IMMEDIATE RESPONSE ACTION STATUS REPORT #5

FORMER AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MA
RTN 4-0601

Prepared for:

AVX Corporation
801 17th Avenue South
Myrtle Beach, SC 29578

August 2015

AECOM
1155 Elm Street, Suite 401
Manchester, New Hampshire 03101

PN: 60420033

Table of Contents

LIST OF ACRONYMS & ABBREVIATIONS

ug/l	micrograms per liter
ACO	Administrative Consent Order (MassDEP-AVX Agreement)
AVX	AVX Corporation
City	City of New Bedford
CSA	Comprehensive Site Assessment
DNAPL	Dense Non-Aqueous Phase Liquid
IRA	Immediate Response Action
LSP	Licensed Site Professional
mg/kg	Milligrams per kilogram
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
MHW	Mean High Water
ml	milliliter
MM	Maintenance and Monitoring
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene or Perchloroethene
PPE	Personal Protective Equipment
RTN	Release Tracking Number
URS	URS Corporation
UTM	Universal Transverse Mercator

1.0 INTRODUCTION

On behalf of AVX Corporation (AVX), AECOM has prepared this *Immediate Response Action (IRA) Status Report* (Status Report) for the Disposal Site known as the former Aerovox Facility (Site) located at 740 Belleville Avenue in New Bedford, Massachusetts. On April 10, 2014, URS Corporation (URS) notified the Massachusetts Department of Environmental Protection (MassDEP) of the presence of dense non-aqueous phase liquid (DNAPL) at a thickness of greater than 0.5-inches per 310 CMR 40.0313(1). AECOM (formerly URS) submitted an IRA Plan on June 10, 2014 and the first IRA Status Report on August 6, 2014. In its letter of September 12, 2014, MassDEP requested an expedited (interim) IRA Status Report and established an interim deadline of October 8, 2014 for submittal of IRA Status Report #2. AECOM submitted interim IRA Status Report #2 as requested on October 8, 2014 and submitted IRA Status Report #3 on February 4, 2015. In its letter of May 8, 2015, MassDEP again requested an expedited (interim) IRA Status Report and established an interim deadline of June 15, 2015 for submittal of this interim IRA Status Report #4. This is IRA Status Report #5.

MassDEP orally approved an IRA consisting of assessment actions pursuant to the MCP, 310 CMR 40.0414(1), including assessment of the extent and recoverability of DNAPL in the vicinity of MW-15D and removal actions pursuant to the MCP 310 CMR 40.0414(2) including utilizing low-energy methods (bailing and pumping) to remove DNAPL from MW-15D and from any newly installed monitoring wells that exhibit DNAPL thickness greater than ½ inch. The IRA condition is being addressed under the existing Release Tracking Number (RTN) for the Site, 4-0601.

The site assessment and remediation under Massachusetts General Law Chapter 21E and the MCP is subject to the Administrative Consent Order and Notice of Responsibility (ACO) between AVX and the MassDEP and the Massachusetts Office of the Attorney General, effective as of June 3, 2010 (ACO-SE-09-3P-016).

Figure 1, Site Location Plan, depicts the Site location with respect to the surrounding topography and features and **Figure 2**, Site Plan, presents the historic investigation locations across the Site. The coordinates of the Site (referenced to the corner of Belleville Avenue and Hadley Street) are latitude 41° 40’ 25.12” N and longitude 70° 55’ 13.84” W (UTM coordinates 340135.53m E and 4615326.34m N). **Figure 3** provides a detail of the IRA area.

The Site as defined by the ACO includes any place or area where a release of oil and/or hazardous material at or from the property which occurred before the ACO Effective Date (June 3, 2010) has come to be located, excepting those places or areas that are part of the New Bedford Harbor Superfund Site including land area, bank or water body located seaward of the sheet pile wall previously installed at the property or seaward of the mean high water (MHW) level at the property and running along the MHW level in a northward and southward direction from the property. Per this definition, the Disposal Site as currently delineated extends to the following locations:

- The existing Aerovox western property line along Belleville Avenue,
- The existing sheet pile wall (inclusive of the wall itself) running generally in a north-south orientation along the Acushnet River;
- North of the northern boundary of the property, onto the Precix property at 744 Belleville Avenue; and
- South of the southern boundary of the property, onto the Titleist property at 700 Belleville Avenue.

Phase II Comprehensive Site Assessment (CSA) activities are ongoing at the Site, and it is likely that, based on the results of those activities, the boundaries of the Site to the north and south will be modified from what is described above. Additional information and details regarding the Disposal Site history, a description of the release and potential receptors were provided in the Phase I and Tier Classification submittal and the IRA Plan, and are not repeated in this IRA Status Report.

2.0 RELEVANT CONTACTS (310 CMR 40.0424(a))

The property is owned by the City of New Bedford, Massachusetts (the City). Contact information for the City's representative is:

Ms. Michele Paul
Director of Environmental Stewardship
City of New Bedford
133 Williams Street, Room 304
New Bedford, MA 02740
Phone Number: 508-991-6188

The person assuming responsibility for conducting IRA activities is:

Mr. Evan Slavitt
AVX Corporation
801 17th Avenue South, P.O. Box 867
Myrtle Beach, SC 29578
Phone Number: 843-946-0714

The Licensed Site Professional (LSP) for the Site is:

Ms. Marilyn Wade, LSP No. 4513
AECOM
1155 Elm Street, Suite 401
Manchester, NH 03101
Phone Number: 603-606-4824

3.0 STATUS OF IMMEDIATE RESPONSE ACTIONS (310 CMR 40.0425(3)(a))

3.1 DNAPL GAUGING AND REMOVAL

Beginning on May 19, 2014, AECOM has conducted bi-weekly DNAPL recovery from monitoring well MW-15D. On September 29, 2014, DNAPL was identified in monitoring well MW-15B for the first time. Prior to this measurement, only a trace of DNAPL had been observed in this well (weighted string was intermittently stained, but not continuously at bottom of string). Since October 6, 2014, bi-weekly DNAPL recovery has been conducted at monitoring well MW-15B in addition to MW-15D. Gauging events have occurred on four occasions since the last event (6/3/15) discussed in IRA Status Report #4.

During each DNAPL recovery event, the thickness of DNAPL in the well is first measured using a weighted string. Once the measurement is recorded, dedicated polyethylene tubing is then deployed to the bottom of the well and the discharge end connected to a peristaltic pump. DNAPL that is located at the bottom of the well is then extracted using the peristaltic pump and discharged into a 5-gallon bucket. Pumping is continued until there is no longer any visible evidence of DNAPL being discharged from the tubing. The discharge consists of a mixture of groundwater and DNAPL extracted from the well. By carefully decanting the water collected into a separate container, the volume of the recovered DNAPL is then measured by decanting into a graduated beaker.

During the four recovery events that have occurred since June 3, 2015, the average thickness of DNAPL measured in MW-15D was 2.4 inches, with a minimum measured thickness of 0.01 inch (trace) and a maximum measured thickness of 4.5 inches. The total volume recovered from MW-15D during these nine events was approximately 97 milliliters (ml) (0.03 gallon). The total DNAPL recovered from MW-15D since initiation of recovery efforts in May 2014 is 2,758 ml (0.70 gallon).

The average thickness of DNAPL measured in MW-15B during this period was 1.9 inches, with a minimum measured thickness of 1 inch and a maximum measured thickness of 2.5 inches. The total volume recovered from MW-15B during these three events is approximately 75 milliliters (ml) (0.02 gallon). The total DNAPL recovered from MW-15B since initiation of recovery efforts in September 2014 is 1,180 ml (0.30 gallon).

Refer to **Table 1** for a tabulated summary of DNAPL recovery by event and cumulative volumes for MW-15D and MW-15B. Graphs of DNAPL thickness and recovery volume per event, and cumulative recovery to date are included in **Appendix A**.

The recovered water/DNAPL mixture is stored in a 5-gallon bucket with lid which is then placed in a 55-gallon drum. The drum is stored in a secure drum shed with secondary containment located on the Site.

To date, measurable DNAPL has not been observed in any other well installed at the Site.

3.2 ACTIVITIES SINCE LAST STATUS REPORT/NEW SITE INFORMATION (310 CMR 40.0425(B))

On May 28 through 29, 2015, groundwater samples were collected from the three shallow open borehole bedrock wells (MW-29B, MW-30B, and MW-31B) installed in April 2015, and four existing monitoring wells (MW-101B, MW-TITL01, MW-24B, and MW-21D). The analytical data for these samples is included in **Appendix B**. Of note is that the well installed with the objective of delineating the southern extent of the CVOC contamination contained a TCE concentration of 68 ug/L. Installation of another well on Titleist, further south of MW-29B, is pending.

The complete Hager-Richter well geophysical logging report for the three shallow bedrock wells and three deep bedrock wells (MW-32B, MW-33B, and MW-34B) was received during this reporting period and is included as **Appendix C**.

4.0 MANAGEMENT OF REMEDIATION WASTE (310 CMR 40.0425(3)(c))

DNAPL, contaminated soil, contaminated groundwater, and contaminated personal protective equipment (PPE) are being generated during IRA activities. The DNAPL generated from recovery activities is temporarily stored in a covered 5-gallon pail that is stored within a 55-gallon drum in the secure temporary drum storage unit (with integral secondary containment) at the Site. Solids (soil, sample/pump tubing, and PPE) generated as part of the IRA and other Phase II CSA investigations are stored in separate 55-gallon drums on the Site pending transportation and disposal. There have been no remediation waste shipments since the last shipments in May 2015, which were summarized in the June 15, 2015 Interim IRA Status Report.

5.0 OTHER NEW SITE INFORMATION OR DATA (310 CMR 0.0425(3)(d))

Pursuant to the Administrative Settlement Agreement and Order on Consent for Non-Time Critical Removal Action (AOC) between AVX and the EPA, effective June 3, 2010, a Monitoring and Maintenance (MM) Plan for the Aerovox Site was prepared by URS for AVX in fulfillment of Sections III.H.4. and III.I. of the Non-Time Critical Removal Action Scope of Work, Appendix B to the AOC. The MM Plan was also prepared in accordance with the Action Memorandum for the Site, issued by EPA on December 23, 2009, and the Toxic Substances Control Act Determination. The MM Plan describes who will be doing monitoring and maintenance for the cap and sheet pile wall, what monitoring and maintenance is required, when monitoring and maintenance will be performed, and in general terms how monitoring and maintenance will be conducted.

One of the requirements of the MM Plan is that the cap and containment barrier (sheet pile wall along the east end of the Property) be inspected each year in late spring to assess for winter damage, weed growth and potential for underlying soils to be exposed or to become exposed in the coming year. Documentation of this inspection is required to be submitted to MassDEP as part of the next regular 21E/MCP submittal. The Spring 2015 inspection occurred on June 5, 2015 with MassDEP, EPA, and AECOM in attendance. A copy of the inspection report is attached to this submittal as **Appendix D**.

6.0 LSP OPINION (310 CMR 40.0425(3)(e))

The IRA activities to date have been successful in removing a limited quantity of DNAPL and providing additional assessment of the extent of DNAPL in and around MW-15D and MW-15B and along the Aerovox shoreline. The IRA has been and will continue to be conducted in conformance with the IRA Plan submitted to MassDEP on June 9, 2014.

TABLE

Table 1
DNAPL Recovery Summary
Aerovox, 740 Belleville Avenue, New Bedford, MA
RTN 4-04601

MW-15D

	Date	Depth to Groundwater (ft)	Approximate DNAPL Thickness (inches)	Recovery Event Volume (ounces)	Recovery Event Volume (ml)	Cumulative Volume Removed (ml)	Recovery Event Volume (gal)	Cumulative Volume Removed (gal)	Tide Cycle At Measurement
Status Report #1	5/19/2014	NM	7	8 to 16	350	350	0.09	0.09	NR
	6/2/2014	5.03	4.5	8 to 16	350	700	0.09	0.18	NR
	6/16/2014	NM	4.5	5.5	160	860	0.04	0.23	NR
	6/30/2014	NM	6	5	150	1010	0.04	0.27	NR
	7/27/2014	4.49	3.5	3.4	100	1110	0.03	0.29	low tide
Status Report #2	8/18/2014	3.85	3	3.4	100	1210	0.03	0.32	3/4 of high
	9/22/2014	5.46	5	6.8	200	1410	0.05	0.37	3/4 of high; ebbing
	10/6/2014	5.48	3	1.4	40	1450	0.01	0.38	low tide
Status Report #3	10/22/2014	4.93	4	6.8	200	1650	0.05	0.44	low tide
	11/3/2014	5.74	4	0.0	1.25	1651	0.00	0.44	low tide
	11/17/2014	4.43	4	3.4	100	1751	0.03	0.46	Mid-tide; ebbing
	12/8/2014	2.76	4	5.1	150	1901	0.04	0.50	high tide
	12/23/2014	2.94	3.5	2.7	80	1981	0.02	0.52	high tide
	1/6/2015	6.35	3.5	2.5	75	2056	0.02	0.54	low tide
Status Report #4	1/19/2015	5.07	3	3.4	100	2156	0.03	0.57	low tide
	2/6/2015	NM	3	0.7	20	2176	0.01	0.57	not noted
	2/23/2015								
	3/9/2015	3.78	6	4.2	125	2301	0.03	0.61	high tide
	3/23/2015	3.13	5.5	5.1	150	2451	0.04	0.65	high tide
	4/13/2015	5.46	1	1.0	30	2481	0.01	0.66	3/4 of high tide; ebbing tide
	4/27/2015	3.05	2.5	1.7	50	2531	0.01	0.67	3/4 of high tide; ebbing tide
	5/11/2015	4.65	2.5	1.0	30	2561	0.01	0.68	3/4 of high tide; ebbing tide
	5/26/2015	4.91	4	1.7	50	2611	0.01	0.69	mid flow tide
	6/3/2015	4.99	2.5	1.7	50	2661	0.01	0.70	low tide
Status Report #5	6/16/2015	3.89	4.5	1.7	50	2711	0.01	0.72	3/4 high tide, ebbing tide
	6/29/2015	4.28	trace	0.1	2	2713	0.00	0.72	Mid-tide; ebbing
	7/16/2015	4.87	2.5	0.7	20	2733	0.01	0.72	low tide
	7/27/2015	4.78	2.5	0.8	25	2758	0.01	0.73	1/4 of low, flood tide

Notes:

Volume is estimated; includes DNAPL only - recovered water is not included in estimate
For the total volume recovered calculation, a value of 12 ounces was used for the first two recovery events.
The site could not be acessed on 2/23/2015 due to accumulation of ice and snow near the access gates.

Table 1
DNAPL Recovery Summary (Continued)
Aerovox, 740 Belleville Avenue, New Bedford, MA
RTN 4-04601

