHLORIDE SAMPLE RESULTS

2L Standards: 250 ppm for Chloride							
Recovery Wells (continued)							
RW-4		**RW-5**		**RW-6**		**RW-7**	
5/26/93	457	5/26/93	428	5/26/88	144/865	5/26/93	324
2/17/98	226	2/17/98	316	10/1/88	800	3/29/96	211
3/23/99	410	3/23/99	386	5/26/93	245	2/17/98	140
6/12/03	368	6/12/03	282	2/17/98	301	10/21/98	240
10/8/03	400	10/8/03	340	10/21/98	615	3/23/99	261
1/8/04	304	1/8/04	324	3/23/99	599	6/12/03	293
4/7/04	323	4/7/04	338	6/12/03	521	10/8/03	350
7/20/04	277	7/20/04	315	10/8/03	310	1/8/04	321
12/15/04	271	12/15/04	347	1/8/04	223	4/7/04	310
3/24/05	249	3/24/05	345	4/7/04	275	7/20/04	283
8/23/05	228	8/23/05	354	7/20/04	219	12/15/04	299
12/1/05	220	12/1/05	329	12/15/04	190	3/24/05	258
3/8/06	120	3/8/06	150	3/24/05	195	8/23/05	261
6/20/06	218	6/20/06	NS	8/23/05	167	12/1/05	287
10/12/06	217	10/12/06	NS	12/1/05	185	3/8/06	140
1/3/07	428	1/3/07	404	3/8/06	120	6/20/06	276
3/22/07	220	3/22/07	NS	6/20/06	297	10/12/06	274
7/18/07	205	7/18/07	298	10/12/06	212	1/3/07	333
1/24/08	172	1/24/08	NS	1/3/07	523	3/22/07	220
3/20/08	175	3/20/08	191	3/22/07	212	7/18/07	220
6/24/08	182	6/24/08	222	7/18/07	161	1/24/08	125
1/14/09	190	1/14/09	226	1/24/08	180	3/20/08	113
4/22/09	209	4/22/09	244	3/20/08	198	6/24/08	152
7/16/09	223	7/16/09	249	6/24/08	258	1/14/09	190
10/14/09	184	10/14/09	230	1/14/09	239	4/22/09	209
1/13/10	214	1/13/10	228	4/22/09†	NS	7/16/09	239
4/15/10	198	4/15/10	209	7/16/09	190	10/14/09	194
7/22/10	176	7/22/10	232	10/14/09	183	1/13/10	170
10/26/2010	171	10/26/2010	139	1/13/10	211	4/15/10	251
1/18/2011	139	1/18/2011	184	4/15/10	166	7/22/2010	201
1/24/2012	184	1/24/2012	169	7/22/10	147	10/26/10	258
				10/26/2010	165	1/18/2011	214
				1/18/2011	171	1/24/2012	192
				1/18/2011** (Depth of 25.0 ft.)	202		
				1/24/2012	251		

Notes:

ppm = parts per million

ft = feet

Concentrations which exceed the 2L Groundwater Quality Standards are bold.

2L Standards - NCAC Title 15A, Subchapter 2L Quality Standards for Class GA groundwater, Jan. 1, 2010

PLW - Parking Lot Well

BQL - Below the quantitation limit of the method of analysis

NS - Not sampled

ND - Non-detect

Environmental Alliance began sampling in April 2009, all previous samples collected by others.

† - Not sampled due to pump malfunctioning

**-Indicates when discrete sampling was used

[1] Sample collected by Westinghouse Environmental Services; piezometers currently inaccessible

[2] Sample collected by Charles T. Main

[3] Sample collected by Smithfield Foods

[4] Sample collected by BPA Environmental & Engineering, Inc.

[5] EPA Method 602 with a detection limit of 1 to 5 ppb

[6] EPA Method 504.1 with a Detection Limit of 0.02 ppb

[7] EPA Method 601 with a detection limit of 1 to 5 ppb

[8] Method 239.1 with a detection limit of 5 ppb

[9] Method SM4500C with a detection limit of 0.10 ppm

[10] Collected on 9/23/88

[11] Sample collected by Rasmow, Kane, and Andrews

144/865 - Sample collected near water table/sample collected at depth

[12] Sample 3C collected from Packer Test Interval 220 - 240 ft. bls.

[13] Sample 3B Collected from Packer Test Interval 290 - 310 ft. bls.

[14] Sample 3A Collected from Packer Test Interval 319 - 339 ft. bls.

[15] Sample 6A Collected from Packer Test Interval 167 - 187 ft. bls.

[16] Sample 7B Collected from Packer Test Interval 170 - 190 ft. bls.

[17] Sample collected by Trigon Engineering Consultants, Inc.

ENVIRONMENTAL ALLIANCE

TABLE 4: SOIL SAMPLE RESULTS : CHLORIDE

Depth in Feet	Location															
	SCL-1								SCL-2							
	7/22/04	8/23/05	6/20/06	1/24/08[1]	4/21/09	1/14/10	01/18/11 [1]	01/25/12 [1]	7/22/04	8/23/05	6/20/06	1/24/08[1]	4/21/09	1/14/10	01/18/11 [1]	01/25/12 [1]
1.0	3.6	18.8	103.0	7.8	47.1	BDL	BDL	BDL	217	29	BDL	53	19.5	BDL	BDL	BDL
4.0	3.3	18.3	NS	1.5	211	95	170	BDL	3,320	NS	NS	146.0	32.7	33.2	BDL	28.0

Depth in Feet	Location															
	SCL-3								SCL-4							
	7/22/04	8/23/05	6/20/06	1/24/08[1]	4/21/09	1/14/10	01/18/11 [1]	01/25/12 [1]	7/22/04	8/23/05	6/20/06	1/24/08[1]	4/21/09	1/14/10	01/18/11 [1]	01/25/12 [1]
1.0	80.5	23.9	65.1	23.1	BDL	BDL	BDL	BDL	8.2	35.2	45.6	6.9	BDL	12.4	BDL	20.2
4.0	670	12	NS	158.0	37	141	119	BDL	3.6	325.0	NS	429.0	19.4	18.2	27.2	27.8

Notes:
Results shown in parts per million
NS - Not Sampled
BDL = Below detection limit
[1] Samples collected on 1/24/08 and 1/18/11 are labeled SS-1, SS-2, SS-3, and SS-4

TABLE 5: HISTORICAL SURFACE WATER SAMPLE RESULTS

S-1 (upper)																
2B Standard. - 230 ppm Chloride																
Sample Date	10/31/88[5]	10/11/96[6]	2/18/98[6]	6/12/03[7]	10/8/03[7]	1/8/04[7]	4/7/04[7]	7/20/04[7]	12/15/04[7]	3/24/05[7]	8/23/05[7]	12/01/05[7]	3/08/06[7]	6/20/06[7]	10/12/06[7]	1/3/07[7]
Chloride[1]	**1,000**	74.6	22.8	12	7.6	10.8	13.6	209	31.6	27.8	NS	33.3	35	NS	NS	37.5

S-1 (upper) (cont'd.)														
2B Standard. - 230 ppm Chloride														
Sample Date	3/22/07[7]	7/18/07[7]	1/24/08[7]	3/20/08[7]	6/24/08[7]	1/14/09[7]	4/21/09[9]	7/16/09[9]	10/14/09[9]	1/13/10	4/16/10	7/21/10	10/26/10	1/17/11	1/25/12
Chloride[1]	23.3	NS	NS	46.3	NS	25.1	14.2	DRY	DRY	9.08	6.52	DRY	DRY	DRY	10.7

S-2 (mid)																
2B Standard. - 230 ppm Chloride																
Sample Date	10/31/88[5]	10/11/96[6]	2/18/98[6]	6/12/03[7]	10/8/03[7]	1/8/04[7]	4/7/04[7]	7/20/04[7]	12/15/04[7]	3/24/05[7]	8/23/05[7]	12/01/05[7]	3/08/06[7]	6/20/06[7]	10/12/06[7]	1/3/07[7]
Chloride[1]	**840**	72.2	156	27	16	39.8	41.1	15.1	64.1	49.8	79.2	**248**	39	26.4	NS	39.9

S-2 (mid) (cont'd.)														
2B Standard. - 230 ppm Chloride														
Sample Date	3/22/07[7]	7/18/07[7]	1/24/08[7]	3/20/08[7]	6/24/08[7]	1/14/09[7]	4/21/09[9]	7/16/09[9]	10/14/09[9]	1/13/10	4/16/10	7/21/10	10/26/10	1/17/11	1/25/12
Chloride[1]	55.9	NS	NS	72.9	NS	62.5	17.5	DRY	DRY	46.2	11.8	11.6	11.6	DRY	54.4

S-3 (lower) (cont'd.)																
2B Standard. - 230 ppm Chloride																
Sample Date	10/31/88[5]	10/11/96[6]	2/18/98[6]	6/12/03[7]	10/8/03[7]	1/8/04[7]	4/7/04[7]	7/20/04[7]	12/15/04[7]	3/24/05[7]	8/23/05[7]	12/01/05[7]	3/08/06[7]	6/20/06[7]	10/12/06[7]	1/3/07[7]
Chloride[1]	**700**	**295**	54.7	29	32	53.4	53.1	97.1	105	51.2	35.6	140	**61**	75.8	25.9	79.8

S-3 (lower)															
2B Standard. - 230 ppm Chloride															
Sample Date	3/22/07[7]	7/18/07[7]	1/24/08[7]	3/20/08[7]	6/24/08[7]	1/14/09[7]	4/21/09[9]	7/16/09[9]	10/14/09[9]	1/13/10	4/16/10	7/21/10	10/26/10	1/17/11	1/25/12
Chloride[1]	70.9	NS	75.8	79.3	84.3	77.2	46.7	DRY	DRY	41.0	17.5	9.31	9.31	DRY	46.8

Notes:
All results are in parts per million (ppm)
Concentrations which exceed the 2B Surface Water Quality Standards are bold
2B Standards - Quality Standards for Aquatic Life in Fresh Water
NS- Not Sampled
NA- Not analyzed for this compound
ND - Non-detect
BQL- Below the quantitation limit of the method of analysis
Environmental Alliance began sampling in April 2009, all previous samples collected by others

[1] EPA Method SM4500C with a detection limit of 0.10 ppm
[5] Sample collected by Westinghouse Environmental

Ms. Ruth Debrito,
Smithfield Foods, Inc.
Hancock Country Hams.
Franklinville, North Carolina

TABLE 6: SUMMARY OF MONITORING WELL AND GROUNDWATER ELEVATION DATA

Well No.	Elevation[1] (ft)		Well Construction (ft)			Static Water Levels															
						11/18/88[3]		2/17-19/98[4]		3/13/99[4]		5/23/99[4]		6/12/03[6]		10/8/03[6]		1/8/04[6]		4/7/04[6]		7/20/04[6]	
	Top of Casing	Top of Screen	Length of Screen	Depth of Casing[5]	Depth of Well	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation
MW-1S	842.84	845.31	5.0	NA	15	13.95	831.36	13.20	832.11	---	---	14.25	831.06	14.21	828.63	14.34	828.50	14.17	828.67	14.07	828.77	14.32	828.52
MW-1D	674.66	-	NA	11.0	72	13.11	663.00	4.70	671.41	---	---	11.05	665.06	---	---	9.30	665.36	9.43	665.23	7.96	666.70	10.74	663.92
P-1	809.32	811.84	2.40	NA	3	3.60	808.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P-2	NM	765.00	2.4	NA	5.5	3.70	761.30	4.95	760.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P-3	682.98	684.89	2.4	NA	2.9	2.78	682.11	2.22	682.67	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW-1	842.56	-	NA	23.8	220	---	---	130.85	712.31	147.25	695.91	>151.50	<691.66	139.20	703.36	117.99	724.57	119.08	723.48	122.22	720.34	118.11	724.45
RW-2	850.47	-	NA	38.6	401	---	---	130.40	720.58	149.62	701.36	145.50	705.48	126.25	724.22	121.88	728.59	122.75	727.72	123.47	727.00	121.79	728.68
RW-3	840.65	-	NA	52.5	340	---	---	129.50	711.47	141.25	699.72	139.55	701.42	124.14	716.51	112.86	727.79	115.78	724.87	113.32	727.33	113.04	727.61
RW-4	821.49	-	NA	20.0	301	---	---	105.20	715.10	119.11	701.19	118.25	702.05	103.34	718.15	96.11	725.38	97.46	724.03	97.81	723.68	95.66	725.83
RW-5	831.07	-	NA	29.5	303	---	---	115.35	716.63	129.10	702.88	128.35	703.63	112.26	718.81	105.87	725.20	107.55	723.52	107.22	723.85	105.78	725.29
RW-6 (PLW	858.38	-	NA	37.7	267	137.64	721.68	137.28	722.04	151.10	708.22	150.35	708.97	132.53	725.85	126.69	731.69	128.68	729.70	129.31	728.97	127.04	731.34
RW-7	857.00	-	NA	14.1	221	---	---	134.70	722.96	145.45	712.21	145.20	712.46	130.27	726.73	124.62	732.38	126.74	730.26	127.46	729.54	125.09	731.91

TABLE 6: SUMMARY OF MONITORING WELL AND GROUNDWATER ELEVATION DATA (cont'd)

Well No.	Elevation[1] (ft)		Well Construction (ft)			Static Water Levels															
						1/05/05[6]		3/24/05[6]		8/23/05[6]		12/01/05[6]		3/08/06[6]		6/20/06[6]		10/12/06[6]		1/3/07[6]		3/22/07[6]	
	Top of Casing	Top of Screen	Length of Screen	Depth of Casing[5]	Depth of Well	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation
MW-1S	842.84	845.31	5.0	NA	15	14.07[7]	828.77	13.8	829.04	14.19	828.65	13.93	828.91	12.95	829.89	14.05	828.79	14.16	828.68	13.64	829.20	13.82	829.02
MW-1D	674.66	-	NA	11.0	72	10.02[7]	664.64	7.39	667.27	11.39	663.27	12.15	662.51	12.33	662.33	12.35	662.31	14.52	660.14	10.28	664.38	9.02	665.64
P-1	809.32	811.84	2.40	NA	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P-2	NM	765.00	2.4	NA	5.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P-3	682.98	684.89	2.4	NA	2.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RW-1	842.56	-	NA	23.8	220	121.75	720.81	118.31	724.25	118.11	724.45	121.85	720.71	121.82	720.74	121.49	721.07	123.17	719.39	123.65	718.91	122.61	719.95
RW-2	850.47	-	NA	38.6	401	127.24	723.23	122.99	727.48	123.92	726.55	127.16	723.31	124.04	726.43	126.04	724.43	128.63	721.84	127.99	722.48	125.4	725.07
RW-3	840.65	-	NA	52.5	340	121.92	718.73	114.96	725.69	114.1	726.55	123.01	717.64	115.14	725.51	115.52	725.13	115.6	725.05	124.6	716.05	114.97	725.68
RW-4	821.49	-	NA	20.0	301	100.26	721.23	96.98	724.51	96.69	724.80	100.49	721.00	100.43	721.06	104.2	717.29	102.22	719.27	102.08	719.41	100.59	720.90
RW-5	831.07	-	NA	29.5	303	110.45	720.62	107.1	723.97	106.89	724.18	110.64	720.43	110.65	720.42	111.21	719.86	112.42	718.65	112.34	718.73	110.62	720.45
RW-6 (PLW	858.38	-	NA	37.7	267	131.44	726.94	128.78	729.60	128.17	730.21	132.01	726.37	131.69	726.69	127.04	731.34	125.65	732.73	133.33	725.05	131.52	726.86
RW-7	857.00	-	NA	14.1	221	129.55	727.45	126.89	730.11	126.22	730.78	130.09	726.91	129.67	727.33	129.44	727.56	131.36	725.64	131.34	725.66	129.46	727.54

Ms. Ruth Debrito,
Smithfield Foods, Inc.
Hancock Country Ham
Franklinville, North Carolina

TABLE 6: SUMMARY OF MONITORING WELL AND GROUNDWATER ELEVATION DATA (cont'd)

Well No.	Elevation[1] (ft)		Well Construction (ft)			Static Water Levels																	
						7/18/07[6]		1/24/08[6]		3/20/08[6]		6/24/08[6]		1/14/09[6]		4/22/09[5]		7/16/09[8]		10/14/09[8]		1/13/10[5]	
	Top of Casing	Top of Screen	Length of Screen	Depth of Casing[5]	Depth of Well	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation
MW-1S	842.84	845.31	5.0	NA	15	12.21	830.63	14.6	828.24	14.47	828.37	14.42	828.42	14.88	827.96	14.72	828.12	14.96	827.88	14.72	828.12	13.92	828.92
MW-1D	674.66	-	NA	11.0	72	12.77	661.89	12.9	661.76	16.50	658.16	12.98	661.68	10.92	663.74	8.32	666.34	12.02	662.64	14.51	660.15	10.79	663.87
P-1	809.32	811.84	2.40	NA	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P-2	NM	765.00	2.4	NA	5.5	---	---	---	---	---	---	---	---	---	---	---	---	Dry	---	---	---	---	---
P-3	682.98	684.89	2.4	NA	2.9	---	---	---	---	---	---	---	---	---	---	---	---	1.88	681.10	2.27	680.71	2.78	680.20
RW-1	842.56	-	NA	23.8	220	121.75	720.81	127.24	715.32	127.53	715.03	124.60	717.96	124.30	718.26	119.28	723.28	118.93	723.63	139.20	703.36	136.11	706.45
RW-2	850.47	-	NA	38.6	401	125.12	725.35	132.81	717.66	132.54	717.93	129.09	721.38	128.88	721.59	121.22	729.25	120.92	729.55	126.22	724.25	125.01	725.46
RW-3	840.65	-	NA	52.5	340	126.67	713.98	128.31	712.34	128.29	712.36	125.82	714.83	125.45	715.20	117.95	722.70	117.49	723.16	123.98	716.67	124.21	716.44
RW-4	821.49	-	NA	20.0	301	100.09	721.40	106.18	715.31	106.32	715.17	103.47	718.02	103.36	718.13	106.04	715.45	86.22	735.27	103.39	718.10	99.69	721.80
RW-5	831.07	-	NA	29.5	303	110.30	720.77	116.45	714.62	116.62	714.45	113.75	717.32	113.65	717.42	108.14	722.93	108.21	722.86	112.25	718.82	109.91	721.16
RW-6 (PLW	858.38	-	NA	37.7	267	130.95	727.43	139.11	719.27	139.31	719.07	134.70	723.68	134.87	723.51	129.39	728.99	129.02	729.36	132.56	725.82	136.50	721.88
RW-7	857.00	-	NA	14.1	221	129.25	727.75	137.05	719.95	137.21	719.79	132.65	724.35	132.98	724.02	127.46	729.54	127.13	729.87	130.60	726.40	128.74	728.26

TABLE 6: SUMMARY OF MONITORING WELL AND GROUNDWATER ELEVATION DATA (cont'd)

Well No.	Elevation[1] (ft)		Well Construction (ft)			Static Water Levels									
						4/15/10[8]		7/22/10[8]		10/26/10[8]		01/17/11[8]		01/24/12[5]	
	Top of Casing	Top of Screen	Length of Screen	Depth of Casing[5]	Depth of Well	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation	Depth (ft.)	Elevation
MW-1S	842.84	845.31	5.0	NA	15	13.52	829.32	13.02	829.82	14.81	828.03	13.50	829.34	14.37	828.47
MW-1D	674.66	-	NA	11.0	72	11.04	663.62	11.98	662.68	10.82	663.84	11.06	663.60	11.10	663.56
P-1	809.32	811.84	2.40	NA	3	—	—	—	—	—	—	—	—	—	—
P-2	NM	765.00	2.4	NA	5.5	Dry	—	Dry	—	—	—	—	—	—	—
P-3	682.98	684.89	2.4	NA	2.9	1.81	681.17	1.68	681.30	2.01	680.97	1.77	681.21	1.67	681.31
RW-1	842.56	-	NA	23.8	220	115.62	726.94	117.46	725.10	120.12	722.44	122.35	720.21	123.27	719.29
RW-2	850.47	-	NA	38.6	401	117.05	733.42	121.43	729.04	125.21	725.26	128.54	721.93	127.55	722.92
RW-3	840.65	-	NA	52.5	340	111.42	729.23	113.95	726.70	118.51	722.14	124.22	716.43	123.76	716.89
RW-4	821.49	-	NA	20.0	301	94.51	726.98	98.46	723.03	108.11	713.38	101.39	720.10	101.87	719.62
RW-5	831.07	-	NA	29.5	303	104.68	726.39	106.60	724.47	111.03	720.04	111.72	719.35	112.22	718.85
RW-6 (PLW	858.38	-	NA	37.7	267	125.58	732.80	128.12	730.26	131.74	726.64	133.75	724.63	133.61	724.77
RW-7	857.00	-	NA	14.1	221	123.65	733.35	126.60	730.98	128.92	728.08	131.88	725.12	131.73	725.27

— Depth to Groundwater Not Measured

[1]Elevations surveyed from USGS Benchmark by Concord Engineering & Surveying.

[2]Static water levels measured from the top of casing.

[3]Water levels measured by Westinghouse Environmental Services.