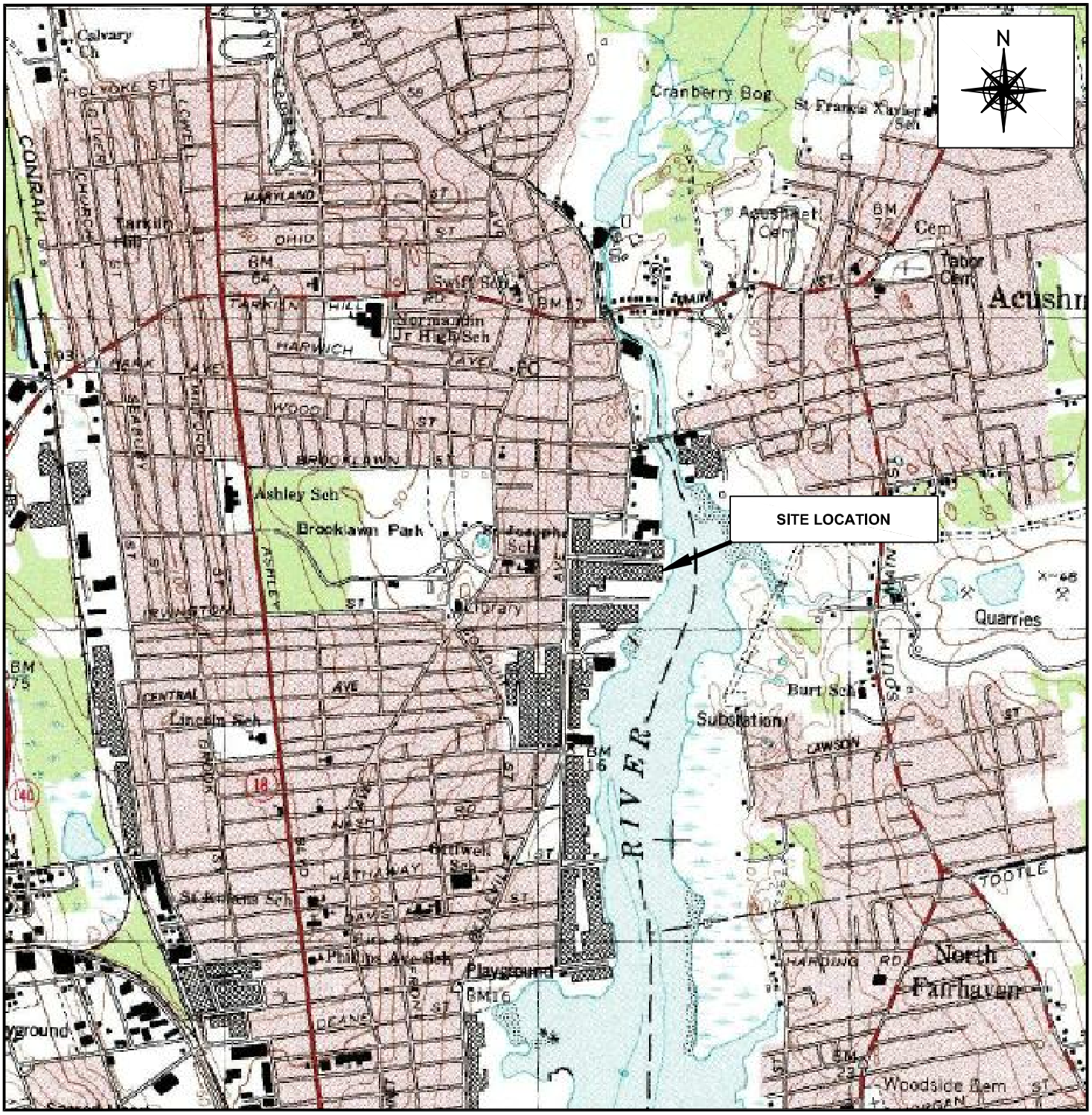
MW-15B

	Date	Depth to Groundwater (ft)	Approximate DNAPL Thickness (inches)	Recovery Event Volume (ounces)	Recovery Event Volume (ml)	Cumulative Recovery Volume (ml)	Recovery Event Volume (gal)	Cumulative Recovery Volume (Gal)	Tide Cycle
	5/19/2014								
	6/2/2014								
	6/16/2014								
	6/30/2014								
	7/27/2014								
	8/18/2014								
	9/22/2014								
	10/6/2014	4.63	3	10.1	30	30	0.00	0.00	low tide
Status Report # 3	10/22/2014	4.82	3.5	33.8	100	130	0.03	0.03	low tide
	11/3/2014	5.46	3	33.8	100	230	0.03	0.05	low tide
	11/17/2014	4.98	2.5	25.4	75	305	0.02	0.07	mid-tide; ebbing
	12/8/2014	4.98	3.5	25.4	75	380	0.02	0.09	high tide
	12/23/2014	3.43	2.5	25.4	75	455	0.02	0.11	high tide
	1/6/2015	4.62	3	25.4	75	530	0.02	0.13	low tide
Status Report # 4	1/19/2015	6.04	3	20.3	60	590	0.02	0.15	low tide
	2/6/2015	NM	3	6.8	20	610	0.01		not noted
	2/23/2015								
	3/9/2015	4.11	4.5	33.8	100	710	0.03	0.17	high tide
	3/23/2015	4.78	5	42.3	125	835	0.03	0.21	high tide
	4/13/2015	5.07	1.5	25.4	75	910	0.02	0.23	3/4 of high tide, ebbing tide
	4/27/2015	4.70	3.5	20.3	60	970	0.02	0.24	Flow tide, nearly high
	5/11/2015	4.99	5.5	20.3	60	1030	0.02	0.26	3/4 of high tide, ebbing tide
	5/26/2015	5.13	2.5	8.5	25	1055	0.01	0.27	mid flow tide
	6/3/2015	5.33	2	16.9	50	1105	0.01	0.28	low tide
Status Report #5	6/16/2015	4.38	2.5	10.1	30	1135	0.00793	0.29	3/4 of high tide, ebbing tide
	6/29/2015	4.42	2.5	6.8	20	1155	0.00528	0.29	mid-tide; ebbing
	7/16/2015	4.49	1	5.1	15	1170	0.00396	0.30	low tide
	7/27/2015	4.46	1.5	3.4	10	1180	0.00264	0.30	1/4 of low, flood tide

Notes:

Volume is estimated; includes DNAPL only - recovered water is not included in estimate
DNAPL was not observed at a measureable thickness in MW-15B until September 29, 2014
The site could not be acessed on 2/23/2015 due to accumulation of ice and snow near the access gates.

Figures



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APPROXIMATE SCALE IN FEET

BASEMAP SOURCE:

USGS 7.5-minute Series Topographic Map
New Bedford North Quadrangle
1979 (photorevised 1975)

SITE LOCATION PLAN

AEROVOX FACILITY
740 BELLEVILLE AVENUE
NEW BEDFORD, MASSACHUSETTS

URS
5 Industrial Way
Salem, New Hampshire 03079
TEL: (603) 893-0616
FAX: (603) 893-6240
http://www.urscorp.com

SCALE:	NTS	DRAWN BY:	KP	JOB NO.:	39744051
DATE:	06/14	APPR. BY:	JU	FIGURE 1	

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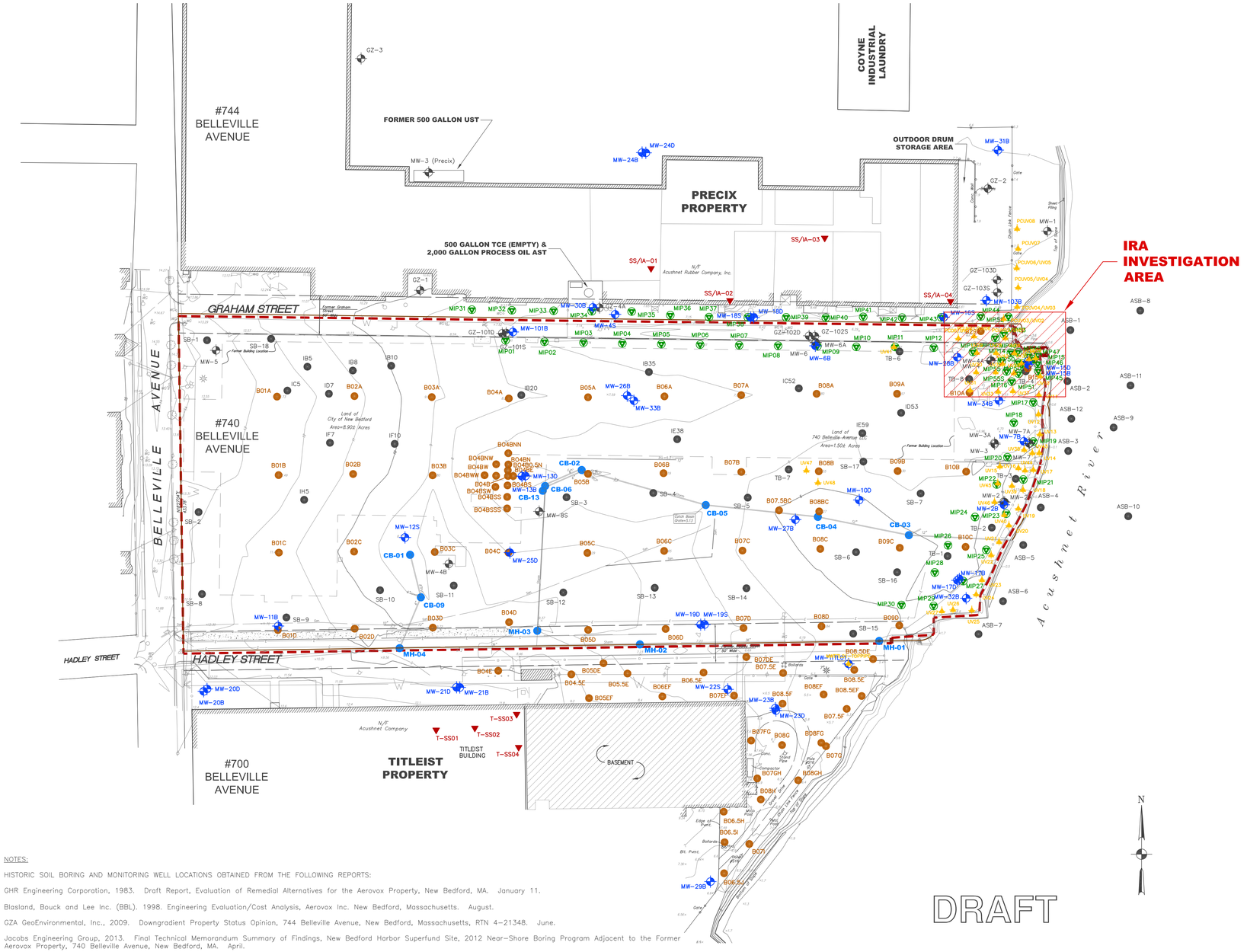
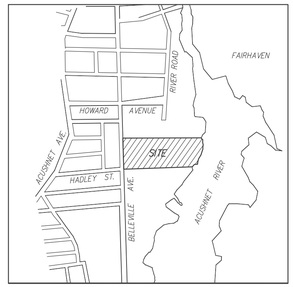


LEGEND

- MONITORING WELL (AECOM)
- SOIL BORING (AECOM)
- MIP BORING (AECOM)
- INDOOR AIR/SUB SLAB VAPOR POINT (AECOM)
- UVOST BORING (AECOM)
- HISTORIC SOIL BORING INSTALLED BY OTHERS*
- HISTORIC MONITORING WELL INSTALLED BY OTHERS*
- CB/MH — CATCH BASIN/MANHOLE
- PROPERTY LINE
- RTN SITE BOUNDARY
- San. — SANITARY SEWER LINES
- Storm. — STORM SEWER LINES
- W — WATER LINES
- G — GAS LINES
- E — ELECTRIC LINES

- Catch Basin
- Manhole
- Coniferous Tree
- Utility Pole
- Deciduous Tree
- WG — Water Gate
- GG — Gas Gate
- Hydrant
- Concrete
- Light Pole

LOCATION MAP
(NOT TO SCALE)



NOTES:

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RTN SITE BOUNDARY AS DEPICTED ON EXHIBIT 3, COOPERATION & SETTLEMENT AGREEMENT, AEROVOX PROPERTY, DEPARTMENT OF THE ARMY NEW ENGLAND DISTRICT CORPS OF ENGINEERS, DATED DECEMBER 2009. CURRENT RTN SITE BOUNDARY EXTENDS BEYOND AEOROVOX PROPERTY.

DRAFT

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SCALE IN FEET

PROJECT NO:	60422003	CLIENT:	AVX CORPORATION
DESIGN: DB	SCALE: AS SHOWN	PROJECT:	IRA STATUS REPORT 740 BELLEVILLE AVENUE NEW BEDFORD, MA
APPROVED: MW	DATE: JUNE 2015	TITLE:	SITE PLAN
DRAWN: FS	FILE NO: AVX - IRA Status Report - 2015-02	FIGURE NO.:	2

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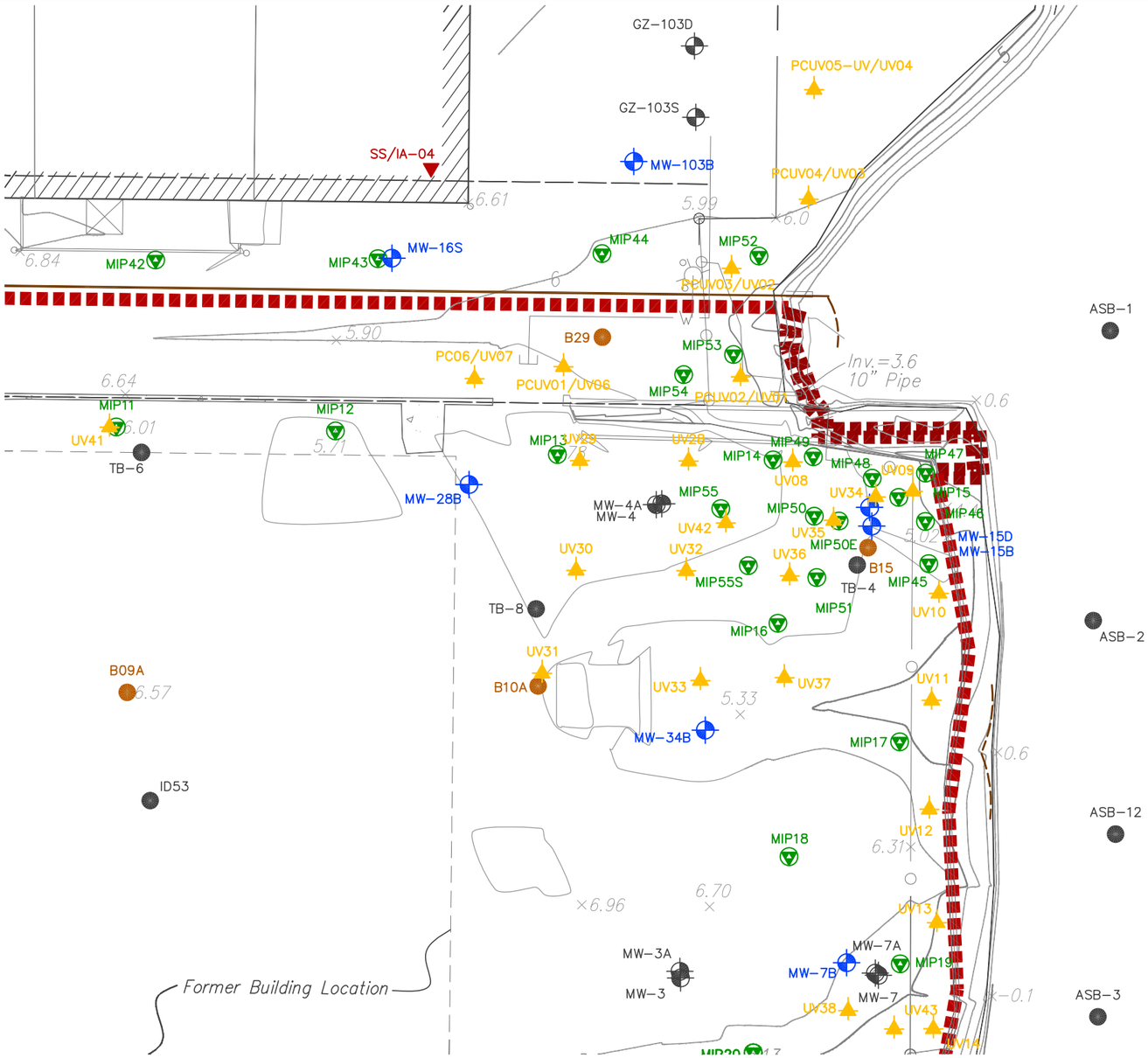

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- Catch Basin
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- WG Water Gate
- GG Gas Gate
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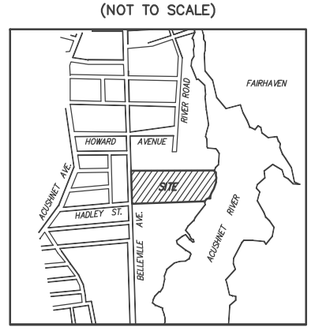
- Concrete
- Light Pole

LOCATION MAP
(NOT TO SCALE)



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0 30 60
SCALE IN FEET

PROJECT NO:	60422003		
DESIGN:	DB	SCALE:	AS SHOWN
APPROVED:	MW	DATE:	JUNE 2015
DRAWN:	FS	FILE NO:	AVX - IRA Status Report - 2015-Q2