[4]Water levels measured by BPA Environmental & Engineering, Inc.

[5]Bedrock Well - Open hole from this depth down. Depth of casing determined from geophysical logging.

[6]Water levels measured by Trigon Engineering Consultants, Inc.

[7]MW-1D and MW-1S water level measured 12/15/04

[8]Water levels measured by Environmental Alliance, Inc.

NA - Not applicable

MW - Monitoring well

P - Piezometer

RW - Recovery Well

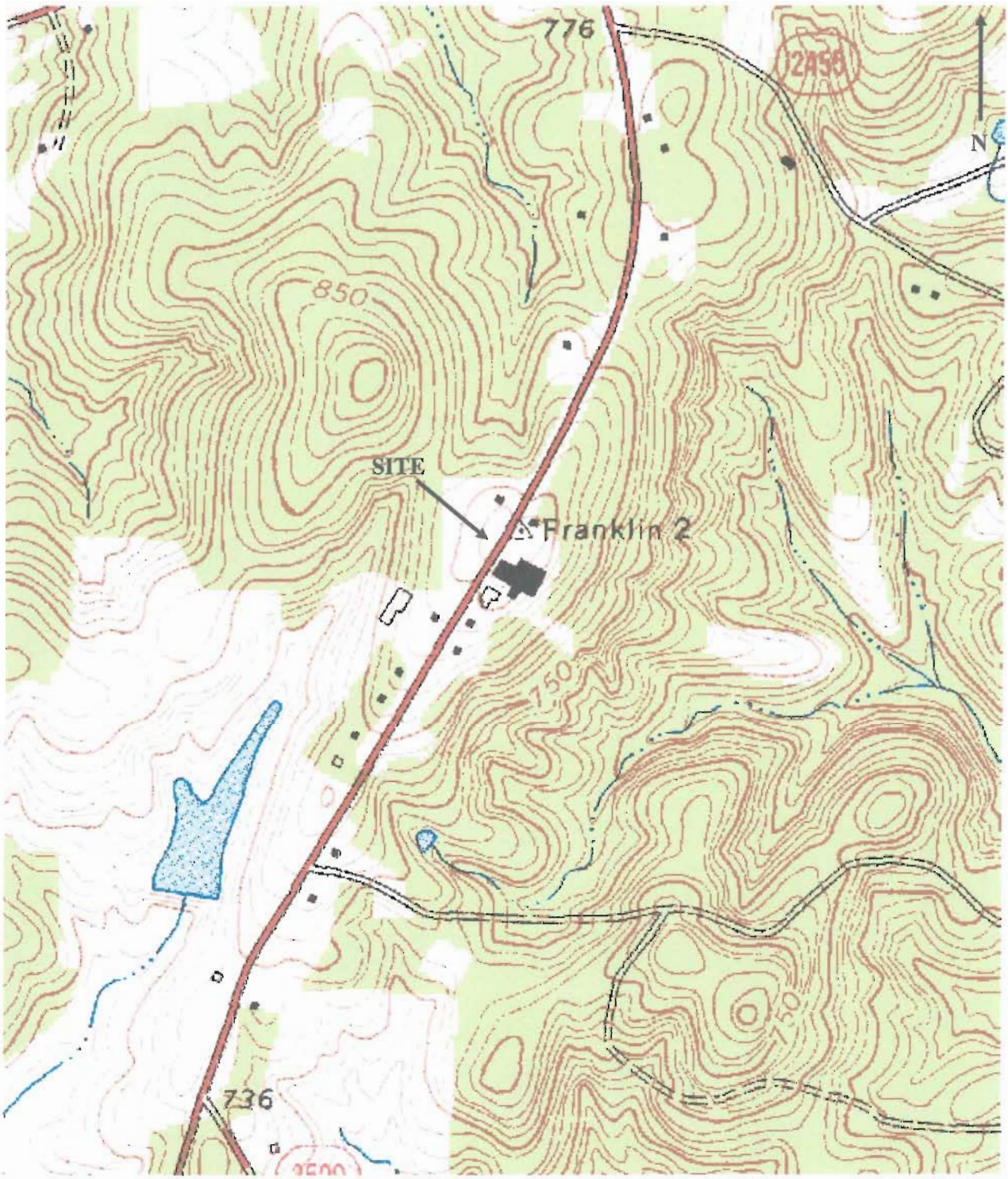
PLW - Also referred as the Parking Lot Well

Ms. Ruth Debrito,
Smithfield Foods, Inc.
Hancock Country Hams,
Franklinville, North Carolina

TABLE 7: MONITORING SCHEDULE		
Sample Location/Task	**Frequency**	**Analysis**
RW-1 thru RW-7, MW-1S, MW-1D	Annually	Chloride
Creek	Annually	Chloride
Soil Chloride Area	Annually	Chloride

ENVIRONMENTAL ALLIANCE

FIGURES



SCALE:	DATE:	APPROVED	SOURCE: 1974 USGS TOPOGRAPHIC MAP, GRAYS
1"=400'	1/15/09	BY: JSE	CHAPEL QUADRANGLE

HANCOCK COUNTRY HAMS
3484 NC HIGHWAY 22
FRANKLINVILLE, NORTH CAROLINA

SITE LOCATION MAP

FIGURE 1

Environmental Alliance, Inc.
10993 South Richardson Road, Suite 17
Ashland, Virginia 23005

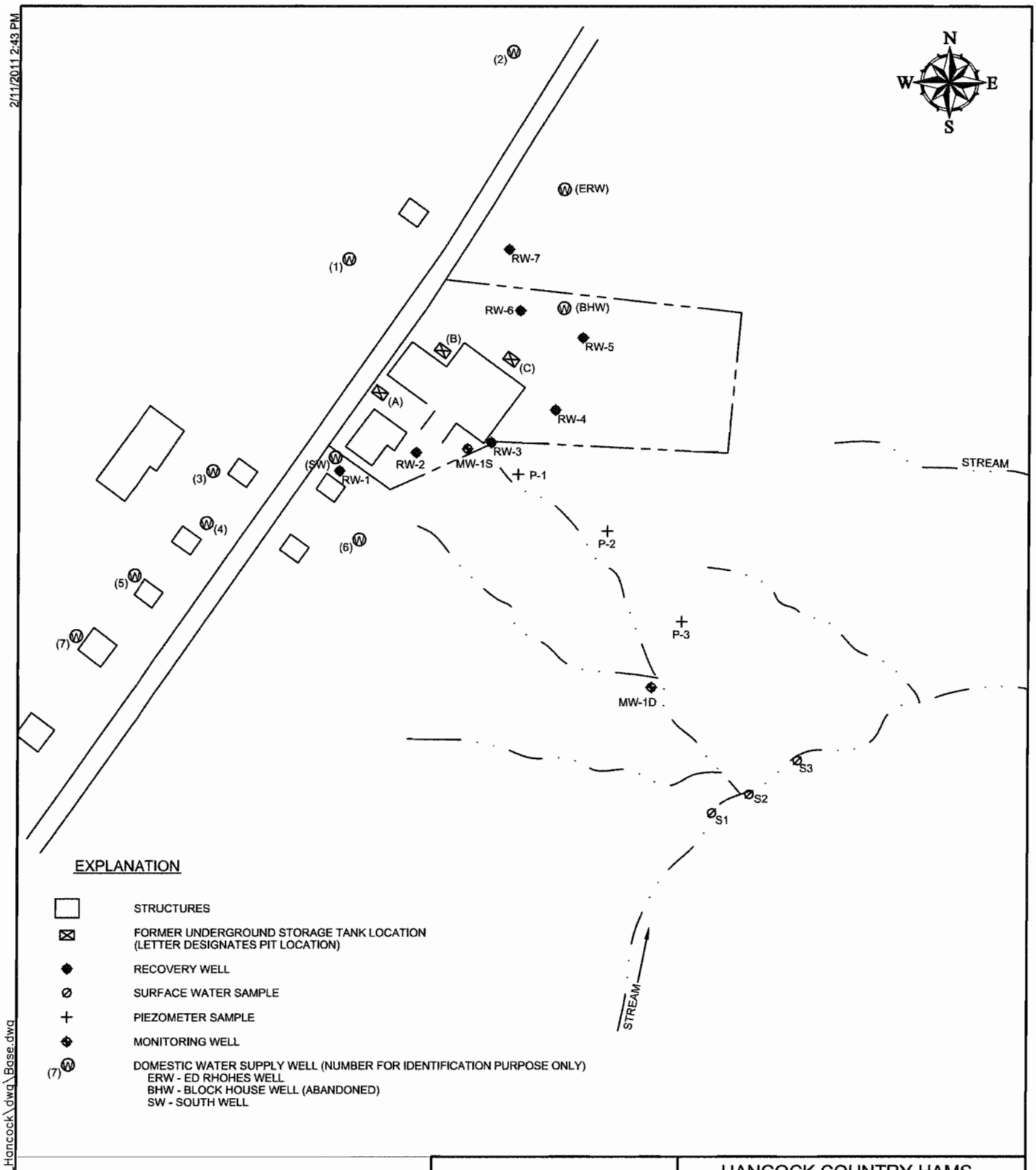
EXPLANATION

▲ WATER SUPPLY WELL

NOTE: WATER SUPPLY WELL LOCATIONS ARE APPROXIMATE

FIGURE FROM RANDOLPH COUNTY, NORTH CAROLINA 1998 PROPERTY MAP SHEETS 7793 AND 7794

Environmental Alliance, Inc. 10993 South Richardson Road, Suite 17 Ashland, Virginia 23005	SCALE: 1" = 400'	DATE: 1/15/09	APPROVED BY: JSE	SOURCE: BPA ENVIRONMENTAL & ENGINEERING, INC. MARCH 23, 1998 REPORT
	HANCOCK COUNTRY HAMS 3484 NC HIGHWAY 22 FRANKLINVILLE, NORTH CAROLINA			
	WATER SUPPLY WELLS WITHIN 1500 FEET OF THE SITE			FIGURE 3



EXPLANATION

- STRUCTURES
- FORMER UNDERGROUND STORAGE TANK LOCATION (LETTER DESIGNATES PIT LOCATION)
- RECOVERY WELL
- SURFACE WATER SAMPLE
- PIEZOMETER SAMPLE
- MONITORING WELL
- (7) DOMESTIC WATER SUPPLY WELL (NUMBER FOR IDENTIFICATION PURPOSE ONLY)
  - ERW - ED RHOHES WELL
  - BHW - BLOCK HOUSE WELL (ABANDONED)
  - SW - SOUTH WELL

0 300 600 Feet

Source: Trigon Engineering, Inc., 2008

Environmental Alliance, Inc.
10993 South Richardson Road, Suite 17,
Ashland, VA 23005
Phone: (804) 752-3558 - Fax: (804) 752-3559

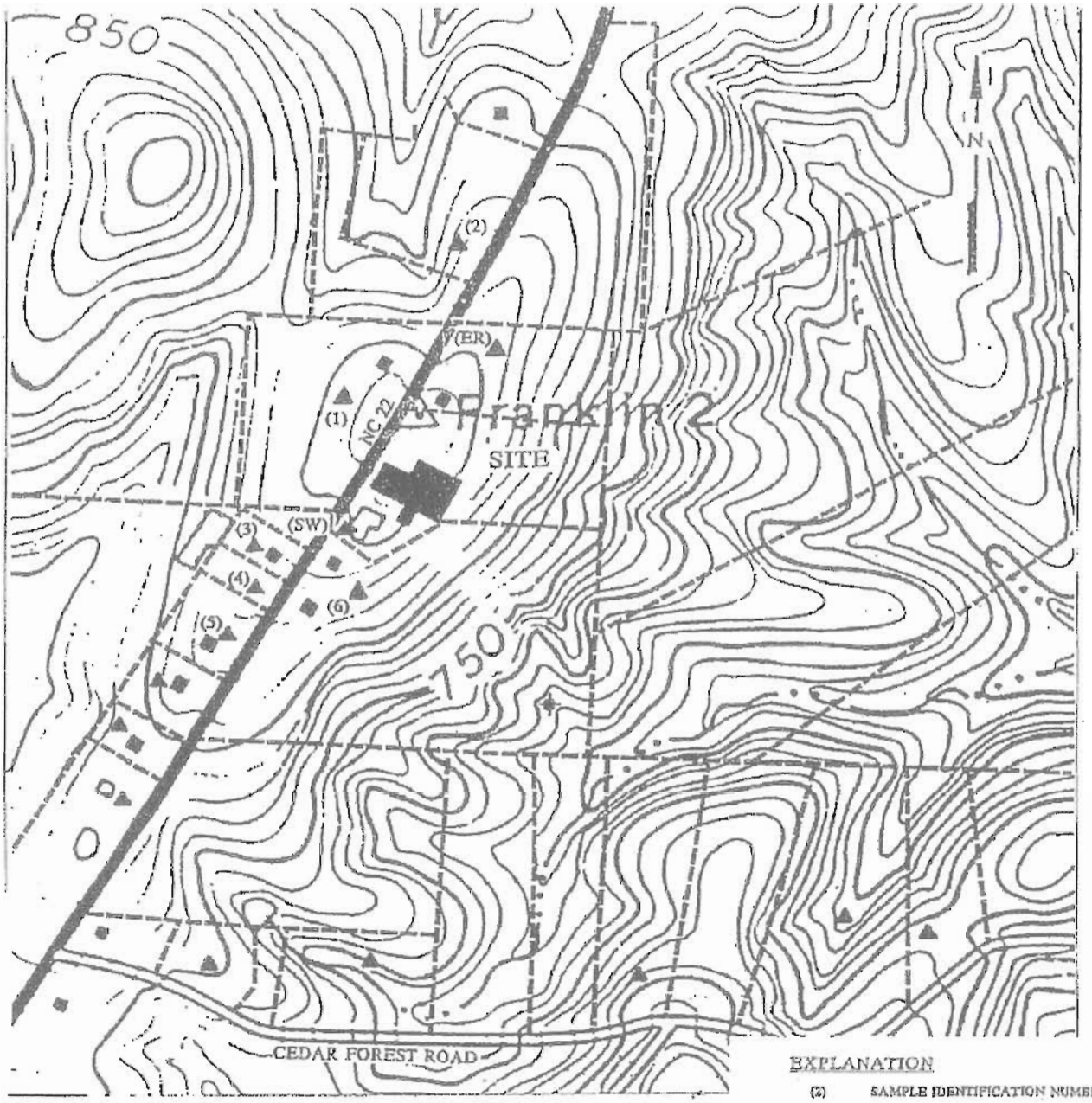
HANCOCK COUNTRY HAMS
FRANKLINVILLE, NORT CAROLINA

SITE MAP

DESIGNED BY:	DRAWN BY:	UPDATED BY:	FIGURE NO:
—	AGG	—	2
APPROVED BY:	PROJECT NO.	DATE:	
JSE	2719	2/11/2011	

2/11/2011 2:43 PM

V:\Projects\2719 Smithfield_Hancock\dwg\Base.dwg



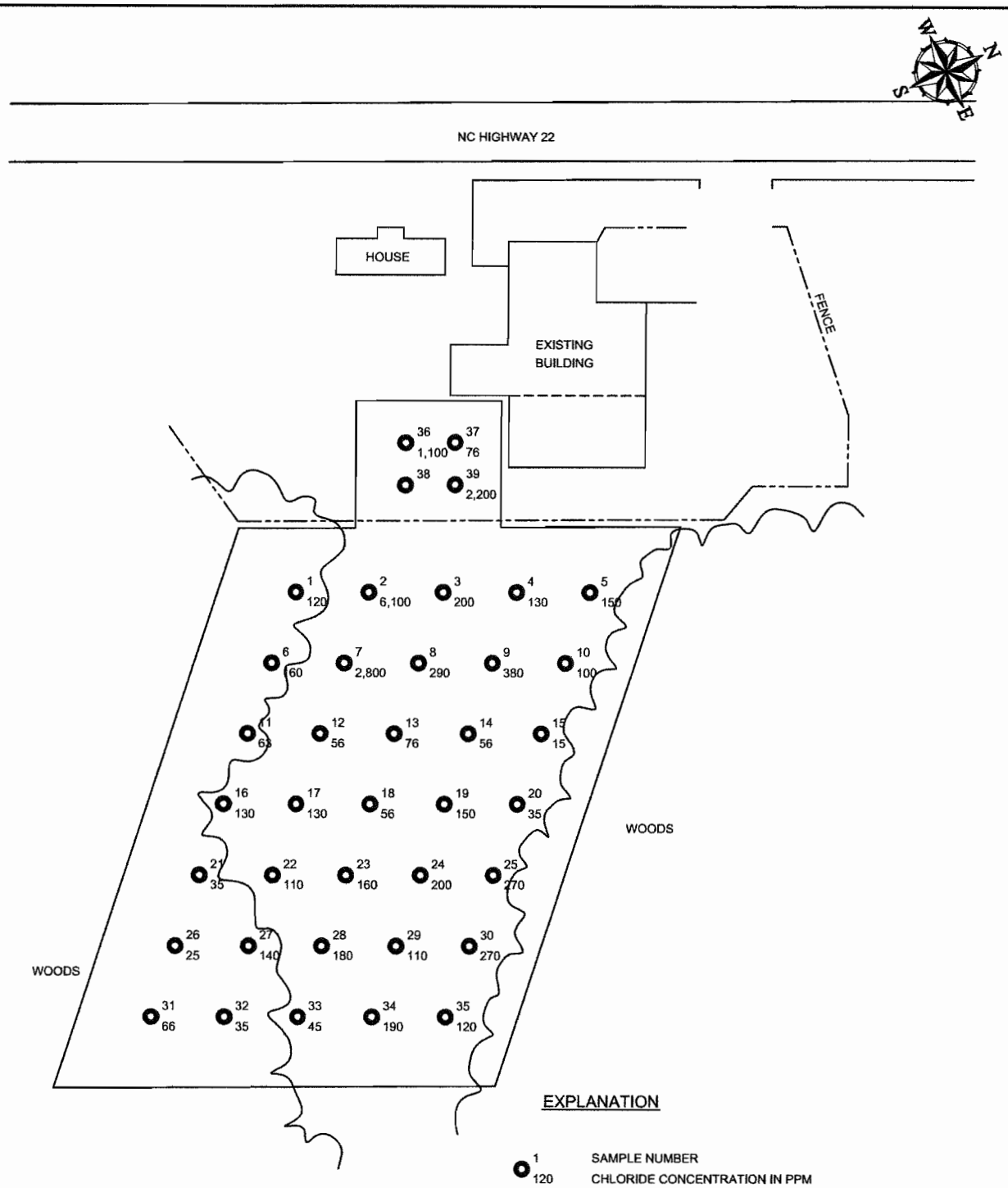
SCALE: 1" = 500	DATE: 1/15/09	APPROVED BY: JSE	SOURCE: 1974 USGS TOPOGRAPHIC MAP, GRAYS CHAPEL QUADRANGLE

HANCOCK COUNTRY HAMS
3484 NC HIGHWAY 22
FRANKLINVILLE, NORTH CAROLINA

Environmental Alliance, Inc.
10993 South Richardson Road, Suite 17
Ashland, Virginia 23005

Topographic Relationship of Water Well to the Site

FIGURE 4



0 100 200 Feet

Source: Trigon Engineering, Inc., 2008

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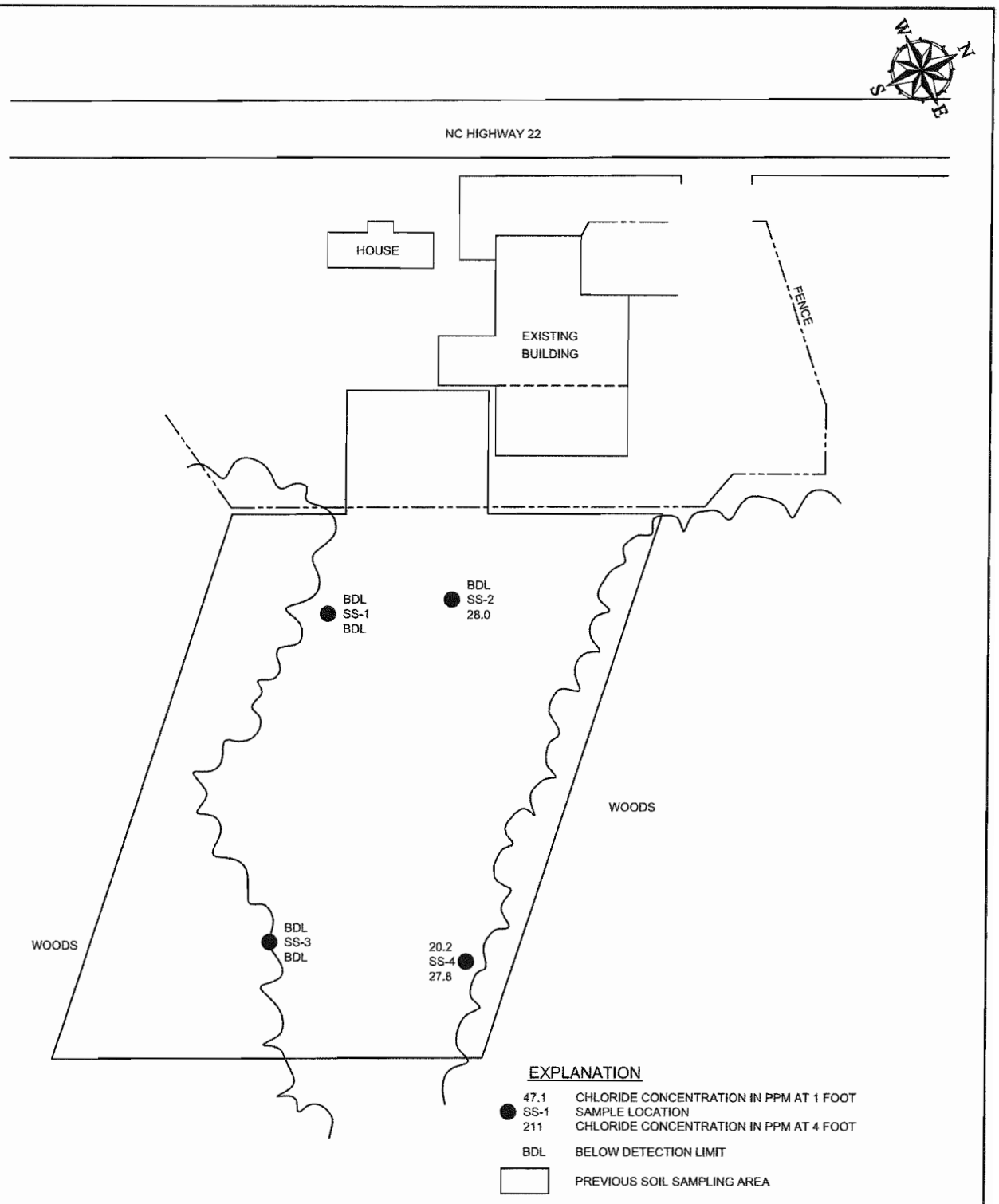
HANCOCK COUNTRY HAMS
FRANKLINVILLE, NORT CAROLINA