CLIENT: AVX CORPORATION

PROJECT: IRA STATUS REPORT
740 BELLEVILLE AVENUE
NEW BEDFORD, MA

TITLE: DETAIL OF DNAPL
IRA AREA

FIGURE NO.: 3

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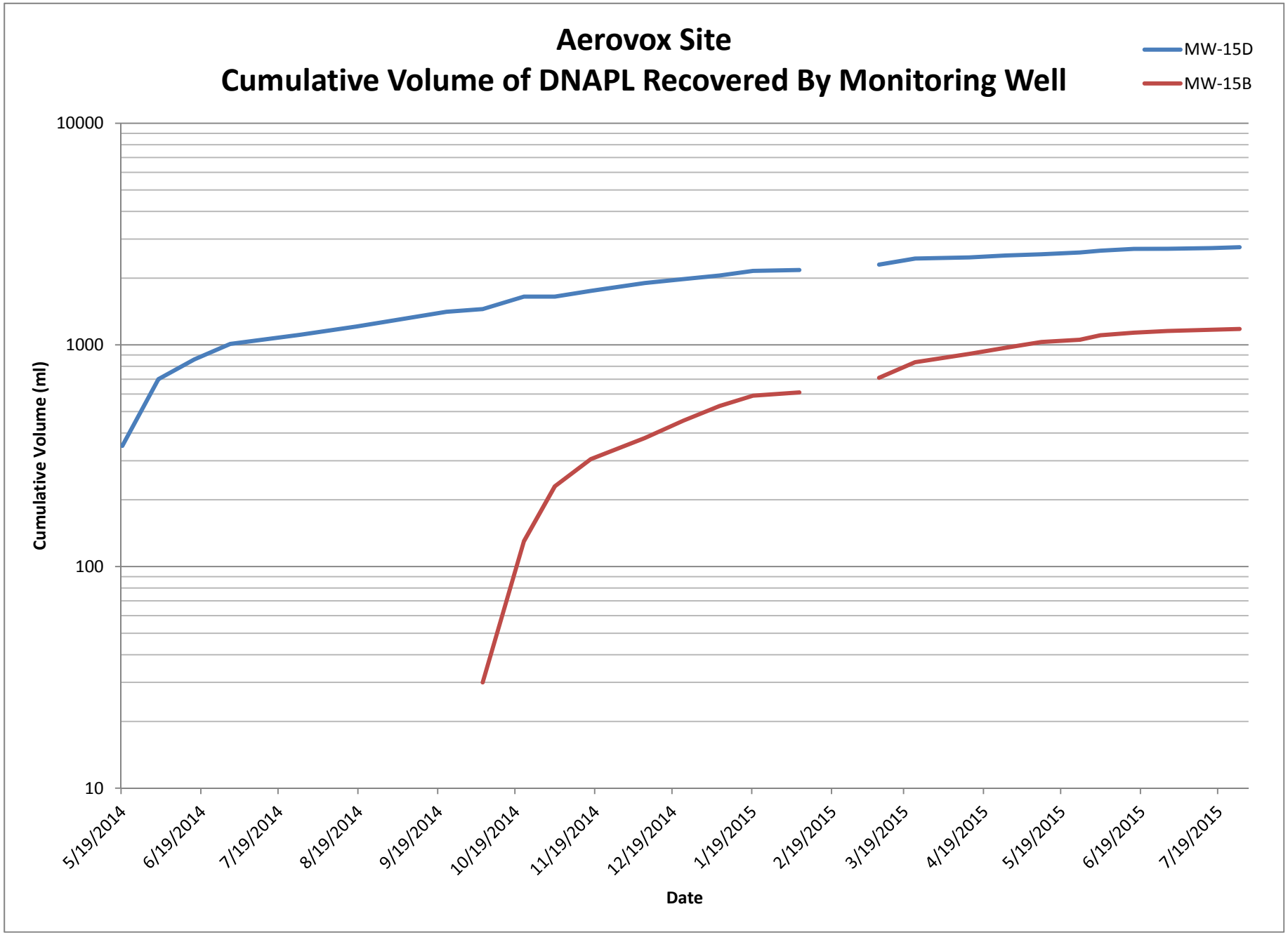
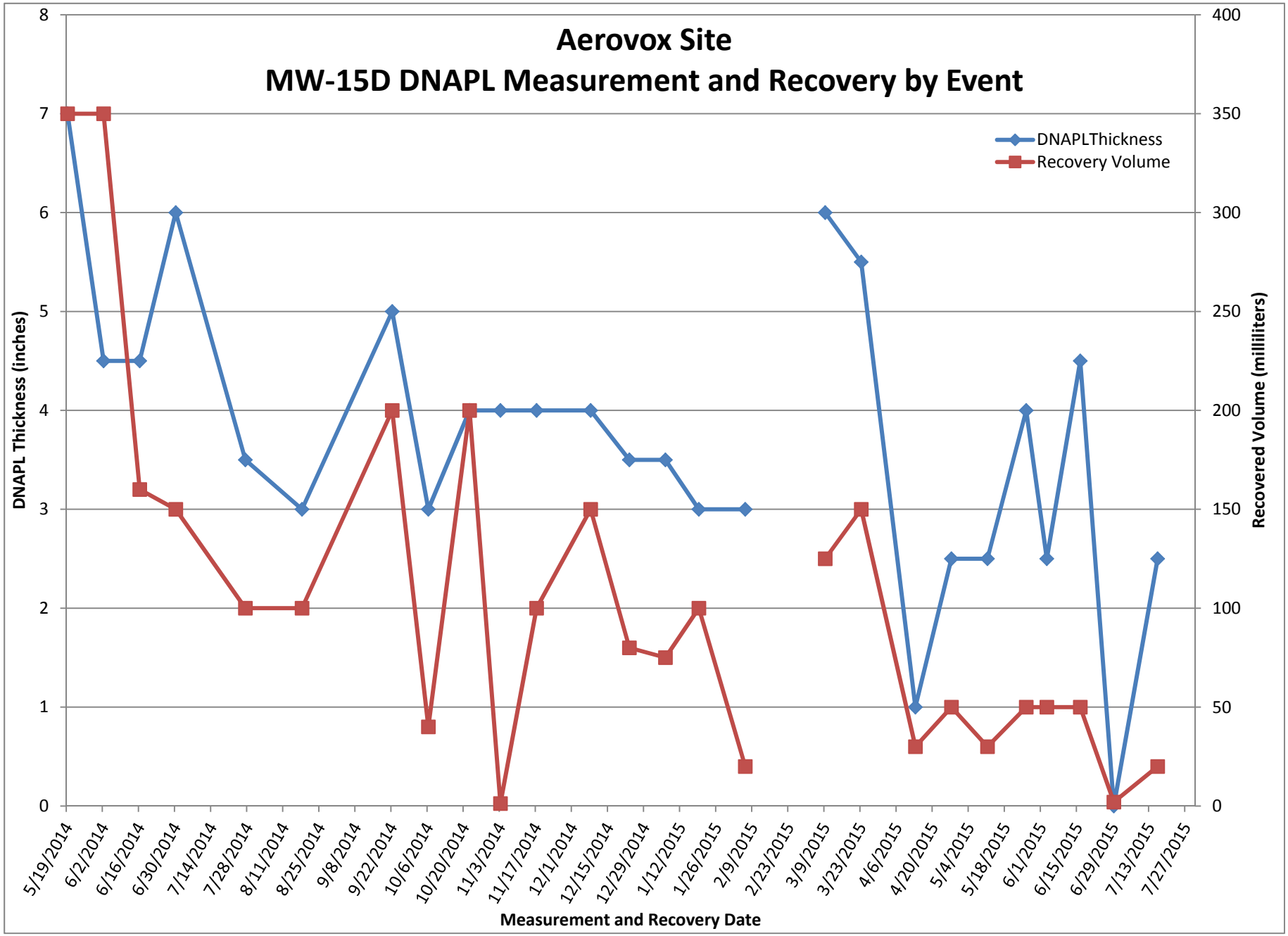
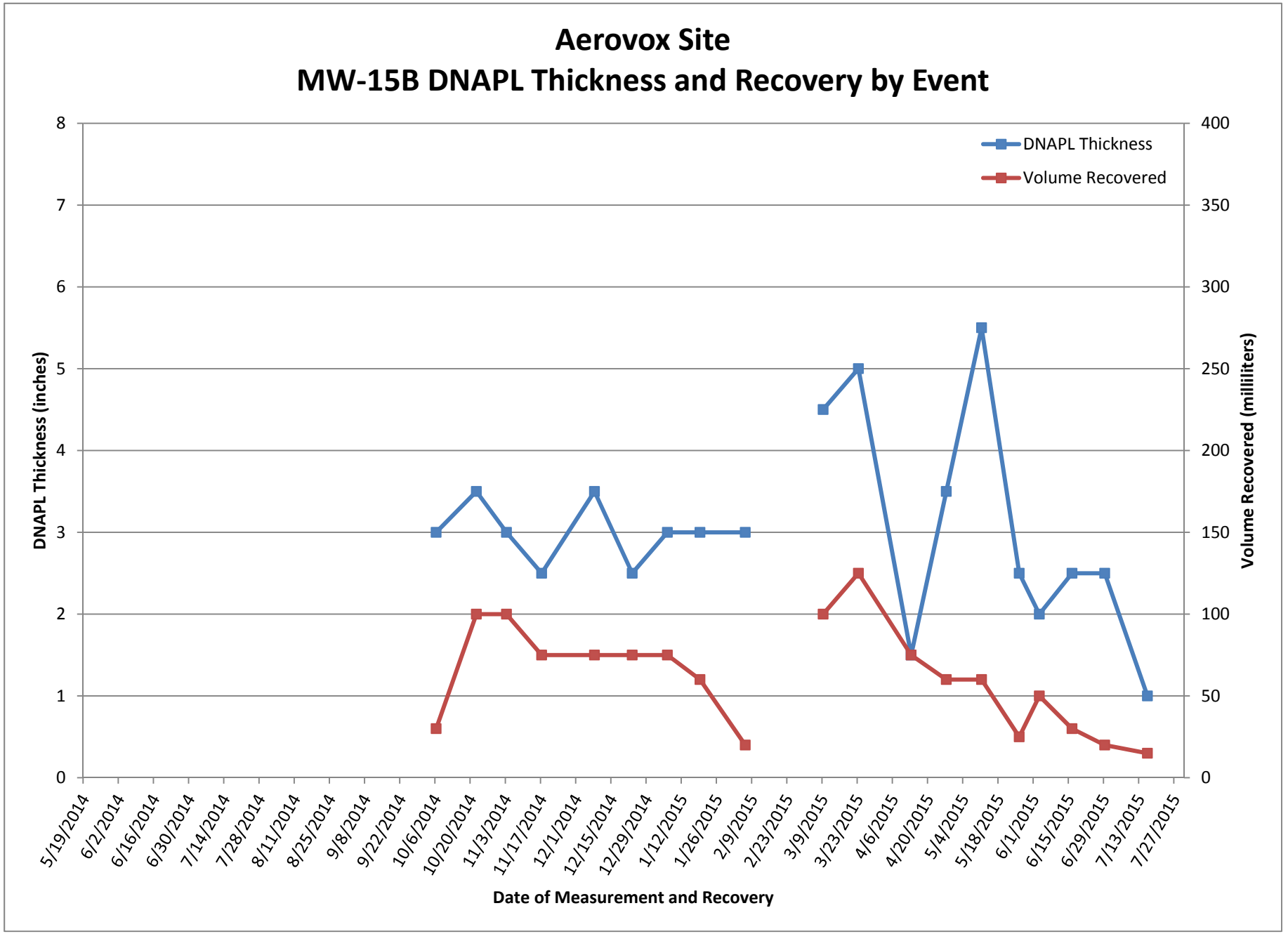
Appendix A

DNAPL Recovery Graphs


Aerovox Site
Cumulative Volume of DNAPL Recovered By Monitoring Well
MW-15D
MW-15B
10000
1000
100
10
Cumulative Volume (ml)
5/19/2014
6/19/2014
7/19/2014
8/19/2014
9/19/2014
10/19/2014
11/19/2014
12/19/2014
1/19/2015
2/19/2015
3/19/2015
4/19/2015
5/19/2015
6/19/2015
7/19/2015
Date


Aerovox Site
MW-15D DNAPL Measurement and Recovery by Event
DNAPLThickness
Recovery Volume
DNAPL Thickness (inches)
Recovered Volume (milliliters)
Measurement and Recovery Date
0
1
2
3
4
5
6
7
8
0
50
100
150
200
250
300
350
400
5/19/2014
6/2/2014
6/16/2014
6/30/2014
7/14/2014
7/28/2014
8/11/2014
8/25/2014
9/8/2014
9/22/2014
10/6/2014
10/20/2014
11/3/2014
11/17/2014
12/1/2014
12/15/2014
12/29/2014
1/12/2015
1/26/2015
2/9/2015
2/23/2015
3/9/2015
3/23/2015
4/6/2015
4/20/2015
5/4/2015
5/18/2015
6/1/2015
6/15/2015
6/29/2015
7/13/2015
7/27/2015


Aerovox Site
MW-15B DNAPL Thickness and Recovery by Event
DNAPL Thickness
Volume Recovered
DNAPL Thickness (inches)
Volume Recovered (milliliters)
Date of Measurement and Recovery
0
1
2
3
4
5
6
7
8
0
50
100
150
200
250
300
350
400
5/19/2014
6/2/2014
6/16/2014
6/30/2014
7/14/2014
7/28/2014
8/11/2014
8/25/2014
9/8/2014
9/22/2014
10/6/2014
10/20/2014
11/3/2014
11/17/2014
12/1/2014
12/15/2014
12/29/2014
1/12/2015
1/26/2015
2/9/2015
2/23/2015
3/9/2015
3/23/2015
4/6/2015
4/20/2015
5/4/2015
5/18/2015
6/1/2015
6/15/2015
6/29/2015
7/13/2015
7/27/2015

Appendix B

May 2015 Groundwater Sampling Analytical Reports

ANALYTICAL REPORT

Lab Number:	L1511821
Client:	AECOM 1155 Elm Street Manchester, NH 03101
ATTN:	Judith LeClair
Phone:	(603) 893-0616
Project Name:	AEROVOX MAY 2015
Project Number:	60422003
Report Date:	06/05/15

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1511821-01	TRIP BLANK	WATER	AEROVOX, NEW BEDFORD, MA	05/29/15 00:00	05/29/15
L1511821-02	AX-GW-TITL01-052915	WATER	AEROVOX, NEW BEDFORD, MA	05/29/15 09:20	05/29/15
L1511821-03	AX-GW-MW24B-052915	WATER	AEROVOX, NEW BEDFORD, MA	05/29/15 10:35	05/29/15
L1511821-04	AX-GW-DUP1-052915	WATER	AEROVOX, NEW BEDFORD, MA	05/29/15 10:40	05/29/15
L1511821-05	AX-GW-MW21D-052915	WATER	AEROVOX, NEW BEDFORD, MA	05/29/15 11:10	05/29/15

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821
Project Number: 60422003 **Report Date:** 06/05/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821
Project Number: 60422003 **Report Date:** 06/05/15

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question G:

L1511821-03 and -04: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The continuing calibration standard, associated with L1511821-01 through -05, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

Non-MCP Related Narratives

Dissolved Gases

L1511821-02 and -03 were collected in pre-preserved vials; however, the pH of the samples was determined to be greater than two.

Nitrogen, Nitrate

L1511821-02 and -03 have elevated detection limits due to the dilutions required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 06/05/15

ORGANICS

VOLATILES

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-01
Client ID: TRIP BLANK
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/04/15 21:40
Analyst: PK

Date Collected: 05/29/15 00:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-01 Date Collected: 05/29/15 00:00

Client ID: TRIP BLANK Date Received: 05/29/15

Sample Location: AEROVOX, NEW BEDFORD, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	106		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-02
Client ID: AX-GW-TITL01-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 06/03/15 13:09
Analyst: MR

Date Collected: 05/29/15 09:20
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	8440		ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	3.19		ug/l	0.500	--	1	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-02
Client ID: AX-GW-TITL01-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/04/15 22:08
Analyst: PK

Date Collected: 05/29/15 09:20
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-02 Date Collected: 05/29/15 09:20

Client ID: AX-GW-TITL01-052915 Date Received: 05/29/15

Sample Location: AEROVOX, NEW BEDFORD, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	122		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-03
Client ID: AX-GW-MW24B-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 06/03/15 13:23
Analyst: MR

Date Collected: 05/29/15 10:35
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	73.1		ug/l	0.500	--	1	A
Ethene	19.1		ug/l	0.500	--	1	A
Ethane	12.8		ug/l	0.500	--	1	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-03 D2
Client ID: AX-GW-MW24B-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/05/15 03:44
Analyst: PK

Date Collected: 05/29/15 10:35
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Chloroform	34000		ug/l	500	--	500
Carbon tetrachloride	19000		ug/l	500	--	500

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	123		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	110		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-03 D
Client ID: AX-GW-MW24B-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/04/15 23:03
Analyst: PK

Date Collected: 05/29/15 10:35
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	4000		ug/l	100	--	50
1,1-Dichloroethane	ND		ug/l	50	--	50
Chloroform	34000	E	ug/l	50	--	50
Carbon tetrachloride	18000	E	ug/l	50	--	50
1,2-Dichloropropane	ND		ug/l	50	--	50
Dibromochloromethane	ND		ug/l	50	--	50
1,1,2-Trichloroethane	ND		ug/l	50	--	50
Tetrachloroethene	ND		ug/l	50	--	50
Chlorobenzene	ND		ug/l	50	--	50
1,2-Dichloroethane	ND		ug/l	50	--	50
1,1,1-Trichloroethane	ND		ug/l	50	--	50
Bromodichloromethane	ND		ug/l	50	--	50
trans-1,3-Dichloropropene	ND		ug/l	25	--	50
cis-1,3-Dichloropropene	ND		ug/l	25	--	50
1,3-Dichloropropene, Total	ND		ug/l	25	--	50
Bromoform	ND		ug/l	100	--	50
1,1,2,2-Tetrachloroethane	ND		ug/l	50	--	50
Chloromethane	ND		ug/l	100	--	50
Vinyl chloride	ND		ug/l	50	--	50
Chloroethane	ND		ug/l	100	--	50
1,1-Dichloroethene	ND		ug/l	50	--	50
trans-1,2-Dichloroethene	ND		ug/l	50	--	50
Trichloroethene	390		ug/l	50	--	50
1,2-Dichlorobenzene	ND		ug/l	50	--	50
1,3-Dichlorobenzene	ND		ug/l	50	--	50
1,4-Dichlorobenzene	ND		ug/l	50	--	50
cis-1,2-Dichloroethene	85		ug/l	50	--	50
1,2-Dichloroethene, Total	85		ug/l	50	--	50
Dichlorodifluoromethane	ND		ug/l	100	--	50
1,2-Dibromoethane	ND		ug/l	100	--	50

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-03 D
Client ID: AX-GW-MW24B-052915
Sample Location: AEROVOX, NEW BEDFORD, MA

Date Collected: 05/29/15 10:35
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	100	--	50
1,1,1,2-Tetrachloroethane	ND		ug/l	50	--	50
o-Chlorotoluene	ND		ug/l	100	--	50
p-Chlorotoluene	ND		ug/l	100	--	50
Hexachlorobutadiene	ND		ug/l	30	--	50
1,2,4-Trichlorobenzene	ND		ug/l	100	--	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-04 D2
Client ID: AX-GW-DUP1-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/05/15 04:12
Analyst: PK

Date Collected: 05/29/15 10:40
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Chloroform	34000		ug/l	500	--	500
Carbon tetrachloride	19000		ug/l	500	--	500

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	122		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	110		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-04 D
Client ID: AX-GW-DUP1-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/04/15 23:31
Analyst: PK

Date Collected: 05/29/15 10:40
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	4100		ug/l	100	--	50
1,1-Dichloroethane	ND		ug/l	50	--	50
Chloroform	34000	E	ug/l	50	--	50
Carbon tetrachloride	19000	E	ug/l	50	--	50
1,2-Dichloropropane	ND		ug/l	50	--	50
Dibromochloromethane	ND		ug/l	50	--	50
1,1,2-Trichloroethane	ND		ug/l	50	--	50
Tetrachloroethene	ND		ug/l	50	--	50
Chlorobenzene	ND		ug/l	50	--	50
1,2-Dichloroethane	ND		ug/l	50	--	50
1,1,1-Trichloroethane	ND		ug/l	50	--	50
Bromodichloromethane	ND		ug/l	50	--	50
trans-1,3-Dichloropropene	ND		ug/l	25	--	50
cis-1,3-Dichloropropene	ND		ug/l	25	--	50
1,3-Dichloropropene, Total	ND		ug/l	25	--	50
Bromoform	ND		ug/l	100	--	50
1,1,2,2-Tetrachloroethane	ND		ug/l	50	--	50
Chloromethane	ND		ug/l	100	--	50
Vinyl chloride	ND		ug/l	50	--	50
Chloroethane	ND		ug/l	100	--	50
1,1-Dichloroethene	ND		ug/l	50	--	50
trans-1,2-Dichloroethene	ND		ug/l	50	--	50
Trichloroethene	400		ug/l	50	--	50
1,2-Dichlorobenzene	ND		ug/l	50	--	50
1,3-Dichlorobenzene	ND		ug/l	50	--	50
1,4-Dichlorobenzene	ND		ug/l	50	--	50
cis-1,2-Dichloroethene	86		ug/l	50	--	50
1,2-Dichloroethene, Total	86		ug/l	50	--	50
Dichlorodifluoromethane	ND		ug/l	100	--	50
1,2-Dibromoethane	ND		ug/l	100	--	50

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-04 D
Client ID: AX-GW-DUP1-052915
Sample Location: AEROVOX, NEW BEDFORD, MA

Date Collected: 05/29/15 10:40
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	100	--	50
1,1,1,2-Tetrachloroethane	ND		ug/l	50	--	50
o-Chlorotoluene	ND		ug/l	100	--	50
p-Chlorotoluene	ND		ug/l	100	--	50
Hexachlorobutadiene	ND		ug/l	30	--	50
1,2,4-Trichlorobenzene	ND		ug/l	100	--	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	94		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-05
Client ID: AX-GW-MW21D-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 06/03/15 13:38
Analyst: MR

Date Collected: 05/29/15 11:10
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	3.55		ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	ND		ug/l	0.500	--	1	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-05
Client ID: AX-GW-MW21D-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/04/15 22:36
Analyst: PK

Date Collected: 05/29/15 11:10
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	12		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	2.4		ug/l	1.0	--	1
1,2-Dichloroethene, Total	2.4		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-05 Date Collected: 05/29/15 11:10

Client ID: AX-GW-MW21D-052915 Date Received: 05/29/15

Sample Location: AEROVOX, NEW BEDFORD, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 06/03/15 11:08
Analyst: MR

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 02-03,05 Batch: WG790350-4						
Methane	ND		ug/l	0.500	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 06/04/15 20:44
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG790962-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 06/04/15 20:44
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG790962-3					
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511821

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-03,05 Batch: WG790350-1									
Methane	105		-		80-120	-		25	A
Ethene	111		-		80-120	-		25	A
Ethane	109		-		80-120	-		25	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511821

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG790962-1 WG790962-2								
Methylene chloride	85		85		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		111		70-130	1		20
Carbon tetrachloride	103		103		70-130	0		20
1,2-Dichloropropane	100		101		70-130	1		20
Dibromochloromethane	105		107		70-130	2		20
1,1,2-Trichloroethane	114		117		70-130	3		20
Tetrachloroethene	112		112		70-130	0		20
Chlorobenzene	103		103		70-130	0		20
1,2-Dichloroethane	106		107		70-130	1		20
1,1,1-Trichloroethane	110		110		70-130	0		20
Bromodichloromethane	98		99		70-130	1		20
trans-1,3-Dichloropropene	115		117		70-130	2		20
cis-1,3-Dichloropropene	89		90		70-130	1		20
Bromoform	108		113		70-130	5		20
1,1,2,2-Tetrachloroethane	110		114		70-130	4		20
Chloromethane	**64**	Q	**57**	Q	70-130	12		20
Vinyl chloride	90		88		70-130	2		20
Chloroethane	115		109		70-130	5		20
1,1-Dichloroethene	109		109		70-130	0		20
trans-1,2-Dichloroethene	105		105		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511821

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG790962-1 WG790962-2								
Trichloroethene	101		101		70-130	0		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,3-Dichlorobenzene	103		104		70-130	1		20
1,4-Dichlorobenzene	104		106		70-130	2		20
cis-1,2-Dichloroethene	102		102		70-130	0		20
Dichlorodifluoromethane	80		79		70-130	1		20
1,2-Dibromoethane	106		108		70-130	2		20
1,3-Dichloropropane	115		117		70-130	2		20
1,1,1,2-Tetrachloroethane	113		113		70-130	0		20
o-Chlorotoluene	120		121		70-130	1		20
p-Chlorotoluene	112		111		70-130	1		20
Hexachlorobutadiene	98		97		70-130	1		20
1,2,4-Trichlorobenzene	109		111		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		113		70-130
Toluene-d8	121		121		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	108		110		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-03,05 QC Batch ID: WG790350-6 QC Sample: L1511713-14 Client ID: MS Sample													
Methane	4.35	54.6	60.0	102		-	-		80-120	-		25	A
Ethene	ND	95.5	104	109		-	-		80-120	-		25	A
Ethane	ND	102	108	105		-	-		80-120	-		25	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-03,05 QC Batch ID: WG790350-5 QC Sample: L1511828-04 Client ID: DUP Sample							
Methane	33.2	38.2	ug/l	14		25	A
Ethene	6.35	6.98	ug/l	9		25	A
Ethane	1.41	1.51	ug/l	7		25	A

PCBS

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-02
Client ID: AX-GW-TITL01-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8082
Analytical Date: 06/02/15 05:43
Analyst: JW

Date Collected: 05/29/15 09:20
Date Received: 05/29/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 06/01/15 11:53
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/15
Cleanup Method: EPA 3660B
Cleanup Date: 06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID:	L1511821-03	Date Collected:	05/29/15 10:35
Client ID:	AX-GW-MW24B-052915	Date Received:	05/29/15
Sample Location:	AEROVOX, NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8082	Extraction Date:	06/01/15 11:53
Analytical Date:	06/02/15 05:58	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	06/01/15
		Cleanup Method:	EPA 3660B
		Cleanup Date:	06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID:	L1511821-04	Date Collected:	05/29/15 10:40
Client ID:	AX-GW-DUP1-052915	Date Received:	05/29/15
Sample Location:	AEROVOX, NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8082	Extraction Date:	06/01/15 11:53
Analytical Date:	06/02/15 06:14	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	06/01/15
		Cleanup Method:	EPA 3660B
		Cleanup Date:	06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-05
Client ID: AX-GW-MW21D-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8082
Analytical Date: 06/02/15 06:29
Analyst: JW

Date Collected: 05/29/15 11:10
Date Received: 05/29/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 06/01/15 11:53
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/15
Cleanup Method: EPA 3660B
Cleanup Date: 06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082A
Analytical Date: 06/02/15 09:03
Analyst: JW

Extraction Method: EPA 3510C
Extraction Date: 06/01/15 11:53
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/15
Cleanup Method: EPA 3660B
Cleanup Date: 06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 02-05 Batch: WG789617-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	102		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	91		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511821

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 02-05 Batch: WG789617-2 WG789617-3									
Aroclor 1016	80		76		40-140	5		20	A
Aroclor 1260	88		85		40-140	4		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		64		30-150	A
Decachlorobiphenyl	116		110		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		72		30-150	B
Decachlorobiphenyl	98		93		30-150	B

METALS

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-02 Date Collected: 05/29/15 09:20

Client ID: AX-GW-TITL01-052915 Date Received: 05/29/15

Sample Location: AEROVOX, NEW BEDFORD, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Iron, Total	51		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 19:25	EPA 3005A	97,6010C	TT

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-03 Date Collected: 05/29/15 10:35

Client ID: AX-GW-MW24B-052915 Date Received: 05/29/15

Sample Location: AEROVOX, NEW BEDFORD, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Iron, Total	3.2		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 19:29	EPA 3005A	97,6010C	TT

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-05 Date Collected: 05/29/15 11:10

Client ID: AX-GW-MW21D-052915 Date Received: 05/29/15

Sample Location: AEROVOX, NEW BEDFORD, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Iron, Total	0.34		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 19:33	EPA 3005A	97,6010C	TT

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 02-03,05 Batch: WG789537-1										
Iron, Total	ND		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 18:24	97,6010C	TT

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511821

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Westborough Lab Associated sample(s): 02-03,05 Batch: WG789537-2 WG789537-3								
Iron, Total	98		98		80-120	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-02
Client ID: AX-GW-TITL01-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water

Date Collected: 05/29/15 09:20
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Bicarbonate	141.		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
Nitrogen, Ammonia	3.13		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:28	30,4500NH3-BH	ML
Nitrogen, Nitrate	ND		mg/l	1.00	--	10	-	05/29/15 23:57	30,4500NO3-F	MR
Phosphorus, Total	0.028		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 12:05	30,4500P-E	SD
Sulfate	ND		mg/l	10	--	1	06/01/15 13:30	06/01/15 13:30	1,9038	MP
Total Organic Carbon	9.7		mg/l	1.0	--	2	-	06/01/15 07:27	1,9060A	DW
Iron, Ferrous	22.		mg/l	5.0	--	10	-	05/30/15 03:12	30,3500Fe-D	LH

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-03
Client ID: AX-GW-MW24B-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water

Date Collected: 05/29/15 10:35
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Bicarbonate	125.		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
Nitrogen, Ammonia	0.186		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:31	30,4500NH3-BH	ML
Nitrogen, Nitrate	ND		mg/l	1.00	--	10	-	05/29/15 23:58	30,4500NO3-F	MR
Phosphorus, Total	ND		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 12:06	30,4500P-E	SD
Sulfate	64.		mg/l	25	--	2.5	06/01/15 13:30	06/01/15 13:30	1,9038	MP
Total Organic Carbon	2.8		mg/l	2.5	--	5	-	06/01/15 07:27	1,9060A	DW
Iron, Ferrous	0.99		mg/l	0.50	--	1	-	05/30/15 03:04	30,3500Fe-D	LH

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

SAMPLE RESULTS

Lab ID: L1511821-05
Client ID: AX-GW-MW21D-052915
Sample Location: AEROVOX, NEW BEDFORD, MA
Matrix: Water

Date Collected: 05/29/15 11:10
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Bicarbonate	85.5		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:32	30,4500NH3-BH	ML
Nitrogen, Nitrate	1.20		mg/l	0.100	--	1	-	05/29/15 23:03	30,4500NO3-F	MR
Phosphorus, Total	ND		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 12:07	30,4500P-E	SD
Sulfate	12.		mg/l	10	--	1	06/01/15 13:30	06/01/15 13:30	1,9038	MP
Total Organic Carbon	1.0		mg/l	1.0	--	2	-	06/01/15 07:27	1,9060A	DW
Iron, Ferrous	ND		mg/l	0.50	--	1	-	05/30/15 03:05	30,3500Fe-D	LH

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02-03,05 Batch: WG789239-1										
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	05/29/15 22:32	30,4500NO3-F	MR
General Chemistry - Westborough Lab for sample(s): 02-03,05 Batch: WG789250-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:21	30,4500NH3-BH	ML
General Chemistry - Westborough Lab for sample(s): 02-03,05 Batch: WG789326-1										
Iron, Ferrous	ND		mg/l	0.50	--	1	-	05/30/15 03:03	30,3500Fe-D	LH
General Chemistry - Westborough Lab for sample(s): 02-03,05 Batch: WG789530-1										
Total Organic Carbon	ND		mg/l	0.50	--	1	-	06/01/15 07:27	1,9060A	DW
General Chemistry - Westborough Lab for sample(s): 02-03,05 Batch: WG789559-1										
Sulfate	ND		mg/l	10	--	1	06/01/15 13:30	06/01/15 13:30	1,9038	MP
General Chemistry - Westborough Lab for sample(s): 02-03,05 Batch: WG789698-1										
Alkalinity, Bicarbonate	ND		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
General Chemistry - Westborough Lab for sample(s): 02-03,05 Batch: WG789998-1										
Phosphorus, Total	ND		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 11:46	30,4500P-E	SD

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511821

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 Batch: WG789239-2								
Nitrogen, Nitrate	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 Batch: WG789250-2								
Nitrogen, Ammonia	100		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 Batch: WG789326-2								
Iron, Ferrous	107		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 Batch: WG789530-2								
Total Organic Carbon	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 Batch: WG789559-2								
Sulfate	95		-		84-119	-		
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 Batch: WG789998-2								
Phosphorus, Total	103		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789239-4 QC Sample: L1511801-07 Client ID: MS Sample												
Nitrogen, Nitrate	1.64	4	5.54	98		-	-		83-113	-		17
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789250-4 QC Sample: L1511776-01 Client ID: MS Sample												
Nitrogen, Ammonia	ND	4	4.11	103		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789326-4 QC Sample: L1511828-05 Client ID: MS Sample												
Iron, Ferrous	ND	1	0.95	95		-	-			-		20
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789530-4 QC Sample: L1511828-04 Client ID: MS Sample												
Total Organic Carbon	7.5	20	27	96		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789559-4 QC Sample: L1511801-11 Client ID: MS Sample												
Sulfate	ND	20	26	130		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789998-3 QC Sample: L1511828-05 Client ID: MS Sample												
Phosphorus, Total	ND	0.5	0.541	108		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789239-3 QC Sample: L1511801-07 Client ID: DUP Sample						
Nitrogen, Nitrate	1.64	1.64	mg/l	0		17
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789250-3 QC Sample: L1511776-01 Client ID: DUP Sample						
Nitrogen, Ammonia	ND	0.075	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789326-3 QC Sample: L1511821-03 Client ID: AX-GW-MW24B-052915						
Iron, Ferrous	0.99	0.92	mg/l	7		20
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789530-3 QC Sample: L1511828-04 Client ID: DUP Sample						
Total Organic Carbon	7.5	7.6	mg/l	1		20
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789559-3 QC Sample: L1511801-11 Client ID: DUP Sample						
Sulfate	ND	ND	mg/l	NC		14
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789698-2 QC Sample: L1511821-05 Client ID: AX-GW-MW21D-052915						
Alkalinity, Bicarbonate	85.5	86.2	mg CaCO3/L	1		
General Chemistry - Westborough Lab Associated sample(s): 02-03,05 QC Batch ID: WG789998-4 QC Sample: L1511828-05 Client ID: DUP Sample						
Phosphorus, Total	ND	ND	mg/l	NC		20

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511821

Project Number: 60422003 **Report Date:** 06/05/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1511821-01A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-01B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-02A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-02B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-02C	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-02D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L1511821-02E	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L1511821-02F	20ml Vial HCl preserved	A	N/A	2.9	Y	Absent	DISSGAS(14)
L1511821-02G	20ml Vial HCl preserved	A	N/A	2.9	Y	Absent	DISSGAS(14)
L1511821-02H	Plastic 120ml unpreserved w/No H	A	N/A	2.9	Y	Absent	ALK-HCO3-2320(14)
L1511821-02I	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	MCP-FE-6010T-10(180)
L1511821-02J	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	SO4-9038(28),NO3-4500(2),FERROUS(1)
L1511821-02K	Plastic 500ml H2SO4 preserved	A	<2	2.9	Y	Absent	TPHOS-4500(28),NH3-4500(28)
L1511821-02L	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)
L1511821-02M	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)
L1511821-03A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-03B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-03C	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-03D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L1511821-03E	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L1511821-03F	20ml Vial HCl preserved	A	N/A	2.9	Y	Absent	DISSGAS(14)
L1511821-03G	20ml Vial HCl preserved	A	N/A	2.9	Y	Absent	DISSGAS(14)
L1511821-03H	Plastic 120ml unpreserved w/No H	A	N/A	2.9	Y	Absent	ALK-HCO3-2320(14)
L1511821-03I	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	MCP-FE-6010T-10(180)
L1511821-03J	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	SO4-9038(28),NO3-4500(2),FERROUS(1)
L1511821-03K	Plastic 500ml H2SO4 preserved	A	<2	2.9	Y	Absent	TPHOS-4500(28),NH3-4500(28)

*Values in parentheses indicate holding time in days

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511821
Report Date: 06/05/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1511821-03L	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)
L1511821-03M	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)
L1511821-04A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-04B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-04C	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-04D	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)
L1511821-04E	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)
L1511821-05A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-05B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-05C	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-CHLR-10(14)
L1511821-05D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L1511821-05E	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L1511821-05F	20ml Vial HCl preserved	A	N/A	2.9	Y	Absent	DISSGAS(14)
L1511821-05G	20ml Vial HCl preserved	A	N/A	2.9	Y	Absent	DISSGAS(14)
L1511821-05H	Plastic 120ml unpreserved w/No H	A	N/A	2.9	Y	Absent	ALK-HCO3-2320(14)
L1511821-05I	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	MCP-FE-6010T-10(180)
L1511821-05J	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	SO4-9038(28),NO3-4500(2),FERROUS(1)
L1511821-05K	Plastic 500ml H2SO4 preserved	A	<2	2.9	Y	Absent	TPHOS-4500(28),NH3-4500(28)
L1511821-05L	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)
L1511821-05M	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	MCP-8082-10(365)

*Values in parentheses indicate holding time in days

Project Name:	AEROVOX MAY 2015	**Lab Number:**	L1511821
Project Number:	60422003	**Report Date:**	06/05/15

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

Report Format: Data Usability Report

Project Name:	AEROVOX MAY 2015	**Lab Number:**	L1511821
Project Number:	60422003	**Report Date:**	06/05/15

Data Qualifiers

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	AEROVOX MAY 2015	**Lab Number:**	L1511821
Project Number:	60422003	**Report Date:**	06/05/15

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/29/15

ALPHA Job #: L1511821

Client Information

Client: AECOM
Address: 1155 Elm St, Suite 401, Manchester, NH 03101
Phone: (603) 606-4800
Fax: (603) 401-7322
Email: judith.leclair@aecom.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Aerovox May 2015
Project Location: Aerovox, New Bedford, MA
Project #: 60422003
Project Manager: J. LeClair / M. Wade
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MA MCP Criteria:

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	cVOC x 8260C	PCB	Dissolved Gases	TOC	T-Phos / NH3	Alk, Br[illegible]	SO4, NO3, Ferrous Fe	Total Fe	Sample Specific Comments	TOTAL # BOTTLES
11821-01	TRIP BLANK	5.29.15		TB		2									2
-02	AX-GW-TITL01-052915	↓	0920	GW	BAH	3	2	2	2	1	1	1	1		13
-03	AX-GW-MW24B-052915	↓	1035	GW	JKH	3	2	2	2	1	1	1	1		13
-04	AX-GW-DUP1-052915	↓	1040	GW	JKH	3	2								5
-05	AX-GW-MW21D-052915	↓	1110	GW	JKH	3	2	2	2	1	1	1	1		13

Container Type	V	A	V	V	P	P	P	P
Preservative	B	A	B	D	D	A	A	C

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	5/29/15 1330	[signature]	5/29/15 1330
[signature]	5/29/15 1631	[signature]	5/29/15 1631
[signature]	5/29/15 1735	[signature]	5/29/15 1735