SOIL CHLORIDE CONCENTRATION - 1990

DESIGNED BY:	DRAWN BY:	UPDATED BY:	FIGURE NO:
---	AGG	---	5
APPROVED BY:	PROJECT NO.	DATE:	
JSE	2719	2/11/2011	



0 100 200 Feet

Source: Trigon Engineering, Inc., 2008

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Ashland, VA 23005
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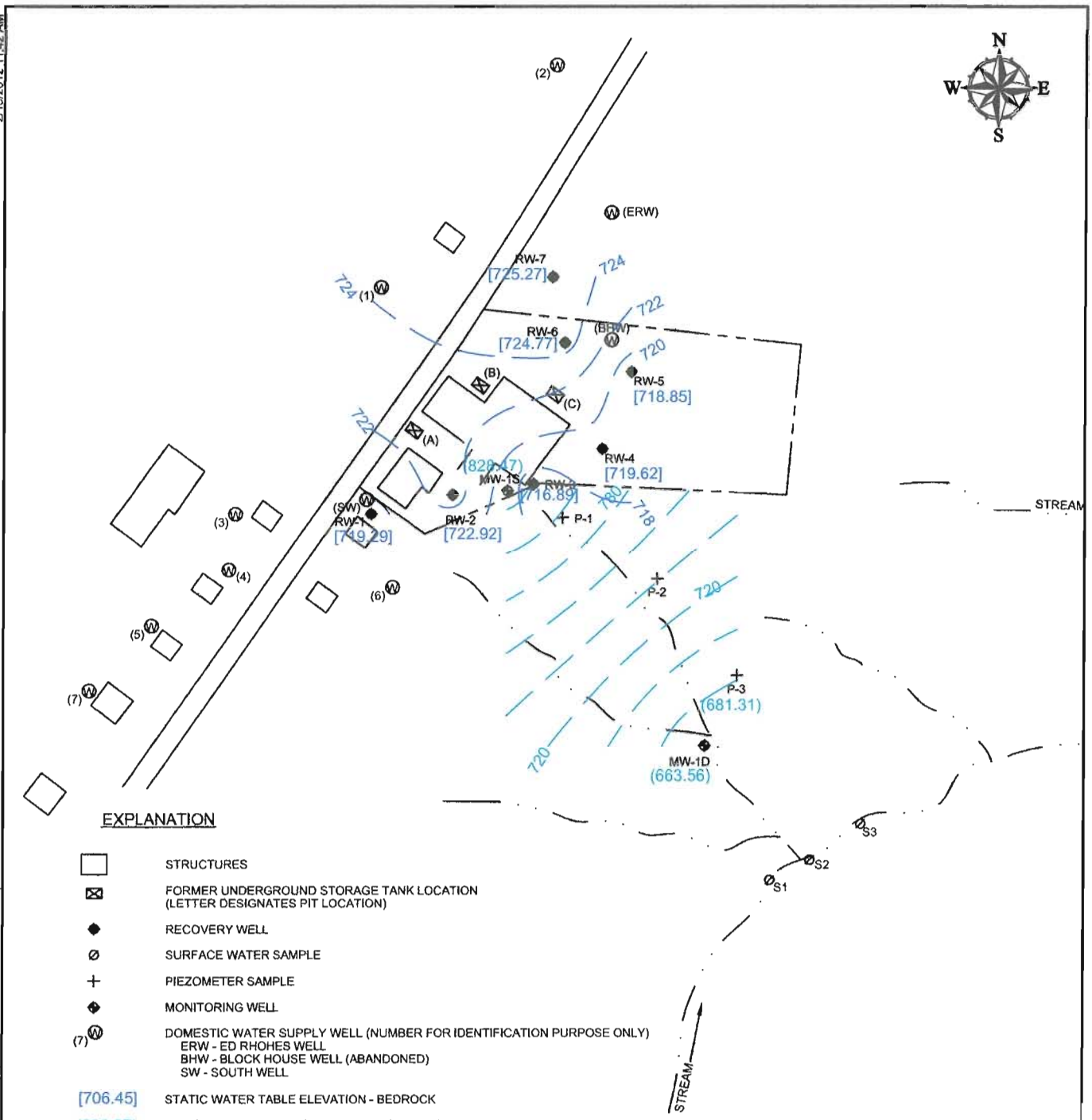
HANCOCK COUNTRY HAMS
FRANKLINVILLE, NORTH CAROLINA

SOIL CHLORIDE CONCENTRATION - 2012

DESIGNED BY:	DRAWN BY:	UPDATED BY:	FIGURE NO:
JSE	SKJ	MRR	6
APPROVED BY:	PROJECT NO.	DATE:	
JSE	2719	2/10/2012	

2/10/2012 9:43 AM

V:\Projects\2719 Smithfield_Hancock\dwg\12-January\Soil_Chloride_0112.dwg



EXPLANATION

- STRUCTURES
- FORMER UNDERGROUND STORAGE TANK LOCATION (LETTER DESIGNATES PIT LOCATION)
- RECOVERY WELL
- Ø SURFACE WATER SAMPLE
- \+ PIEZOMETER SAMPLE
- MONITORING WELL
- (7)Ⓦ DOMESTIC WATER SUPPLY WELL (NUMBER FOR IDENTIFICATION PURPOSE ONLY)
  ERW - ED RHOHES WELL
  BHW - BLOCK HOUSE WELL (ABANDONED)
  SW - SOUTH WELL
- [706.45] STATIC WATER TABLE ELEVATION - BEDROCK
- (663.87) STATIC WATER TABLE ELEVATION - RESIDUUM
- PIEZOMETRIC SURFACE SHALLOW BEDROCK AQUIFER
- PIEZOMETRIC SURFACE SHALLOW REGOLITH AQUIFER

0 300 600 Feet

Source: Trigon Engineering, Inc., 2008

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Phone: (804) 752-3558 - Fax: (804) 752-3559

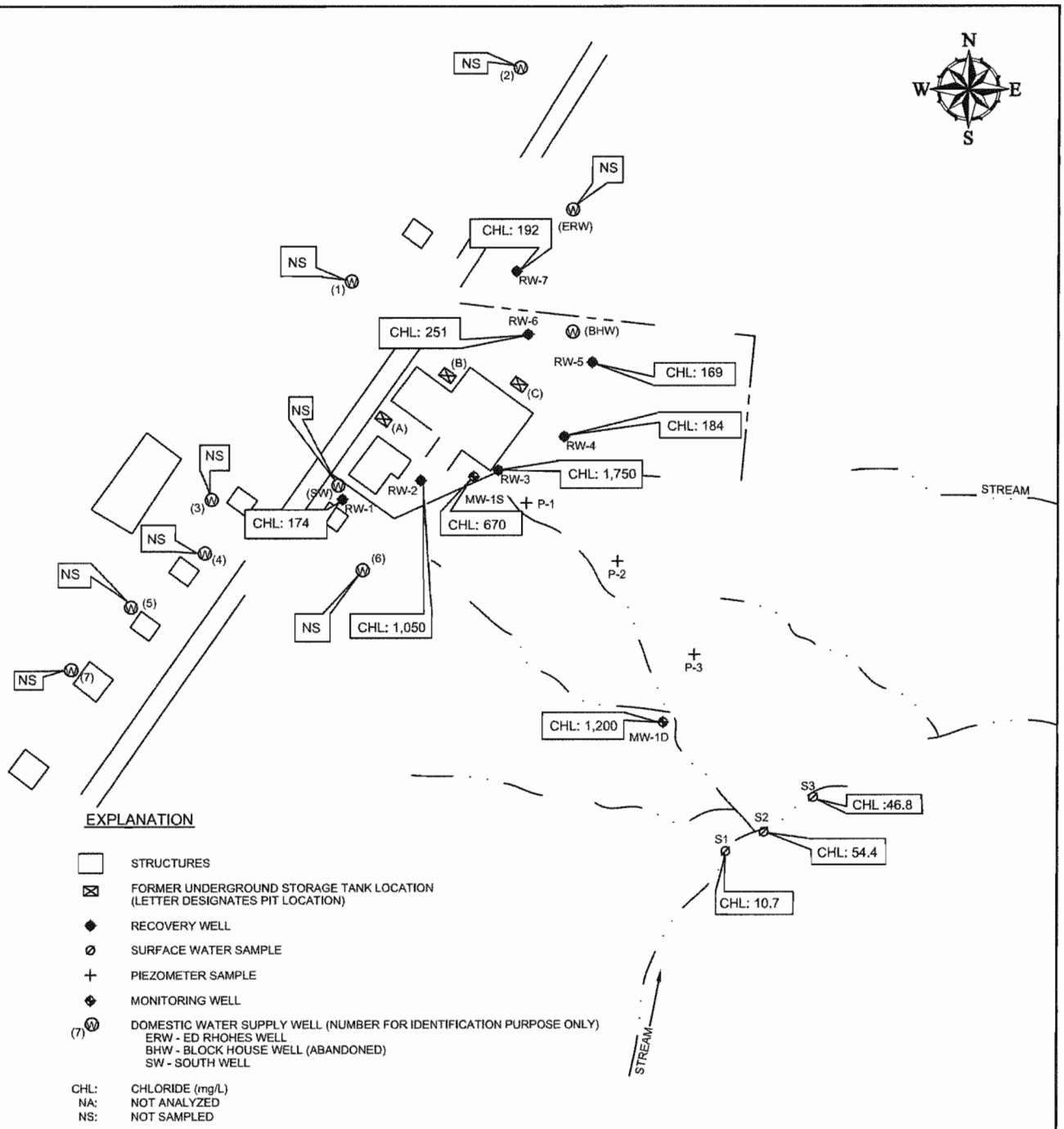
HANCOCK COUNTRY HAMS
FRANKLINVILLE, NORTH CAROLINA

GROUNDWATER FLOW MAP
JANUARY 24, 2012

DESIGNED BY:	DRAWN BY:	UPDATED BY:	FIGURE NO:
JSE	SKJ	—	7
APPROVED BY:	PROJECT NO.	DATE:	
	2719	2/13/2012	

2/13/2012 11:42 AM

V:\Projects\2719 Smithfield_Hancock\dwg\12-January\2719-GWFlow-012412.dwg



0 300 600 Feet

Source: Trigon Engineering, Inc., 2008

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Ashland, VA 23005
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HANCOCK COUNTRY HAMS
FRANKLINVILLE, NORTH CAROLINA