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

Serial_No:06051517:49

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/29/15

ALPHA Job #: L1511821

Client Information

Client: AECOM
Address: 1155 Elm St, Suite 401 Manchester, NH 03101
Phone: (603) 606-4800
~~Fax~~: (603) 401-7322
Email: judith.leclair@aecom.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Aerovox May 2015
Project Location: Aerovox, New Bedford MA
Project #: 60422003
Project Manager: J. LeClair/M. Wade
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MA MCP Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

SAMPLE HANDLING
Filtration ________
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ANALYSIS: CVOC x 8260C | PCB | Dissolved Gases | TOC | TPhos, NH3 | Alk, Bicarb | SO4, NO3, Ferrous Fe | Total Fe

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CVOC x 8260C	PCB	Dissolved Gases	TOC	TPhos, NH3	Alk, Bicarb	SO4, NO3, Ferrous Fe	Total Fe					Sample Specific Comments	TOTAL # BOTTLES
11821. -01	TRIP BLANK	5.29.15		TB		2													2
-02	AX-GW-TITL01-052915	↓	0920	GW	BAH	3	2	2	2	1	1	1	1						13
-03	AX-GW-MW24B-052915	↓	1035	GW	JKH	3	2	2	2	1	1	1	1						13
-04	AX-GW-DUP1-052915	↓	1040	GW	JKH	3	2												5
-05	AX-GW-MW21D-052915	↓	1110	GW	JKH	3	2	2	2	1	1	1	1						13
Container Type						V	A	V	V	P	P	P	P						
Preservative						B	A	B	D	D	A	A	C						

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	5/29/15 1330	[signature]	5/29/15 1330

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1511821

Instrument ID: Voa105.i Calibration Date: 04-JUN-2015 Time: 19:21

Lab File ID: 0604N01 Init. Calib. Date(s): 26-MAY-2 27-MAY-2

Sample No: 8260 CCAL Init. Calib. Times : 21:33 00:20

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.2555	.20446	.1	-20	20	
chloromethane	.34971	.22378	.1	-36	20	F
vinyl chloride	.2854	.25681	.1	-10	20	
chloroethane	.1302	.1494	.1	15	20	
1,1,-dichloroethene	.1655	.18042	.1	9	20	
methylene chloride	.21968	.18752	.1	-15	20	
trans-1,2-dichloroethene	.18644	.19647	.1	5	20	
1,1-dichloroethane	.35407	.39047	.2	10	20	
cis-1,2-dichloroethene	.21004	.21404	.1	2	20	
chloroform	.33291	.36635	.2	10	20	
carbontetrachloride	.28049	.28807	.1	3	20	
1,1,1-trichloroethane	.31843	.35006	.1	10	20	
1,2-dichloroethane	.28164	.29813	.1	6	20	
trichloroethene	.21499	.21647	.2	1	20	
1,2-dichloropropane	.20841	.20805	.1	0	20	
bromodichloromethane	.27357	.2667	.2	-3	20	
cis-1,3-dichloropropene	.34245	.30421	.2	-11	20	
tetrachloroethene	.2648	.29633	.2	12	20	
trans-1,3-dichloropropene	.30885	.35457	.1	15	20	
1,1,2-trichloroethane	.14794	.16897	.1	14	20	
chlorodibromomethane	.20975	.2205	.1	5	20	
1,3-dichloropropane	.32014	.36693	.05	15	20	
1,2-dibromoethane	.18312	.19343	.1	6	20	
chlorobenzene	.73646	.75832	.5	3	20	
1,1,1,2-tetrachloroethane	.22754	.25659	.05	13	20	
bromoform	.22368	.24266	.1	8	20	
1,1,2,2,-tetrachloroethane	.40833	.45136	.3	11	20	
2-chlorotoluene	1.7942	2.1612	.05	20	20	F
4-chorotoluene	1.9455	2.1748	.05	12	20	
1,3-dichlorobenzene	1.1640	1.2032	.6	3	20	
1,4-dichlorobenzene	1.1407	1.1903	.5	4	20	
1,2-dichlorobenzene	1.0586	1.0216	.4	-4	20	
hexachlorobutadiene	.17427	.17012	.05	-2	20	
1,2,4-trichlorobenzene	.42678	.46617	.2	9	20	
dibromofluoromethane	.24523	.2659	.05	8	20	
1,2-dichloroethane-d4	.29784	.32999	.05	11	20	
toluene-d8	1.0800	1.3073	.05	21	20	F

FORM VII MCP-8260-CHLR-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1511821

Instrument ID: Voa105.i Calibration Date: 04-JUN-2015 Time: 19:21

Lab File ID: 0604N01 Init. Calib. Date(s): 26-MAY-2 27-MAY-2

Sample No: 8260 CCAL Init. Calib. Times : 21:33 00:20

Compound	RRF	RRF	MIN RRF	%D	MAX %D
4-bromofluorobenzene	1.1101	1.1008	.05	-1	20

FORM VII MCP-8260-CHLR-10

ANALYTICAL REPORT

Lab Number:	L1511828
Client:	AECOM 1155 Elm Street Manchester, NH 03101
ATTN:	Judith LeClair
Phone:	(603) 893-0616
Project Name:	AEROVOX MAY 2015
Project Number:	60422003
Report Date:	06/05/15

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1511828-01	TRIP BLANK	WATER	NEW BEDFORD, MA	05/28/15 00:00	05/29/15
L1511828-02	AX-GW-MW31B-052815	WATER	NEW BEDFORD, MA	05/28/15 14:05	05/29/15
L1511828-03	AX-GW-MW30B-052815	WATER	NEW BEDFORD, MA	05/28/15 14:20	05/29/15
L1511828-04	AX-GW-MW101B-052815	WATER	NEW BEDFORD, MA	05/28/15 16:00	05/29/15
L1511828-05	AX-GW-MW29B-052815	WATER	NEW BEDFORD, MA	05/28/15 17:00	05/29/15

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828
Project Number: 60422003 **Report Date:** 06/05/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828
Project Number: 60422003 **Report Date:** 06/05/15

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question G:

L1511828-02, -03, -04: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The continuing calibration standard, associated with L1511828-01 through -05, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

Non-MCP Related Narratives

Total Organic Carbon

L1511828-02 and -05 have elevated detection limits due to the dilutions required by the sample matrices.

Iron, Ferrous

L1511828-02, -03, -04, and -05 were analyzed with the method required holding time exceeded.

Alkalinity, Bicarbonate

L1511828-04 has an elevated detection limit due to the dilution required by the sample matrix.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 06/05/15

ORGANICS

VOLATILES

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-01
Client ID: TRIP BLANK
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/04/15 21:12
Analyst: PK

Date Collected: 05/28/15 00:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-01 Date Collected: 05/28/15 00:00

Client ID: TRIP BLANK Date Received: 05/29/15

Sample Location: NEW BEDFORD, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-02
Client ID: AX-GW-MW31B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 06/03/15 12:11
Analyst: MR

Date Collected: 05/28/15 14:05
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	22.0		ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	ND		ug/l	0.500	--	1	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-02 D
Client ID: AX-GW-MW31B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/04/15 23:59
Analyst: PK

Date Collected: 05/28/15 14:05
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	8.0	--	4
1,1-Dichloroethane	ND		ug/l	4.0	--	4
Chloroform	ND		ug/l	4.0	--	4
Carbon tetrachloride	ND		ug/l	4.0	--	4
1,2-Dichloropropane	ND		ug/l	4.0	--	4
Dibromochloromethane	ND		ug/l	4.0	--	4
1,1,2-Trichloroethane	ND		ug/l	4.0	--	4
Tetrachloroethene	ND		ug/l	4.0	--	4
Chlorobenzene	ND		ug/l	4.0	--	4
1,2-Dichloroethane	ND		ug/l	4.0	--	4
1,1,1-Trichloroethane	ND		ug/l	4.0	--	4
Bromodichloromethane	ND		ug/l	4.0	--	4
trans-1,3-Dichloropropene	ND		ug/l	2.0	--	4
cis-1,3-Dichloropropene	ND		ug/l	2.0	--	4
1,3-Dichloropropene, Total	ND		ug/l	2.0	--	4
Bromoform	ND		ug/l	8.0	--	4
1,1,2,2-Tetrachloroethane	ND		ug/l	4.0	--	4
Chloromethane	ND		ug/l	8.0	--	4
Vinyl chloride	ND		ug/l	4.0	--	4
Chloroethane	ND		ug/l	8.0	--	4
1,1-Dichloroethene	ND		ug/l	4.0	--	4
trans-1,2-Dichloroethene	ND		ug/l	4.0	--	4
Trichloroethene	460		ug/l	4.0	--	4
1,2-Dichlorobenzene	ND		ug/l	4.0	--	4
1,3-Dichlorobenzene	ND		ug/l	4.0	--	4
1,4-Dichlorobenzene	ND		ug/l	4.0	--	4
cis-1,2-Dichloroethene	100		ug/l	4.0	--	4
1,2-Dichloroethene, Total	100		ug/l	4.0	--	4
Dichlorodifluoromethane	ND		ug/l	8.0	--	4
1,2-Dibromoethane	ND		ug/l	8.0	--	4

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-02 D
Client ID: AX-GW-MW31B-052815
Sample Location: NEW BEDFORD, MA

Date Collected: 05/28/15 14:05
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	8.0	--	4
1,1,1,2-Tetrachloroethane	ND		ug/l	4.0	--	4
o-Chlorotoluene	ND		ug/l	8.0	--	4
p-Chlorotoluene	ND		ug/l	8.0	--	4
Hexachlorobutadiene	ND		ug/l	2.4	--	4
1,2,4-Trichlorobenzene	ND		ug/l	8.0	--	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-03
Client ID: AX-GW-MW30B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 06/03/15 12:25
Analyst: MR

Date Collected: 05/28/15 14:20
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	2.92		ug/l	0.500	--	1	A
Ethene	3.15		ug/l	0.500	--	1	A
Ethane	0.787		ug/l	0.500	--	1	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-03 D
Client ID: AX-GW-MW30B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/05/15 00:27
Analyst: PK

Date Collected: 05/28/15 14:20
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	20	--	10
1,1-Dichloroethane	ND		ug/l	10	--	10
Chloroform	ND		ug/l	10	--	10
Carbon tetrachloride	ND		ug/l	10	--	10
1,2-Dichloropropane	ND		ug/l	10	--	10
Dibromochloromethane	ND		ug/l	10	--	10
1,1,2-Trichloroethane	ND		ug/l	10	--	10
Tetrachloroethene	ND		ug/l	10	--	10
Chlorobenzene	ND		ug/l	10	--	10
1,2-Dichloroethane	ND		ug/l	10	--	10
1,1,1-Trichloroethane	ND		ug/l	10	--	10
Bromodichloromethane	ND		ug/l	10	--	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	--	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	--	10
1,3-Dichloropropene, Total	ND		ug/l	5.0	--	10
Bromoform	ND		ug/l	20	--	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	--	10
Chloromethane	ND		ug/l	20	--	10
Vinyl chloride	ND		ug/l	10	--	10
Chloroethane	ND		ug/l	20	--	10
1,1-Dichloroethene	ND		ug/l	10	--	10
trans-1,2-Dichloroethene	ND		ug/l	10	--	10
Trichloroethene	1400		ug/l	10	--	10
1,2-Dichlorobenzene	ND		ug/l	10	--	10
1,3-Dichlorobenzene	ND		ug/l	10	--	10
1,4-Dichlorobenzene	ND		ug/l	10	--	10
cis-1,2-Dichloroethene	300		ug/l	10	--	10
1,2-Dichloroethene, Total	300		ug/l	10	--	10
Dichlorodifluoromethane	ND		ug/l	20	--	10
1,2-Dibromoethane	ND		ug/l	20	--	10

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-03 D
Client ID: AX-GW-MW30B-052815
Sample Location: NEW BEDFORD, MA

Date Collected: 05/28/15 14:20
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	20	--	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	--	10
o-Chlorotoluene	ND		ug/l	20	--	10
p-Chlorotoluene	ND		ug/l	20	--	10
Hexachlorobutadiene	ND		ug/l	6.0	--	10
1,2,4-Trichlorobenzene	ND		ug/l	20	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	123		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-04
Client ID: AX-GW-MW101B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 06/03/15 12:40
Analyst: MR

Date Collected: 05/28/15 16:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	33.2		ug/l	0.500	--	1	A
Ethene	6.35		ug/l	0.500	--	1	A
Ethane	1.41		ug/l	0.500	--	1	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-04 D
Client ID: AX-GW-MW101B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/05/15 00:54
Analyst: PK

Date Collected: 05/28/15 16:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	400	--	200
1,1-Dichloroethane	ND		ug/l	200	--	200
Chloroform	ND		ug/l	200	--	200
Carbon tetrachloride	ND		ug/l	200	--	200
1,2-Dichloropropane	ND		ug/l	200	--	200
Dibromochloromethane	ND		ug/l	200	--	200
1,1,2-Trichloroethane	ND		ug/l	200	--	200
Tetrachloroethene	ND		ug/l	200	--	200
Chlorobenzene	ND		ug/l	200	--	200
1,2-Dichloroethane	ND		ug/l	200	--	200
1,1,1-Trichloroethane	ND		ug/l	200	--	200
Bromodichloromethane	ND		ug/l	200	--	200
trans-1,3-Dichloropropene	ND		ug/l	100	--	200
cis-1,3-Dichloropropene	ND		ug/l	100	--	200
1,3-Dichloropropene, Total	ND		ug/l	100	--	200
Bromoform	ND		ug/l	400	--	200
1,1,2,2-Tetrachloroethane	ND		ug/l	200	--	200
Chloromethane	ND		ug/l	400	--	200
Vinyl chloride	ND		ug/l	200	--	200
Chloroethane	ND		ug/l	400	--	200
1,1-Dichloroethene	ND		ug/l	200	--	200
trans-1,2-Dichloroethene	ND		ug/l	200	--	200
Trichloroethene	16000		ug/l	200	--	200
1,2-Dichlorobenzene	ND		ug/l	200	--	200
1,3-Dichlorobenzene	ND		ug/l	200	--	200
1,4-Dichlorobenzene	ND		ug/l	200	--	200
cis-1,2-Dichloroethene	2300		ug/l	200	--	200
1,2-Dichloroethene, Total	2300		ug/l	200	--	200
Dichlorodifluoromethane	ND		ug/l	400	--	200
1,2-Dibromoethane	ND		ug/l	400	--	200

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-04 D
Client ID: AX-GW-MW101B-052815
Sample Location: NEW BEDFORD, MA

Date Collected: 05/28/15 16:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	400	--	200
1,1,1,2-Tetrachloroethane	ND		ug/l	200	--	200
o-Chlorotoluene	ND		ug/l	400	--	200
p-Chlorotoluene	ND		ug/l	400	--	200
Hexachlorobutadiene	ND		ug/l	120	--	200
1,2,4-Trichlorobenzene	ND		ug/l	400	--	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	122		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-05
Client ID: AX-GW-MW29B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 06/03/15 12:55
Analyst: MR

Date Collected: 05/28/15 17:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	4.09		ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	ND		ug/l	0.500	--	1	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-05
Client ID: AX-GW-MW29B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8260C
Analytical Date: 06/05/15 01:22
Analyst: PK

Date Collected: 05/28/15 17:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	68		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	5.2		ug/l	1.0	--	1
1,2-Dichloroethene, Total	5.2		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-05 Date Collected: 05/28/15 17:00

Client ID: AX-GW-MW29B-052815 Date Received: 05/29/15

Sample Location: NEW BEDFORD, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	122		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 06/03/15 11:08
Analyst: MR

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 02-05 Batch: WG790350-4						
Methane	ND		ug/l	0.500	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 06/04/15 20:44
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG790962-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,3-Dichloropropene, Total	ND		ug/l	0.50	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
1,2-Dichloroethene, Total	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 06/04/15 20:44
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-05 Batch: WG790962-3					
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511828

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-05 Batch: WG790350-1									
Methane	105		-		80-120	-		25	A
Ethene	111		-		80-120	-		25	A
Ethane	109		-		80-120	-		25	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511828

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG790962-1 WG790962-2								
Methylene chloride	85		85		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		111		70-130	1		20
Carbon tetrachloride	103		103		70-130	0		20
1,2-Dichloropropane	100		101		70-130	1		20
Dibromochloromethane	105		107		70-130	2		20
1,1,2-Trichloroethane	114		117		70-130	3		20
Tetrachloroethene	112		112		70-130	0		20
Chlorobenzene	103		103		70-130	0		20
1,2-Dichloroethane	106		107		70-130	1		20
1,1,1-Trichloroethane	110		110		70-130	0		20
Bromodichloromethane	98		99		70-130	1		20
trans-1,3-Dichloropropene	115		117		70-130	2		20
cis-1,3-Dichloropropene	89		90		70-130	1		20
Bromoform	108		113		70-130	5		20
1,1,2,2-Tetrachloroethane	110		114		70-130	4		20
Chloromethane	**64**	Q	**57**	Q	70-130	12		20
Vinyl chloride	90		88		70-130	2		20
Chloroethane	115		109		70-130	5		20
1,1-Dichloroethene	109		109		70-130	0		20
trans-1,2-Dichloroethene	105		105		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511828

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-05 Batch: WG790962-1 WG790962-2								
Trichloroethene	101		101		70-130	0		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,3-Dichlorobenzene	103		104		70-130	1		20
1,4-Dichlorobenzene	104		106		70-130	2		20
cis-1,2-Dichloroethene	102		102		70-130	0		20
Dichlorodifluoromethane	80		79		70-130	1		20
1,2-Dibromoethane	106		108		70-130	2		20
1,3-Dichloropropane	115		117		70-130	2		20
1,1,1,2-Tetrachloroethane	113		113		70-130	0		20
o-Chlorotoluene	120		121		70-130	1		20
p-Chlorotoluene	112		111		70-130	1		20
Hexachlorobutadiene	98		97		70-130	1		20
1,2,4-Trichlorobenzene	109		111		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		113		70-130
Toluene-d8	121		121		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	108		110		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-05 QC Batch ID: WG790350-6 QC Sample: L1511713-14 Client ID: MS Sample													
Methane	4.35	54.6	60.0	102		-	-		80-120	-		25	A
Ethene	ND	95.5	104	109		-	-		80-120	-		25	A
Ethane	ND	102	108	105		-	-		80-120	-		25	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 02-05 QC Batch ID: WG790350-5 QC Sample: L1511828-04 Client ID: AX-GW-MW101B-052815							
Methane	33.2	38.2	ug/l	14		25	A
Ethene	6.35	6.98	ug/l	9		25	A
Ethane	1.41	1.51	ug/l	7		25	A

PCBS

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-02
Client ID: AX-GW-MW31B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8082
Analytical Date: 06/02/15 06:44
Analyst: JW

Date Collected: 05/28/15 14:05
Date Received: 05/29/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 06/01/15 11:53
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/15
Cleanup Method: EPA 3660B
Cleanup Date: 06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-03
Client ID: AX-GW-MW30B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8082
Analytical Date: 06/02/15 07:00
Analyst: JW

Date Collected: 05/28/15 14:20
Date Received: 05/29/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 06/01/15 11:53
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/15
Cleanup Method: EPA 3660B
Cleanup Date: 06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	46		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-04
Client ID: AX-GW-MW101B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water
Analytical Method: 97,8082
Analytical Date: 06/02/15 07:15
Analyst: JW

Date Collected: 05/28/15 16:00
Date Received: 05/29/15
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 06/01/15 11:53
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/15
Cleanup Method: EPA 3660B
Cleanup Date: 06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	3.23		ug/l	0.250	--	1	B
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	3.23		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID:	L1511828-05	Date Collected:	05/28/15 17:00
Client ID:	AX-GW-MW29B-052815	Date Received:	05/29/15
Sample Location:	NEW BEDFORD, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8082	Extraction Date:	06/01/15 11:53
Analytical Date:	06/02/15 07:30	Cleanup Method:	EPA 3665A
Analyst:	JW	Cleanup Date:	06/01/15
		Cleanup Method:	EPA 3660B
		Cleanup Date:	06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
MCP Polychlorinated Biphenyls - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.250	--	1	A
Aroclor 1262	ND		ug/l	0.250	--	1	A
Aroclor 1268	ND		ug/l	0.250	--	1	A
PCBs, Total	ND		ug/l	0.250	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082A
Analytical Date: 06/02/15 09:03
Analyst: JW

Extraction Method: EPA 3510C
Extraction Date: 06/01/15 11:53
Cleanup Method: EPA 3665A
Cleanup Date: 06/01/15
Cleanup Method: EPA 3660B
Cleanup Date: 06/01/15

Parameter	Result	Qualifier	Units	RL	MDL	Column
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 02-05 Batch: WG789617-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.250	--	A
Aroclor 1262	ND		ug/l	0.250	--	A
Aroclor 1268	ND		ug/l	0.250	--	A
PCBs, Total	ND		ug/l	0.250	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	102		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	91		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511828

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 02-05 Batch: WG789617-2 WG789617-3									
Aroclor 1016	80		76		40-140	5		20	A
Aroclor 1260	88		85		40-140	4		20	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		64		30-150	A
Decachlorobiphenyl	116		110		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		72		30-150	B
Decachlorobiphenyl	98		93		30-150	B

METALS

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-02 Date Collected: 05/28/15 14:05

Client ID: AX-GW-MW31B-052815 Date Received: 05/29/15

Sample Location: NEW BEDFORD, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Iron, Total	0.60		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 19:37	EPA 3005A	97,6010C	TT

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-03 Date Collected: 05/28/15 14:20

Client ID: AX-GW-MW30B-052815 Date Received: 05/29/15

Sample Location: NEW BEDFORD, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Iron, Total	18		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 19:41	EPA 3005A	97,6010C	TT

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-04 Date Collected: 05/28/15 16:00

Client ID: AX-GW-MW101B-052815 Date Received: 05/29/15

Sample Location: NEW BEDFORD, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Iron, Total	0.21		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 19:45	EPA 3005A	97,6010C	TT

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-05 Date Collected: 05/28/15 17:00

Client ID: AX-GW-MW29B-052815 Date Received: 05/29/15

Sample Location: NEW BEDFORD, MA Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Total Metals - Westborough Lab											
Iron, Total	0.48		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 19:49	EPA 3005A	97,6010C	TT

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals - Westborough Lab for sample(s): 02-05 Batch: WG789537-1										
Iron, Total	ND		mg/l	0.05	--	1	06/01/15 13:13	06/01/15 18:24	97,6010C	TT

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511828

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Total Metals - Westborough Lab Associated sample(s): 02-05 Batch: WG789537-2 WG789537-3								
Iron, Total	98		98		80-120	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-02
Client ID: AX-GW-MW31B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water

Date Collected: 05/28/15 14:05
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Bicarbonate	ND		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
Nitrogen, Ammonia	0.170		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:33	30,4500NH3-BH	ML
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	05/29/15 23:05	30,4500NO3-F	MR
Phosphorus, Total	ND		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 12:08	30,4500P-E	SD
Sulfate	280		mg/l	250	--	25	06/01/15 13:30	06/01/15 13:30	1,9038	MP
Total Organic Carbon	ND		mg/l	5.0	--	10	-	06/01/15 07:27	1,9060A	DW
Iron, Ferrous	ND		mg/l	0.50	--	1	-	05/30/15 03:06	30,3500Fe-D	LH

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-03
Client ID: AX-GW-MW30B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water

Date Collected: 05/28/15 14:20
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Bicarbonate	68.7		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
Nitrogen, Ammonia	0.333		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:34	30,4500NH3-BH	ML
Nitrogen, Nitrate	1.92		mg/l	0.100	--	1	-	05/29/15 23:06	30,4500NO3-F	MR
Phosphorus, Total	0.051		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 12:09	30,4500P-E	SD
Sulfate	24.		mg/l	10	--	1	06/01/15 13:30	06/01/15 13:30	1,9038	MP
Total Organic Carbon	1.9		mg/l	1.0	--	2	-	06/01/15 07:27	1,9060A	DW
Iron, Ferrous	ND		mg/l	0.50	--	1	-	05/30/15 03:06	30,3500Fe-D	LH

Project Name: AEROVOX MAY 2015
Project Number: 60422003
Lab Number: L1511828
Report Date: 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-04
Client ID: AX-GW-MW101B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water

Date Collected: 05/28/15 16:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Bicarbonate	ND		mg CaCO3/L	5.00	NA	2.5	-	06/01/15 08:33	30,2320B	SG
Nitrogen, Ammonia	0.078		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:35	30,4500NH3-BH	ML
Nitrogen, Nitrate	0.475		mg/l	0.100	--	1	-	05/29/15 23:07	30,4500NO3-F	MR
Phosphorus, Total	ND		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 12:12	30,4500P-E	SD
Sulfate	40.		mg/l	10	--	1	06/01/15 13:30	06/01/15 13:30	1,9038	MP
Total Organic Carbon	7.5		mg/l	2.5	--	5	-	06/01/15 07:27	1,9060A	DW
Iron, Ferrous	ND		mg/l	0.50	--	1	-	05/30/15 03:07	30,3500Fe-D	LH

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

SAMPLE RESULTS

Lab ID: L1511828-05
Client ID: AX-GW-MW29B-052815
Sample Location: NEW BEDFORD, MA
Matrix: Water

Date Collected: 05/28/15 17:00
Date Received: 05/29/15
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Bicarbonate	126.		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:36	30,4500NH3-BH	ML
Nitrogen, Nitrate	1.05		mg/l	0.100	--	1	-	05/29/15 23:09	30,4500NO3-F	MR
Phosphorus, Total	ND		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 12:13	30,4500P-E	SD
Sulfate	80.		mg/l	50	--	5	06/01/15 13:30	06/01/15 13:30	1,9038	MP
Total Organic Carbon	ND		mg/l	1.0	--	2	-	06/01/15 07:27	1,9060A	DW
Iron, Ferrous	ND		mg/l	0.50	--	1	-	05/30/15 03:07	30,3500Fe-D	LH

Project Name: AEROVOX MAY 2015 **Lab Number:** L1511828

Project Number: 60422003 **Report Date:** 06/05/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG789239-1										
Nitrogen, Nitrate	ND		mg/l	0.100	--	1	-	05/29/15 22:32	30,4500NO3-F	MR
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG789250-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	05/29/15 18:00	06/01/15 14:21	30,4500NH3-BH	ML
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG789326-1										
Iron, Ferrous	ND		mg/l	0.50	--	1	-	05/30/15 03:03	30,3500Fe-D	LH
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG789530-1										
Total Organic Carbon	ND		mg/l	0.50	--	1	-	06/01/15 07:27	1,9060A	DW
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG789559-1										
Sulfate	ND		mg/l	10	--	1	06/01/15 13:30	06/01/15 13:30	1,9038	MP
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG789698-1										
Alkalinity, Bicarbonate	ND		mg CaCO3/L	2.00	NA	1	-	06/01/15 08:33	30,2320B	SG
General Chemistry - Westborough Lab for sample(s): 02-05 Batch: WG789998-1										
Phosphorus, Total	ND		mg/l	0.010	--	1	06/02/15 11:00	06/03/15 11:46	30,4500P-E	SD

Lab Control Sample Analysis

Batch Quality Control

Project Name: AEROVOX MAY 2015

Project Number: 60422003

Lab Number: L1511828

Report Date: 06/05/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG789239-2								
Nitrogen, Nitrate	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG789250-2								
Nitrogen, Ammonia	100		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG789326-2								
Iron, Ferrous	107		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG789530-2								
Total Organic Carbon	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG789559-2								
Sulfate	95		-		84-119	-		
General Chemistry - Westborough Lab Associated sample(s): 02-05 Batch: WG789998-2								
Phosphorus, Total	103		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789239-4 QC Sample: L1511801-07 Client ID: MS Sample												
Nitrogen, Nitrate	1.64	4	5.54	98		-	-		83-113	-		17
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789250-4 QC Sample: L1511776-01 Client ID: MS Sample												
Nitrogen, Ammonia	ND	4	4.11	103		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789326-4 QC Sample: L1511828-05 Client ID: AX-GW-MW29B-052815												
Iron, Ferrous	ND	1	0.95	95		-	-			-		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789530-4 QC Sample: L1511828-04 Client ID: AX-GW-MW101B-052815												
Total Organic Carbon	7.5	20	27	96		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789559-4 QC Sample: L1511801-11 Client ID: MS Sample												
Sulfate	ND	20	26	130		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789998-3 QC Sample: L1511828-05 Client ID: AX-GW-MW29B-052815												
Phosphorus, Total	ND	0.5	0.541	108		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789239-3 QC Sample: L1511801-07 Client ID: DUP Sample						
Nitrogen, Nitrate	1.64	1.64	mg/l	0		17
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789250-3 QC Sample: L1511776-01 Client ID: DUP Sample						
Nitrogen, Ammonia	ND	0.075	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789326-3 QC Sample: L1511821-03 Client ID: DUP Sample						
Iron, Ferrous	0.99	0.92	mg/l	7		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789530-3 QC Sample: L1511828-04 Client ID: AX-GW-MW101B-052815						
Total Organic Carbon	7.5	7.6	mg/l	1		20
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789559-3 QC Sample: L1511801-11 Client ID: DUP Sample						
Sulfate	ND	ND	mg/l	NC		14
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789698-2 QC Sample: L1511821-05 Client ID: DUP Sample						
Alkalinity, Bicarbonate	85.5	86.2	mg CaCO3/L	1		
General Chemistry - Westborough Lab Associated sample(s): 02-05 QC Batch ID: WG789998-4 QC Sample: L1511828-05 Client ID: AX-GW-MW29B-052815						
Phosphorus, Total	ND	ND	mg/l	NC		20

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1511828-01A	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-01B	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-02A	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-02B	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-02C	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-02D	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1511828-02E	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1511828-02F	20ml Vial HCl preserved	A	N/A	2.4	Y	Absent	DISSGAS(14)
L1511828-02G	20ml Vial HCl preserved	A	N/A	2.4	Y	Absent	DISSGAS(14)
L1511828-02H	Plastic 120ml unpreserved w/No H	A	N/A	2.4	Y	Absent	ALK-HCO3-2320(14)
L1511828-02I	Plastic 120ml HNO3 preserved	A	<2	2.4	Y	Absent	MCP-FE-6010T-10(180)
L1511828-02J	Plastic 250ml unpreserved	A	7	2.4	Y	Absent	SO4-9038(28),NO3-4500(2),FERROUS(1)
L1511828-02K	Plastic 500ml H2SO4 preserved	A	<2	2.4	Y	Absent	TPHOS-4500(28),NH3-4500(28)
L1511828-02L	Amber 1000ml unpreserved	A	7	2.4	Y	Absent	MCP-8082-10(365)
L1511828-02M	Amber 1000ml unpreserved	A	7	2.4	Y	Absent	MCP-8082-10(365)
L1511828-03A	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-03B	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-03C	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-03D	Vial H2SO4 preserved	B	N/A	3.2	Y	Absent	TOC-9060(28)
L1511828-03E	Vial H2SO4 preserved	B	N/A	3.2	Y	Absent	TOC-9060(28)
L1511828-03F	20ml Vial HCl preserved	B	N/A	3.2	Y	Absent	DISSGAS(14)
L1511828-03G	20ml Vial HCl preserved	B	N/A	3.2	Y	Absent	DISSGAS(14)
L1511828-03H	Plastic 120ml unpreserved w/No H	B	N/A	3.2	Y	Absent	ALK-HCO3-2320(14)
L1511828-03I	Plastic 120ml HNO3 preserved	B	<2	3.2	Y	Absent	MCP-FE-6010T-10(180)
L1511828-03J	Plastic 250ml unpreserved	B	7	3.2	Y	Absent	SO4-9038(28),NO3-4500(2),FERROUS(1)

*Values in parentheses indicate holding time in days

Project Name: AEROVOX MAY 2015
Project Number: 60422003

Lab Number: L1511828
Report Date: 06/05/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1511828-03K	Plastic 500ml H2SO4 preserved	B	<2	3.2	Y	Absent	TPHOS-4500(28),NH3-4500(28)
L1511828-03L	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8082-10(365)
L1511828-03M	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8082-10(365)
L1511828-04A	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-04B	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-04C	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-04D	Vial H2SO4 preserved	B	N/A	3.2	Y	Absent	TOC-9060(28)
L1511828-04E	Vial H2SO4 preserved	B	N/A	3.2	Y	Absent	TOC-9060(28)
L1511828-04F	20ml Vial HCl preserved	B	N/A	3.2	Y	Absent	DISSGAS(14)
L1511828-04G	20ml Vial HCl preserved	B	N/A	3.2	Y	Absent	DISSGAS(14)
L1511828-04H	Plastic 120ml unpreserved w/No H	B	N/A	3.2	Y	Absent	ALK-HCO3-2320(14)
L1511828-04I	Plastic 120ml HNO3 preserved	B	<2	3.2	Y	Absent	MCP-FE-6010T-10(180)
L1511828-04J	Plastic 250ml unpreserved	B	7	3.2	Y	Absent	SO4-9038(28),NO3-4500(2),FERROUS(1)
L1511828-04K	Plastic 500ml H2SO4 preserved	B	<2	3.2	Y	Absent	TPHOS-4500(28),NH3-4500(28)
L1511828-04L	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8082-10(365)
L1511828-04M	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8082-10(365)
L1511828-05A	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-05B	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-05C	Vial HCl preserved	B	N/A	3.2	Y	Absent	MCP-8260-CHLR-10(14)
L1511828-05D	Vial H2SO4 preserved	B	N/A	3.2	Y	Absent	TOC-9060(28)
L1511828-05E	Vial H2SO4 preserved	B	N/A	3.2	Y	Absent	TOC-9060(28)
L1511828-05F	20ml Vial HCl preserved	B	N/A	3.2	Y	Absent	DISSGAS(14)
L1511828-05G	20ml Vial HCl preserved	B	N/A	3.2	Y	Absent	DISSGAS(14)
L1511828-05H	Plastic 120ml unpreserved w/No H	B	N/A	3.2	Y	Absent	ALK-HCO3-2320(14)
L1511828-05I	Plastic 120ml HNO3 preserved	B	<2	3.2	Y	Absent	MCP-FE-6010T-10(180)
L1511828-05J	Plastic 250ml unpreserved	B	7	3.2	Y	Absent	SO4-9038(28),NO3-4500(2),FERROUS(1)
L1511828-05K	Plastic 500ml H2SO4 preserved	B	<2	3.2	Y	Absent	TPHOS-4500(28),NH3-4500(28)
L1511828-05L	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8082-10(365)
L1511828-05M	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	MCP-8082-10(365)

*Values in parentheses indicate holding time in days

Project Name:	AEROVOX MAY 2015	**Lab Number:**	L1511828
Project Number:	60422003	**Report Date:**	06/05/15

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

Report Format: Data Usability Report

Project Name:	AEROVOX MAY 2015	**Lab Number:**	L1511828
Project Number:	60422003	**Report Date:**	06/05/15

Data Qualifiers

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name:	AEROVOX MAY 2015	**Lab Number:**	L1511828
Project Number:	60422003	**Report Date:**	06/05/15

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/29/15

ALPHA Job #: L1511828

Project Information

Project Name: Aerovox May 2015
Project Location: New Bedford, MA
Project #: 60422003
Project Manager: J. LeClair/M. Wade
ALPHA Quote #:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Client Information

Client: AECOM
Address: 1155 Elm St, Suite 401
Manchester, NH 03101
Phone: (603) 606-4800
Fax: (603) 401-7322
Email: judith.leClair@aecom.com
☐ These samples have been previously analyzed by Alpha

Regulatory Requirements/Report Limits

State /Fed Program: MA MCP Criteria

MA MCP PRESUMPTIVE CERTAINTY — CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Other Project Specific Requirements/Comments/Detection Limits:
If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