GROUNDWATER ANALYTICAL DATA
JANUARY 2012

DESIGNED BY:	DRAWN BY:	UPDATED BY:	FIGURE NO:
JSE	SKJ	MRR	8
APPROVED BY:	PROJECT NO.	DATE:	
JSE	2719	2/10/12	

APPENDIX A
LABORATORY RESULTS

REIC

Improving the environment, one client at a time...

225 Industrial Park Drive
Beaver, WV 25813
TEL: 304.255.2500
FAX: 304.255.2572

3029-C Peters Creek Road
Roanoke, VA 24019
TEL: 540.777.1276
FAX: 540.400.8508

101 17th Street
Ashland, KY 41101
TEL: 606.393.5027

1557 Commerce Road, Suite 201
Verona, VA 24482
TEL: 540.248.0183

February 08, 2012

Mr. Jason Early, P.G.
ENVIRONMENTAL ALLIANCE INC
10993 S RICHARDSON RD SUITE 17
ASHLAND VA 23005

TEL: (804) 752-3558
FAX (804) 752-3559

RE: 2719

Order No.: 1202028

Dear Mr. Jason Early, P.G.:

REI Consultants, Inc. received 20 sample(s) on 1/31/2012 for the analyses presented in the following report.

Please note two changes you may see on your report.

- Results for "Dissolved" parameters will be shown under a separate sample ID, rather than as a separate analysis under the same sample ID. The sample ID for "Dissolved" parameters will include "Field Filtered" or "Lab Filtered", as appropriate.
- Metals results will no longer be identified as "Total" or "Total Recoverable". The methods have not been changed, only their appearance on the report.

If you have any questions regarding these results, please do not hesitate to call.

Sincerely,

Scott Gross
Project Manager

[redacted]

[redacted] ACCREDITED IN ACCORDANCE WITH nelac

REIC

Improving the environment, one client at a time...

225 Industrial Park Drive
Beaver, WV 25813
TEL: 304.255.2500
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Roanoke, VA 24019
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101 17th Street
Ashland, KY 41101
TEL: 606.393.5027

1557 Commerce Road, Suite 201
Verona, VA 24482
TEL: 540.248.0183

Report Narrative

Project Manager:: **Scott Gross**

WO#: **1202028**
Date: **2/8/2012**

CLIENT: ENVIRONMENTAL ALLIANCE INC
Project: 2719

The analytical results presented in this report relate only to the samples documented herein. All analyses were performed using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. Any deviation from compliance or method modification is explained below and/or identified within the body of this report by a qualifier footnote which is defined at the bottom of each page.

All sample results are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as Total Trihalomethanes (TTHM) and Total Haloacetic Acids (HAA5), may vary slightly from the sum of the individual parameter results. This apparent anomaly is caused by rounding individual results and summations at reporting, as required by EPA.

Following standard laboratory protocol, sample preservation, such as pH, is verified at time of extraction or analysis based on client requested parameters. Improper preservation is noted on the analytical bench sheet, extraction log, or preservation log and client is notified by close of following business day. All results are reported using preservation compliant samples unless otherwise noted in the analytical report.

The test results in this report meet all NELAP requirements for parameters for which accreditations are required or available. Any exceptions are noted in this report. This report may not be reproduced, except in full, without the written approval of REIC.

In compliance with federal guidelines and standard operating procedures, all reports, including raw data and supporting quality control, will be disposed of after five years unless otherwise arranged by the client via written notification or contract requirement.

If you have any questions please contact the project manager whose name is listed above.

Beaver, WV: WVDHHR 00412CM, WVDEP 060, VADCLS 00281, KYDEP 90039, TNDEQ TN02926, NCDWQ 466, PADEP 68-00839, FLDOH (NELAC) E87958, VADCLS (VELAP) 460148
Bioassay (Beaver, WV) WVDEP 060, FLDOH (NELAC) E871055, VADCLS (VELAP) 460149
Roanoke, VA: VACDLS (VELAP) 460150
Verona, VA: VADCLS (VELAP) 460157
Ashland, KY: KYDEP 00094

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-01A
Client Sample ID:	SS1010125120710	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 7:10:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	ND	mg/Kg		20.0	NA		02/01/12 3:31 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	27.6	wt%		0.01	NA		02/01/12 9:45 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-02A
Client Sample ID:	SS1040125120722	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 7:22:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	ND	mg/Kg		20.0	NA		02/01/12 3:50 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	24.4	wt%		0.01	NA		02/01/12 9:45 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-03A
Client Sample ID:	SS2010125120750	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 7:50:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	ND	mg/Kg		20.0	NA		02/01/12 4:09 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	25.1	wt%		0.01	NA		02/01/12 9:45 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-04A
Client Sample ID:	SS2040125120810	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 8:10:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	28.0	mg/Kg		20.0	NA		02/01/12 5:44 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	24.8	wt%		0.01	NA		02/01/12 9:45 AM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-05A
Client Sample ID:	SS3010125120825	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 8:25:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	ND	mg/Kg		20.0	NA		02/01/12 6:03 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	34.2	wt%		0.01	NA		02/01/12 9:45 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-06A
Client Sample ID:	SS3040125120840	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 8:40:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	ND	mg/Kg		20.0	NA		02/01/12 6:22 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	19.5	wt%		0.01	NA		02/01/12 9:45 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-07A
Client Sample ID:	SS4010125120904	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 9:04:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	20.2	mg/Kg		20.0	NA		02/01/12 6:40 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	48.9	wt%		0.01	NA		02/01/12 9:45 AM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-08A
Client Sample ID:	SS4040125120920	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 9:20:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	SOLID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY IC, WATER SOLUBLE			**SW9056**			Analyst: **CF**	
Chloride	27.8	mg/Kg		20.0	NA		02/01/12 6:59 PM
PERCENT MOISTURE			**SM2540 G**			Analyst: **SF**	
Percent Moisture	19.5	wt%		0.01	NA		02/01/12 9:45 AM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-09A
Client Sample ID:	RW10124120900	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/24/2012 9:00:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	174	mg/L		10.0	NA		02/01/12 7:18 PM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-10A
Client Sample ID:	RW20125121040	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 10:40:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	1,050	mg/L		50.0	NA		02/01/12 7:37 PM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-11A
Client Sample ID:	RW30124121004	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/24/2012 10:04:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	1,750	mg/L		50.0	NA		02/01/12 7:56 PM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-12A
Client Sample ID:	RW40124121115	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/24/2012 11:15:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	184	mg/L		10.0	NA		02/01/12 9:49 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-13A
Client Sample ID:	RW50124121225	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/24/2012 12:25:00 PM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	169	mg/L		10.0	NA		02/01/12 10:08 PM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-14A
Client Sample ID:	RW60124121402	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/24/2012 2:02:00 PM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	251	mg/L		10.0	NA		02/02/12 8:09 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-15A
Client Sample ID:	RW70124121510	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/24/2012 3:10:00 PM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	192	mg/L		10.0	NA		02/02/12 8:28 AM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-16A
Client Sample ID:	MW1S0124121600	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/24/2012 4:00:00 PM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	670	mg/L		50.0	NA		02/02/12 8:47 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-17A
Client Sample ID:	MW1D01251120	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 11:20:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	GROUNDWATER

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	1,200	mg/L		50.0	NA		02/02/12 9:06 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-18A
Client Sample ID:	SS10125121130	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 11:30:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	LIQUID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	10.7	mg/L		1.00	NA		02/02/12 9:25 AM

Key:	MCL	Maximum Contaminant Level	**Qualifiers:**	B	Analyte detected in the associated Method Blank
	MDL	Minimum Detection Limit		E	Estimated Value above quantitation range
	NA	Not Applicable		H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the PQL or MDL		S	Spike/Surrogate Recovery exceeds REIC control limits
	PQL	Practical Quantitation Limit		*	Value exceeds MCL or Regulatory Limits
	TIC	Tentatively Identified Compound, Estimated Concentration			

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-19A
Client Sample ID:	SS20125121135	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 11:35:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	LIQUID

Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	54.4	mg/L		2.00	NA		02/02/12 9:44 AM

Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

REI Consultants, Inc. Analytical Results

Date: *09-Feb-12*

CLIENT:	ENVIRONMENTAL ALLIANCE INC	**WorkOrder**	1202028 **Lab ID** 1202028-20A
Client Sample ID:	SS30125121138	**DateReceived**	1/31/2012
Project:	2719	**Collection Date:**	1/25/2012 11:38:00 AM
Site ID:	HANCOCK NORTH CAROLINA	**Matrix:**	LIQUID