SAMPLE HANDLING
Filtration ____
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CVOC X 8260C	PCB	Dissolved Gases	TOC	T Phos, NH3	Alk, Bicarb	SO4, NO3, Ferrous Fe	Total Fe	Sample Specific Comments	TOTAL # BOTTLES
11828-01	TRIP BLANK	5.28.15		TB		2									2
02	AX-GW-MW31B-052815	↓	1405	GW	BAH	3	2	2	2	1	1	1	1		13
03	AX-GW-MW30B-052815	↓	1420	GW	JKH	3	2	2	2	1	1	1	1		13
04	AX-GW-MW101B-052815	↓	1600	GW	JKH	3	2	2	2	1	1	1	1		13
05	AX-GW-MW29B-052815	↓	1700	GW	BAH	3	2	2	2	1	1	1	1		13

Container Type	V	A	V	V	P	P	P	P
Preservative	B	A	B	D	D	A	A	C

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	5/29/15 10:30	[signature]	5/29/15 10:30
[signature]	5/29/15 1621	[signature]	5/29/15 1621
[signature]	5/30/15 0400	Mansfield Lab	5/30/15 0400

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

Serial_No:06051517:15

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 5/29/15

ALPHA Job #: L1511828

Project Information

Project Name: Aerovox May 2015
Project Location: New Bedford, MA
Project #: 60422003
Project Manager: J.LeClair/M.Wade
ALPHA Quote #:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Client Information

Client: AECOM
Address: 1155 Elm St, Suite 401
Manchester, NH 03101
Phone: (603) 606-4800
Fax: (603) 401-7322
Email: judith.leClair@aecom.com
☐ These samples have been previously analyzed by Alpha

Regulatory Requirements/Report Limits

State /Fed Program: MA MCP Criteria:

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Other Project Specific Requirements/Comments/Detection Limits:
If MS is required , indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

SAMPLE HANDLING
Filtration________
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	CVOC x 8260C	PCB	Dissolved Gases	TOC	TPhos, NH3	Alk, Bicarb	SO4, NO3, Ferrous Fe	Total Fe	Sample Specific Comments	TOTAL # BOTTLES
11828-01	TRIP BLANK	5.28.15		TB		2									2
02	AX-GW-MW31B-052815	↓	1405	GW	BAH	3	2	2	2	1	1	1	1		13
03	AX-GW-MW30B-052815	↓	1420	GW	JKH	3	2	2	2	1	1	1	1		13
04	AX-GW-MW101B-052815	↓	1600	GW	JKH	3	2	2	2	1	1	1	1		13
05	AX-GW-MW29B-052815	↓	1700	GW	BAH	3	2	2	2	1	1	1	1		13

	CVOC x 8260C	PCB	Dissolved Gases	TOC	TPhos, NH3	Alk, Bicarb	SO4, NO3, Ferrous Fe	Total Fe
Container Type	V	A	V	V	P	P	P	P
Preservative	B	A	B	D	D	A	A	C

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Jeffrey A. Harshman	5/29/15 10³⁰	[illegible]	5/29/15 10:30 AAL
[illegible]	5/29/15 1621	[illegible]	5/29/15 1621

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1511828

Instrument ID: Voa105.i Calibration Date: 04-JUN-2015 Time: 19:21

Lab File ID: 0604N01 Init. Calib. Date(s): 26-MAY-2 27-MAY-2

Sample No: 8260 CCAL Init. Calib. Times : 21:33 00:20

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.2555	.20446	.1	-20	20	
chloromethane	.34971	.22378	.1	-36	20	F
vinyl chloride	.2854	.25681	.1	-10	20	
chloroethane	.1302	.1494	.1	15	20	
1,1,-dichloroethene	.1655	.18042	.1	9	20	
methylene chloride	.21968	.18752	.1	-15	20	
trans-1,2-dichloroethene	.18644	.19647	.1	5	20	
1,1-dichloroethane	.35407	.39047	.2	10	20	
cis-1,2-dichloroethene	.21004	.21404	.1	2	20	
chloroform	.33291	.36635	.2	10	20	
carbontetrachloride	.28049	.28807	.1	3	20	
1,1,1-trichloroethane	.31843	.35006	.1	10	20	
1,2-dichloroethane	.28164	.29813	.1	6	20	
trichloroethene	.21499	.21647	.2	1	20	
1,2-dichloropropane	.20841	.20805	.1	0	20	
bromodichloromethane	.27357	.2667	.2	-3	20	
cis-1,3-dichloropropene	.34245	.30421	.2	-11	20	
tetrachloroethene	.2648	.29633	.2	12	20	
trans-1,3-dichloropropene	.30885	.35457	.1	15	20	
1,1,2-trichloroethane	.14794	.16897	.1	14	20	
chlorodibromomethane	.20975	.2205	.1	5	20	
1,3-dichloropropane	.32014	.36693	.05	15	20	
1,2-dibromoethane	.18312	.19343	.1	6	20	
chlorobenzene	.73646	.75832	.5	3	20	
1,1,1,2-tetrachloroethane	.22754	.25659	.05	13	20	
bromoform	.22368	.24266	.1	8	20	
1,1,2,2,-tetrachloroethane	.40833	.45136	.3	11	20	
2-chlorotoluene	1.7942	2.1612	.05	20	20	F
4-chorotoluene	1.9455	2.1748	.05	12	20	
1,3-dichlorobenzene	1.1640	1.2032	.6	3	20	
1,4-dichlorobenzene	1.1407	1.1903	.5	4	20	
1,2-dichlorobenzene	1.0586	1.0216	.4	-4	20	
hexachlorobutadiene	.17427	.17012	.05	-2	20	
1,2,4-trichlorobenzene	.42678	.46617	.2	9	20	
dibromofluoromethane	.24523	.2659	.05	8	20	
1,2-dichloroethane-d4	.29784	.32999	.05	11	20	
toluene-d8	1.0800	1.3073	.05	21	20	F

FORM VII MCP-8260-CHLR-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1511828

Instrument ID: Voa105.i Calibration Date: 04-JUN-2015 Time: 19:21

Lab File ID: 0604N01 Init. Calib. Date(s): 26-MAY-2 27-MAY-2

Sample No: 8260 CCAL Init. Calib. Times : 21:33 00:20

Compound	RRF	RRF	MIN RRF	%D	MAX %D
4-bromofluorobenzene	1.1101	1.1008	.05	-1	20

FORM VII MCP-8260-CHLR-10

Appendix C

Hager-Richter Geophysical Logging Report

HAGER-RICHTER
GEOSCIENCE, INC.

CONSULTANTS IN GEOLOGY AND GEOPHYSICS
8 INDUSTRIAL WAY - D10
SALEM, NEW HAMPSHIRE 03079
TELEPHONE (603) 893-9944
FAX (603) 893-8313

BOREHOLE GEOPHYSICAL LOGGING - DATA REPORT
FORMER AEROVOX PROPERTY
740 BELLEVILLE AVENUE
NEW BEDFORD, MASSACHUSETTS

Prepared for:

AECOM
1155 Elm Street, Suite 401
Manchester, New Hampshire 03101

Prepared by:

Hager-Richter Geoscience, Inc.
8 Industrial Way - D10
Salem, New Hampshire 03079

File 15RG09
July, 2015

Tadpole	Structure Category (Symbol Color)	Description
	Fracture Rank 1 (Light Blue)	Minor Fracture - not distinct and may not be continuous around the borehole
	Fracture Rank 2 (Blue)	Intermediate Fracture - distinct and continuous around the borehole with little or no apparent aperture
	Fracture Rank 3 (Red)	Major Fracture - distinct and continuous around the borehole with apparent aperture

Figure 1. Key to bedrock structure categories.

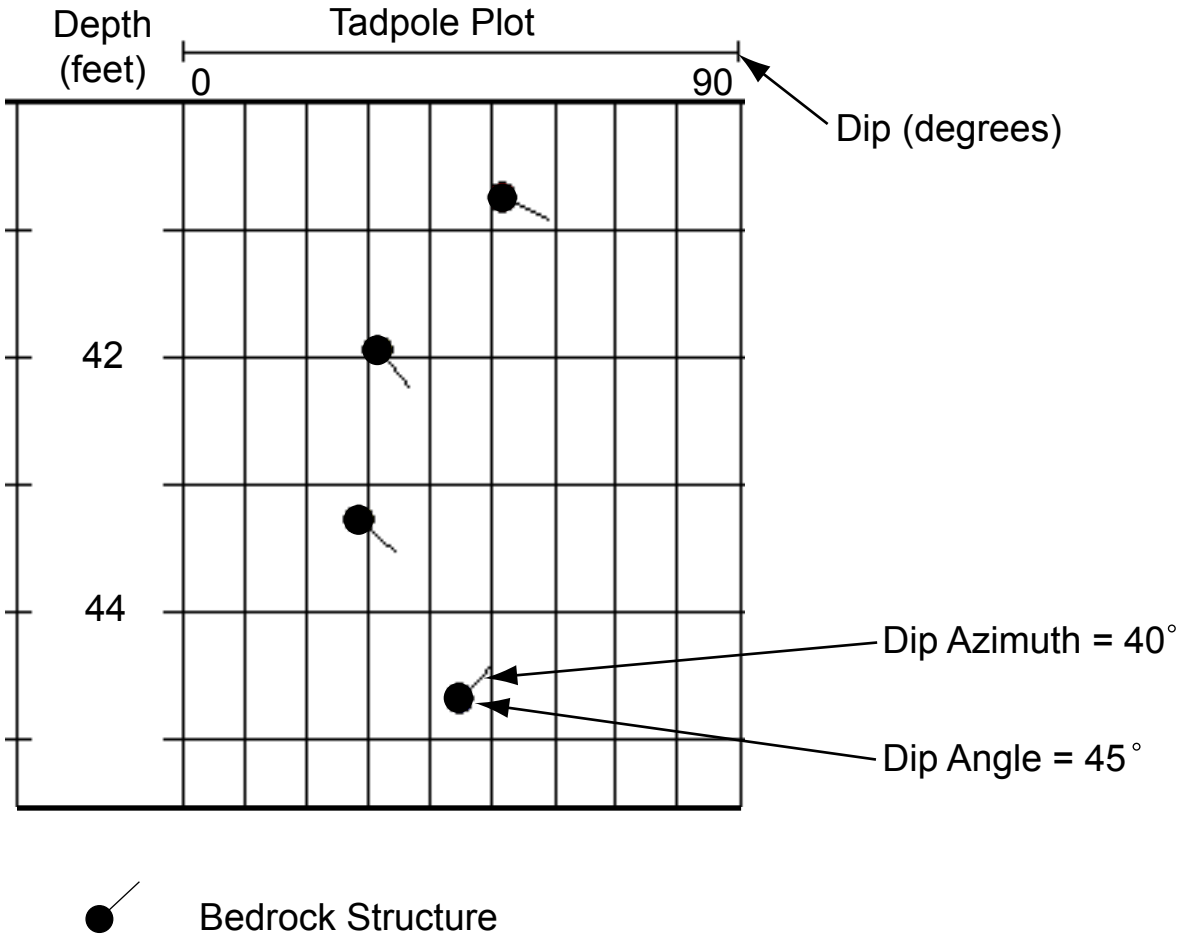


Figure 2. Tadpole plot explanation. The orientation of the bedrock structures is graphically displayed by a tadpole consisting of a circle, the head, and a line, the tail. The position of the head, left to right on the tadpole plot, gives the dip angle of the structure. The left side of the track indicates a dip angle of 0°, and the right side of the track indicates a dip angle of 90° from horizontal. The orientation of the tail gives the dip azimuth of the structure and can be read like a compass. The tail pointing directly up is 0°, north.

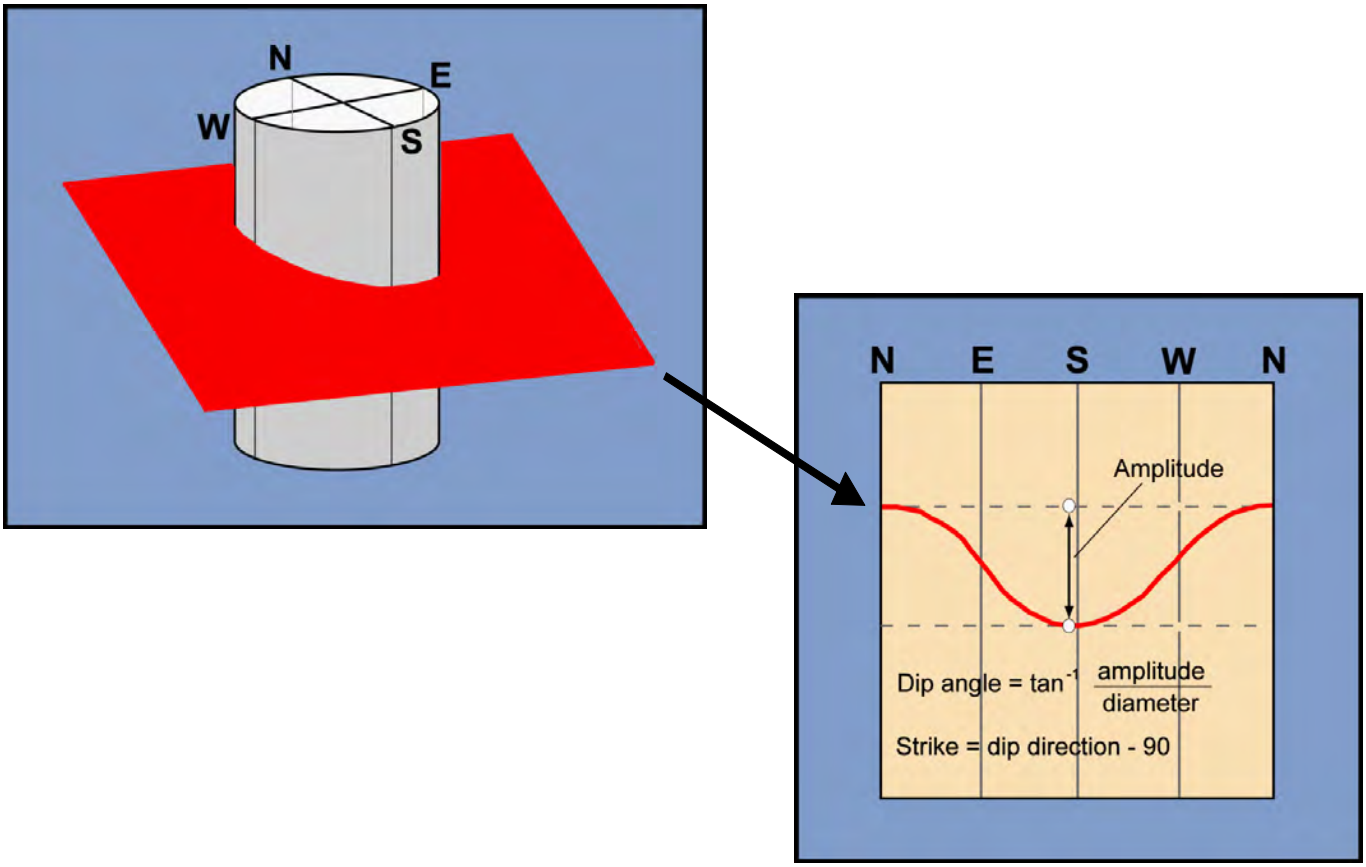


Figure 3. Televiewer explanation. The image on the left depicts a planar structure in red, such as a fracture or bedding plane, intersected by a borehole. The image on the right depicts the same structure unwrapped as it would be displayed in an optical televiewer (OTV) or acoustic televiewer (ATV) log.

Figure modified from: Garfield, R.L., Day-Lewis, F.D., Gray, M.B., Johnson, C.D., Williams, J.H. and Day-Lewis, A.D.F., 2003, Fractured-Rock Aquifer Characterization within a Regional Geologic Context: Results from the Bucknell University Hydrogeophysics Test Site, GSA Northeastern Section, 38th Annual Meeting, Paper No. 25-19.

HAGER-RICHTER GEOSCIENCE, INC.