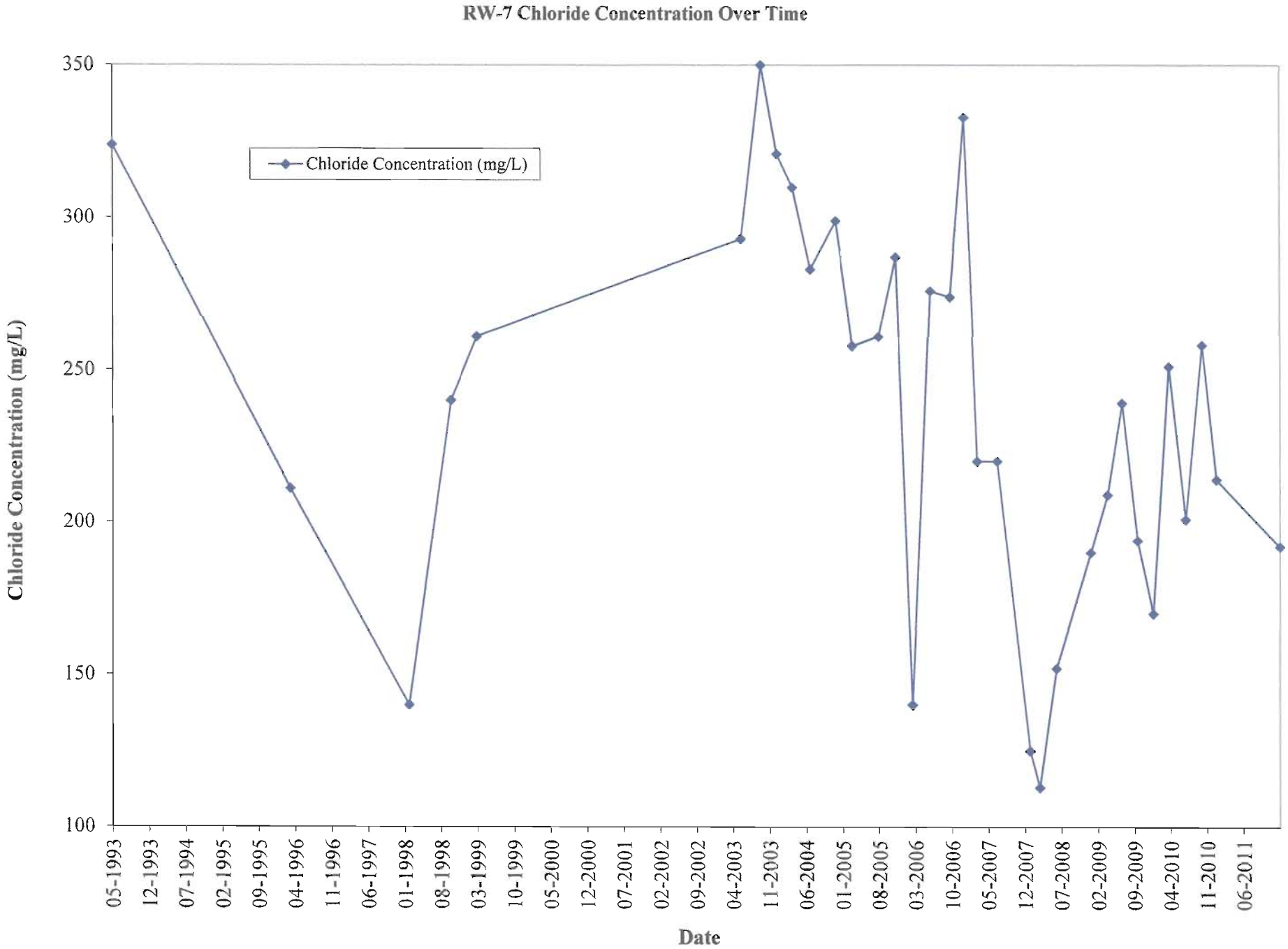
Analyses	Result	Units	Qual	PQL	MCL	Prep Date	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CF**	
Chloride	46.8	mg/L		2.00	NA		02/02/12 9:14 AM

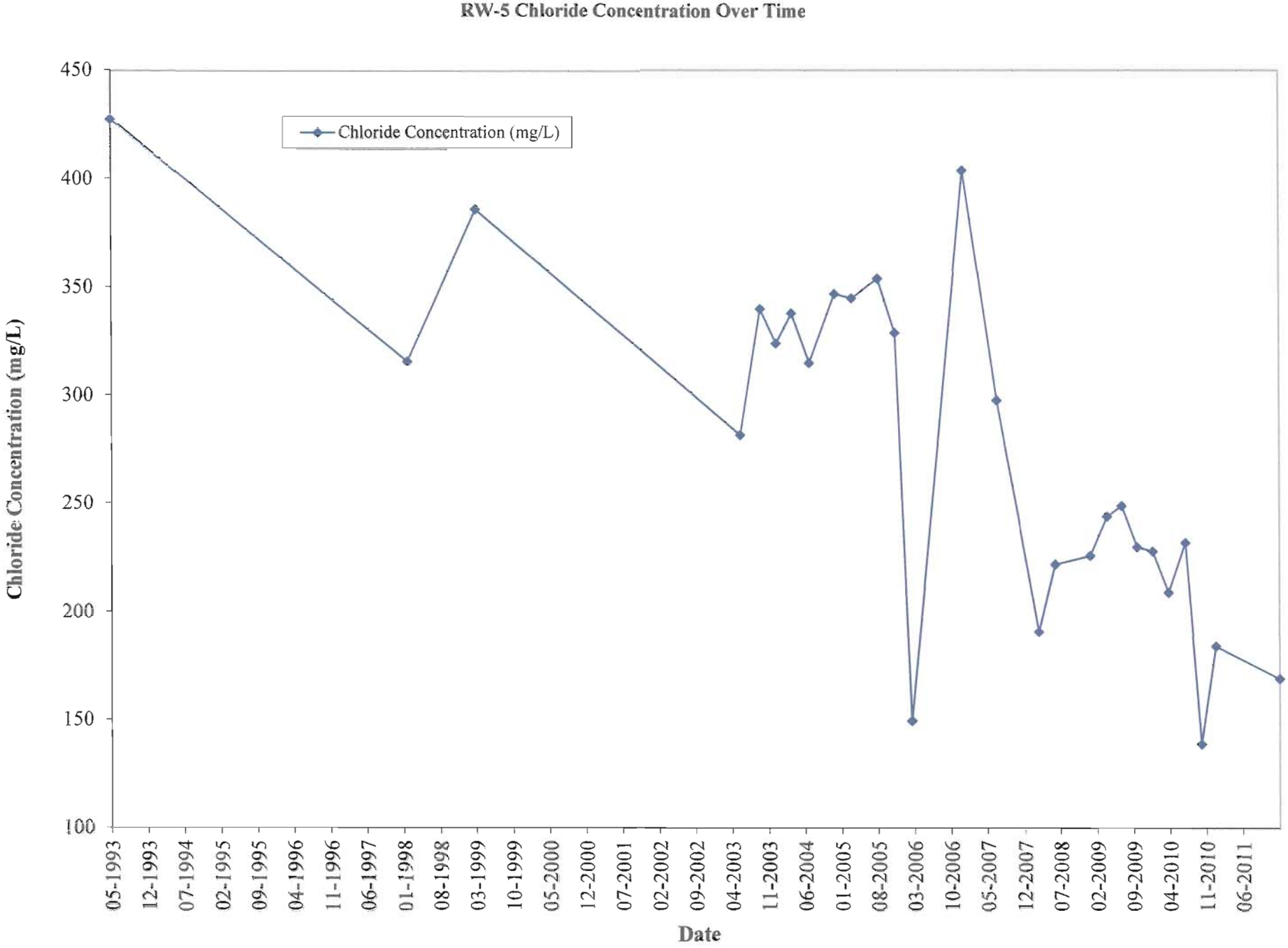
Key:
- MCL Maximum Contaminant Level
- MDL Minimum Detection Limit
- NA Not Applicable
- ND Not Detected at the PQL or MDL
- PQL Practical Quantitation Limit
- TIC Tentatively Identified Compound, Estimated Concentration

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Estimated Value above quantitation range
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate Recovery exceeds REIC control limits
- * Value exceeds MCL or Regulatory Limits

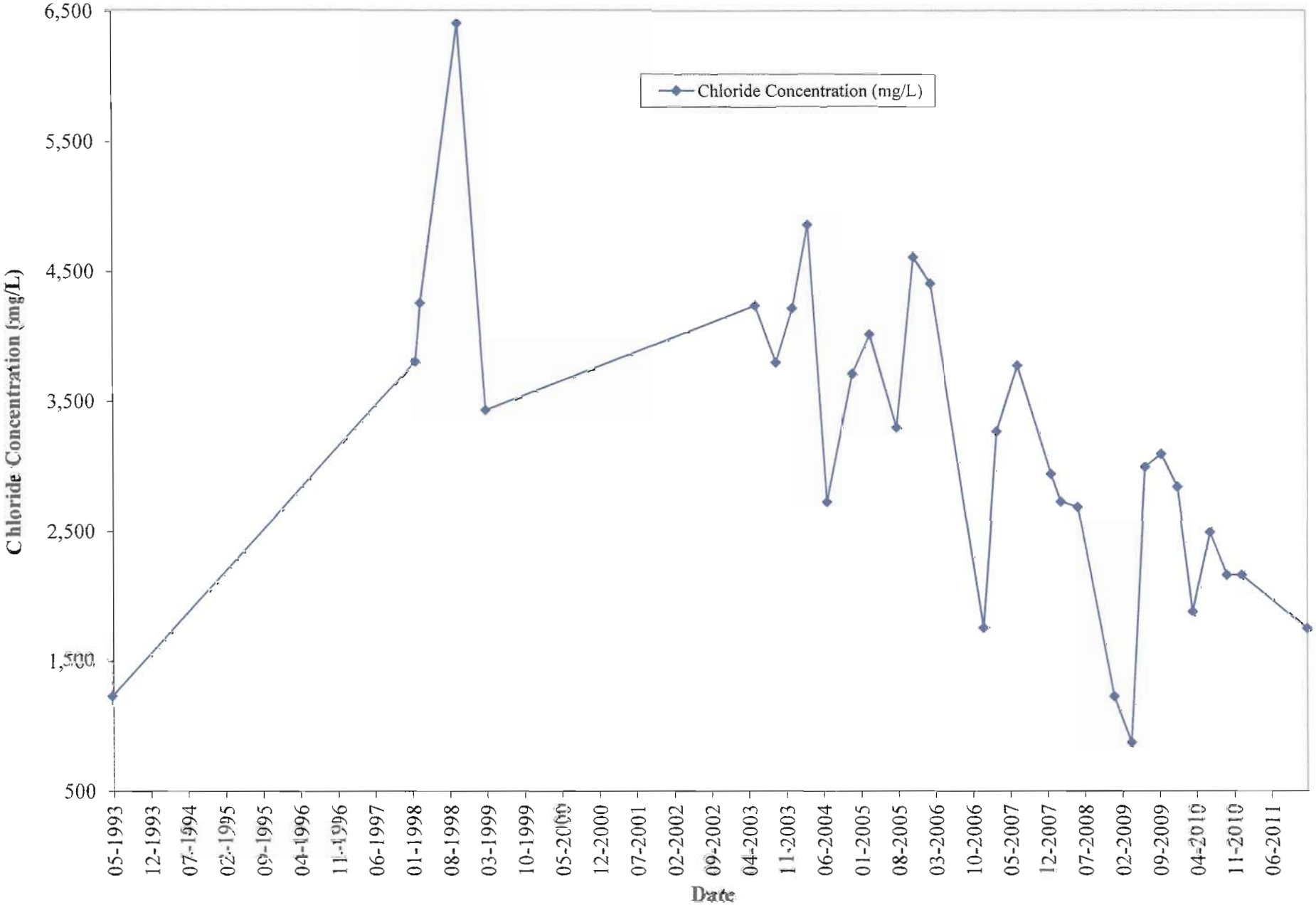
APPENDIX B

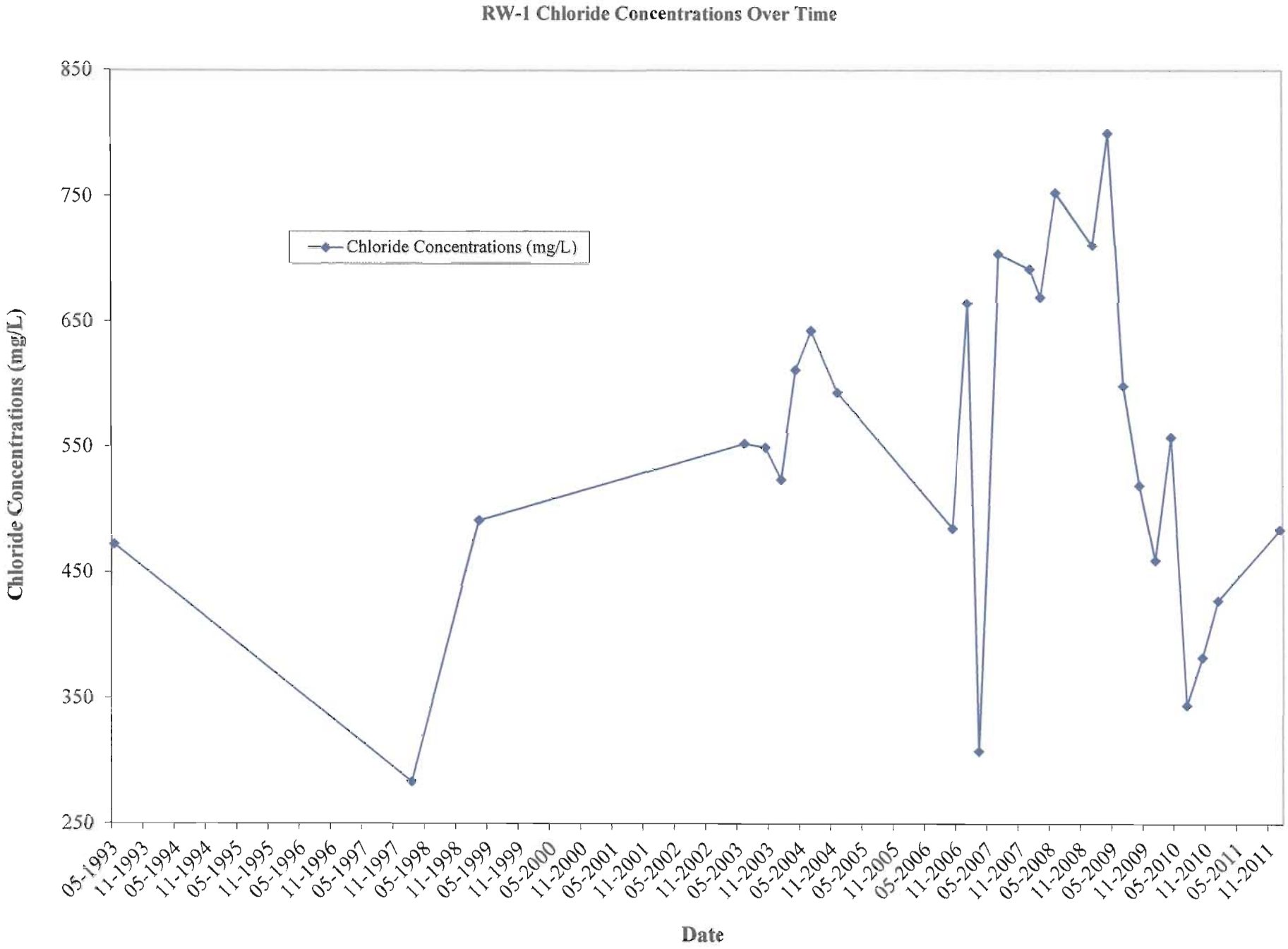
CHLORIDE TIME SERIES GRAPHS


RW-7 Chloride Concentration Over Time
Chloride Concentration (mg/L)
Chloride Concentration (mg/L)
350
300
250
200
150
100
05-1993
12-1993
07-1994
02-1995
09-1995
04-1996
11-1996
06-1997
01-1998
08-1998
03-1999
10-1999
05-2000
12-2000
07-2001
02-2002
09-2002
04-2003
11-2003
06-2004
01-2005
08-2005
03-2006
10-2006
05-2007
12-2007
07-2008
02-2009
09-2009
04-2010
11-2010
06-2011
Date


RW-5 Chloride Concentration Over Time
Chloride Concentration (mg/L)
Chloride Concentration (mg/L)
450
400
350
300
250
200
150
100
05-1993
12-1993
07-1994
02-1995
09-1995
04-1996
11-1996
06-1997
01-1998
08-1998
03-1999
10-1999
05-2000
12-2000
07-2001
02-2002
09-2002
04-2003
11-2003
06-2004
01-2005
08-2005
03-2006
10-2006
05-2007
12-2007
07-2008
02-2009
09-2009
04-2010
11-2010
06-2011
Date

RW-3 Chloride Concentration Over Time




RW-1 Chloride Concentrations Over Time
Chloride Concentrations (mg/L)
850
750
650
550
450
350
250
Chloride Concentrations (mg/L)
05-1993
11-1993
05-1994
11-1994
05-1995
11-1995
05-1996
11-1996
05-1997
11-1997
05-1998
11-1998
05-1999
11-1999
05-2000
11-2000
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11-2001
05-2002
11-2002
05-2003
11-2003
05-2004
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05-2005
11-2005
05-2006
11-2006
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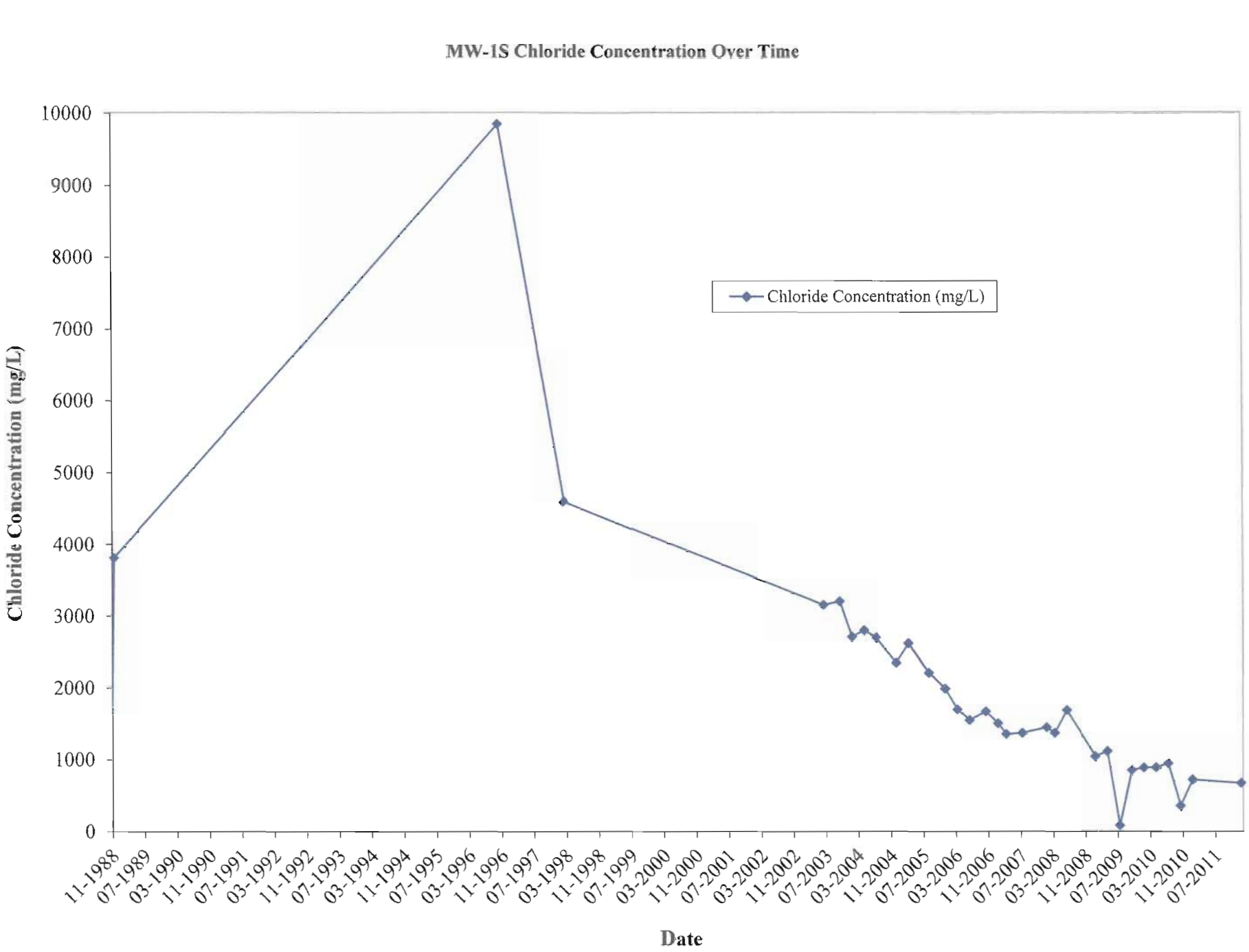
11-2007
05-2008
11-2008
05-2009
11-2009
05-2010
11-2010
05-2011
11-2011
Date


MW-1S Chloride Concentration Over Time
Chloride Concentration (mg/L)
Chloride Concentration (mg/L)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
11-1988
07-1989
03-1990
11-1990
07-1991
03-1992
11-1992
07-1993
03-1994
11-1994
07-1995
03-1996
11-1996
07-1997
03-1998
11-1998
07-1999
03-2000
11-2000
07-2001
03-2002
11-2002
07-2003
03-2004
11-2004
07-2005
03-2006
11-2006
07-2007
03-2008
11-2008
07-2009
03-2010
11-2010
07-2011
Date