8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-29B - BOREHOLE GEOPHYSICAL LOGS

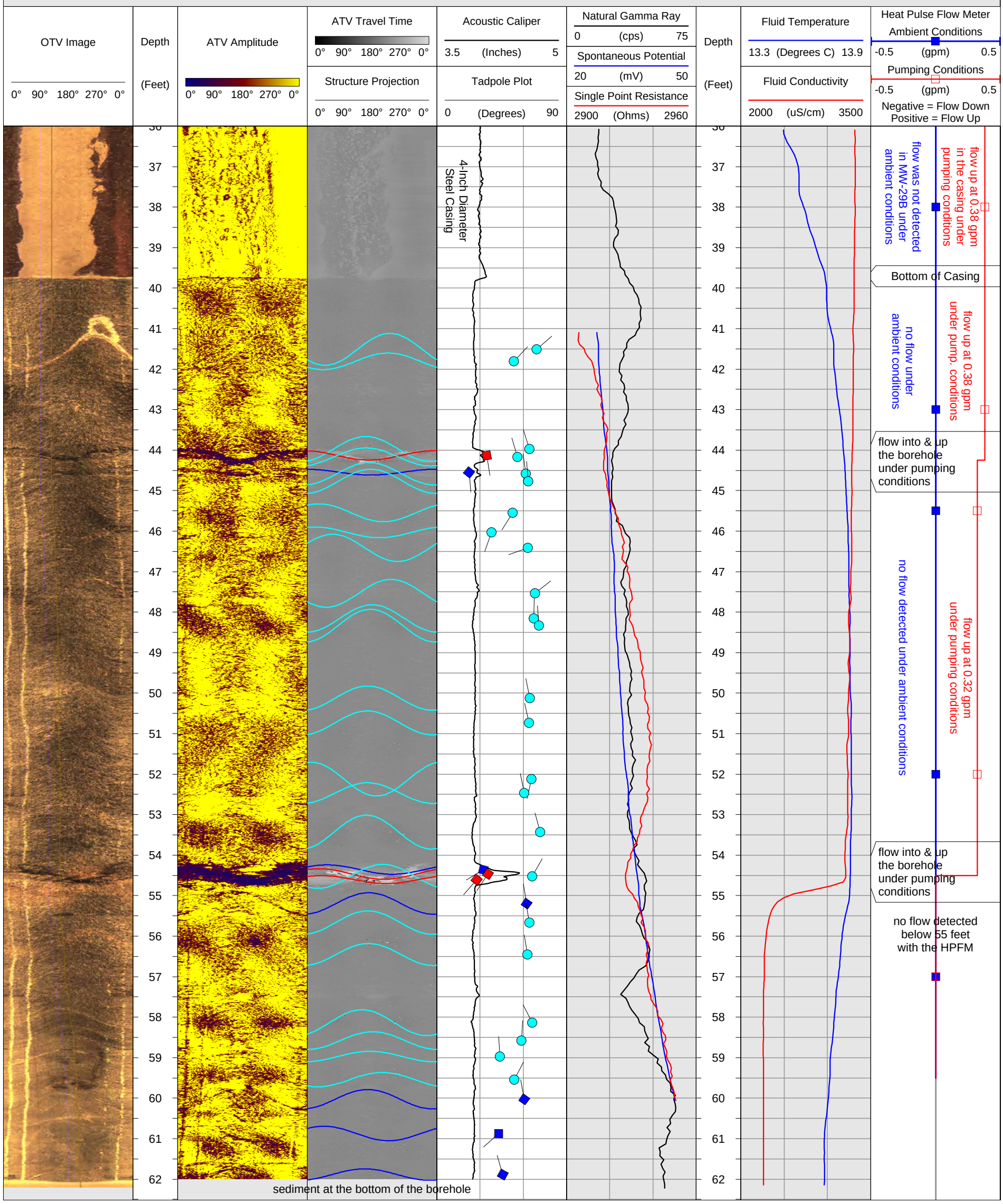
DATE(S) LOGGED: May 21, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	2.7 Feet Above the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	8.2 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-29B - Borehole Geophysical Logs



HAGER-RICHTER GEOSCIENCE, INC.

8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-30B - BOREHOLE GEOPHYSICAL LOGS

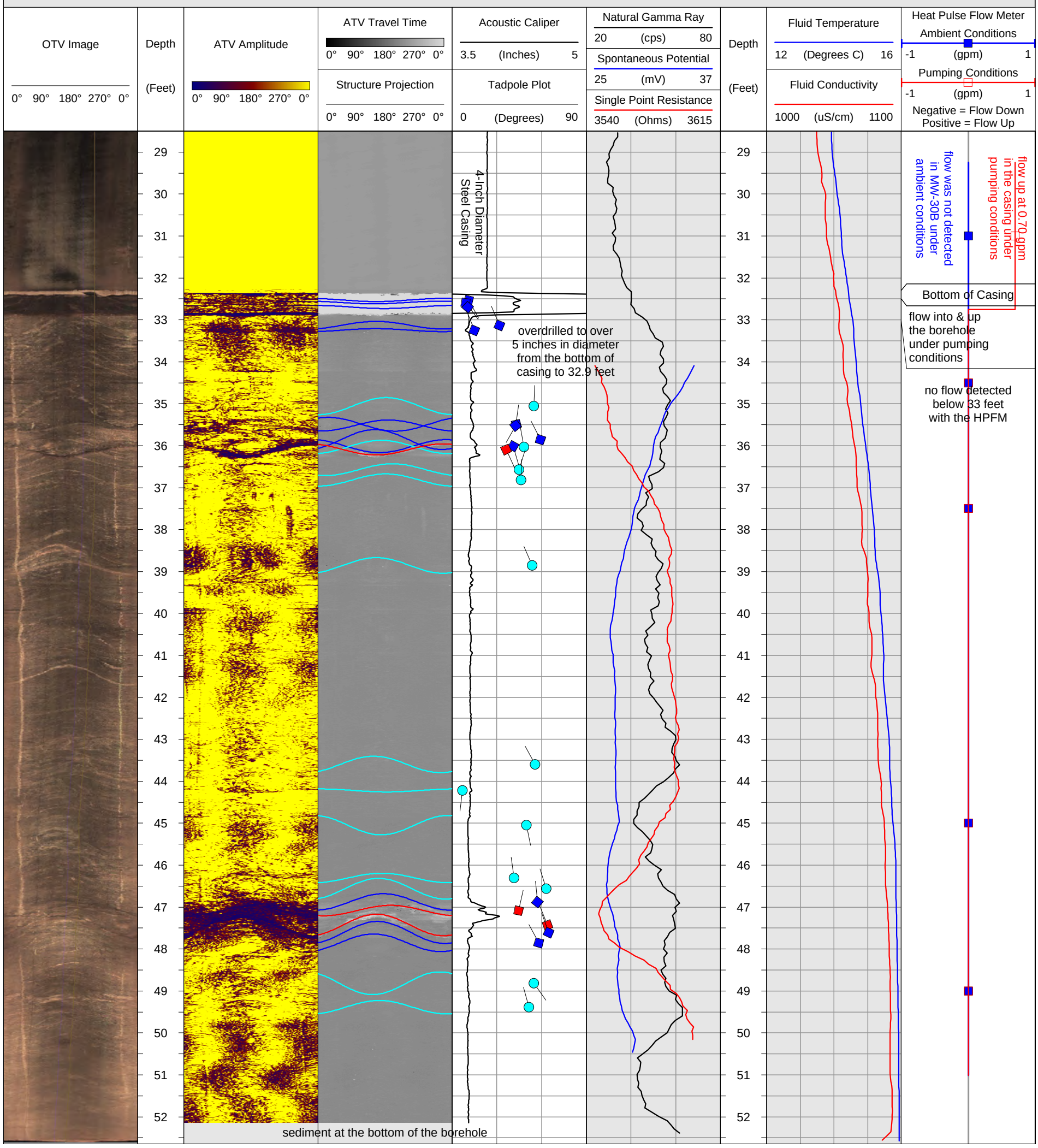
DATE(S) LOGGED: May 21, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	0.6 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	5.4 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-30B - Borehole Geophysical Logs



HAGER-RICHTER GEOSCIENCE, INC.

8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-31B - BOREHOLE GEOPHYSICAL LOGS

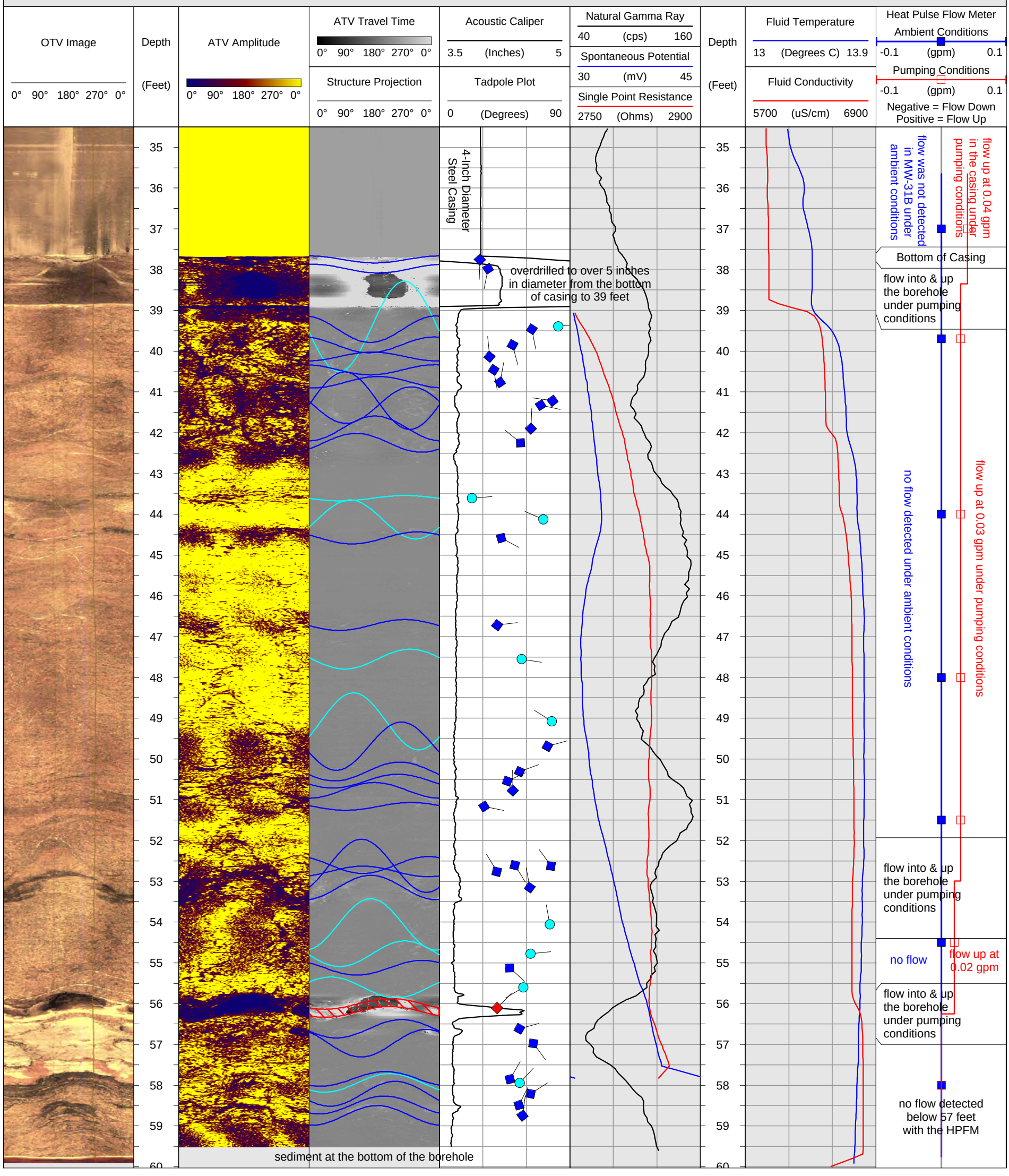
DATE(S) LOGGED: May 21, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	0.3 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	5.2 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-31B - Borehole Geophysical Logs



HAGER-RICHTER GEOSCIENCE, INC.

8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-32B - BOREHOLE IMAGE LOGS

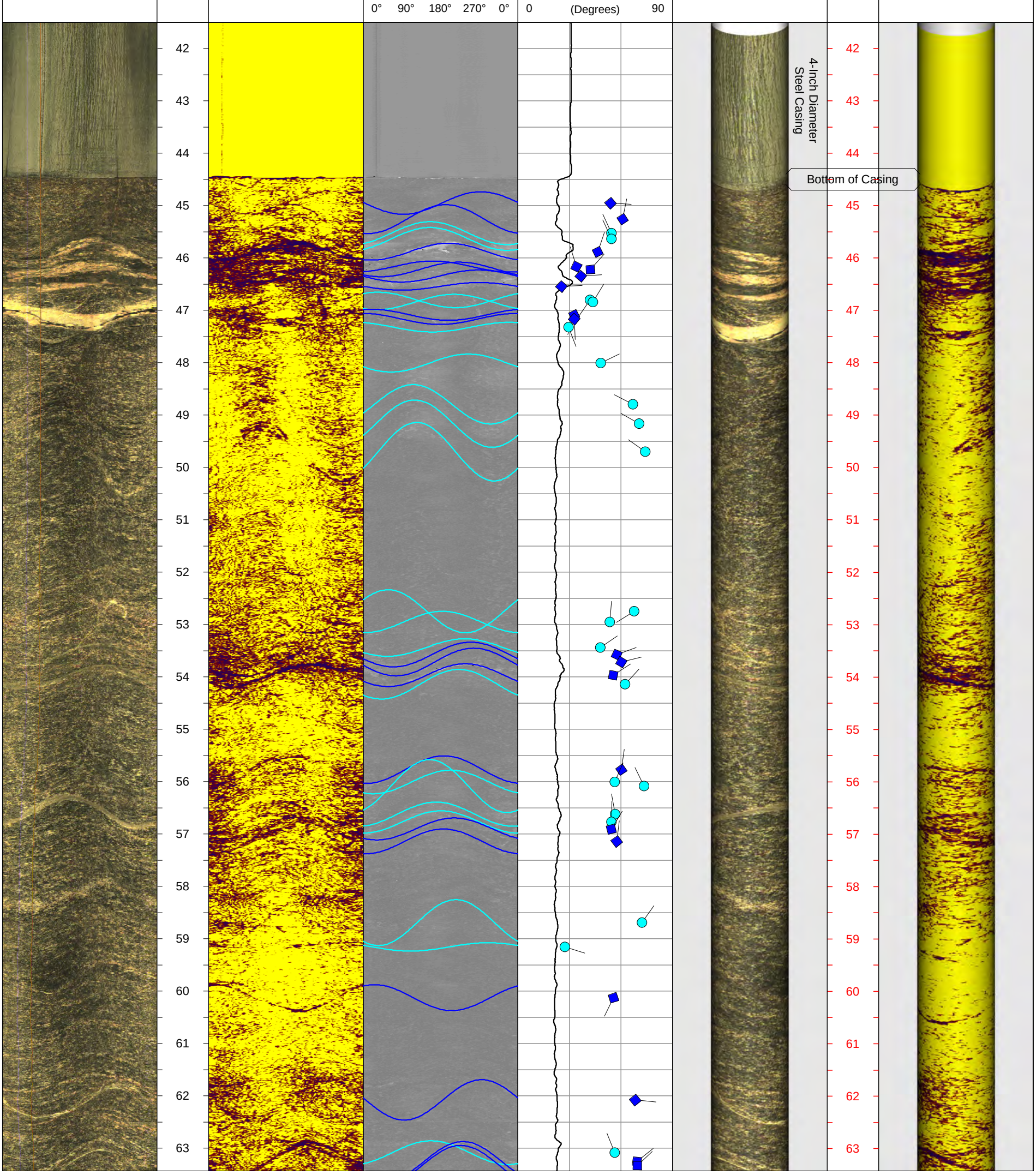
DATE(S) LOGGED: May 20, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	1.0 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	3.0 Feet

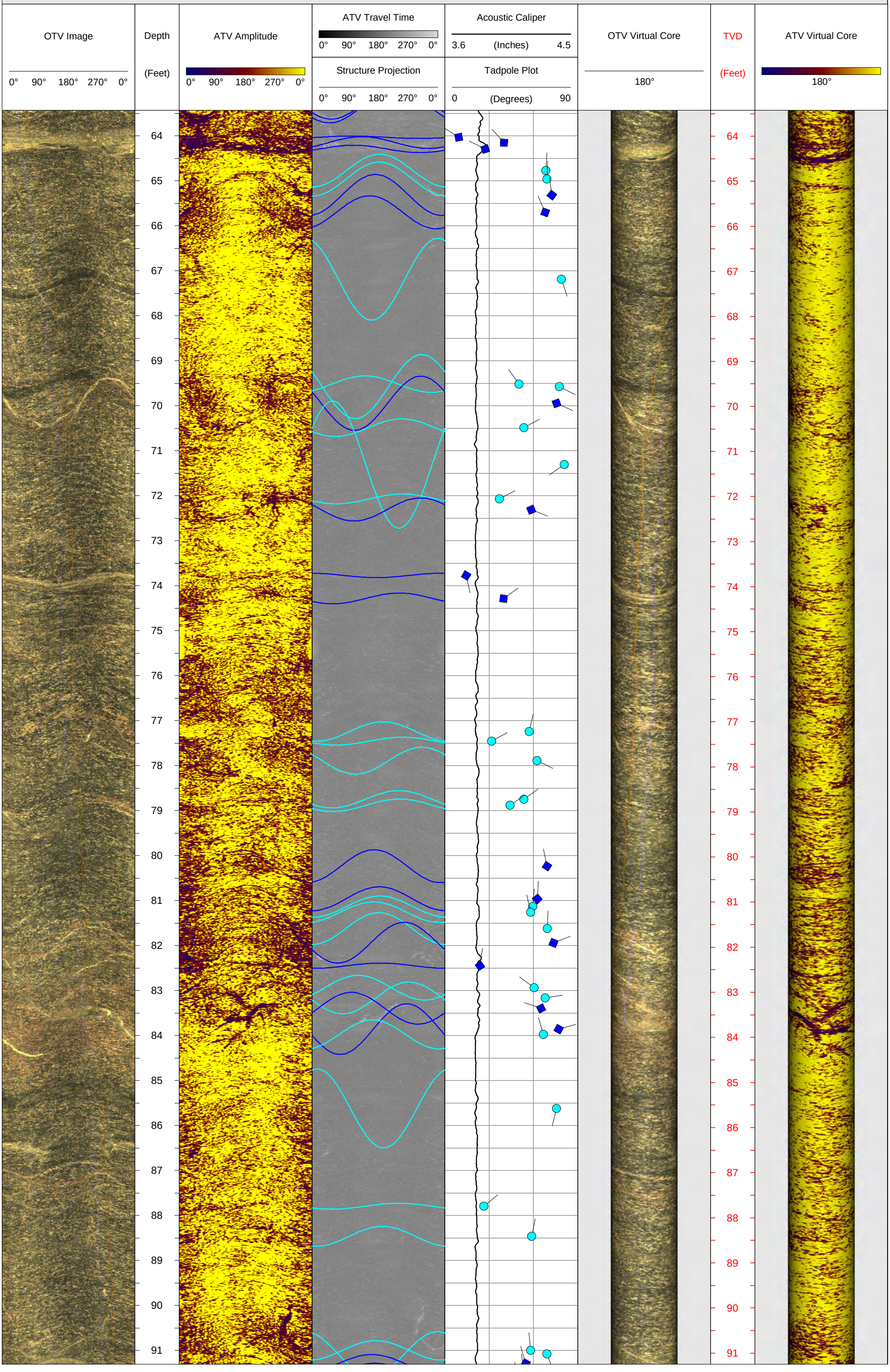
STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

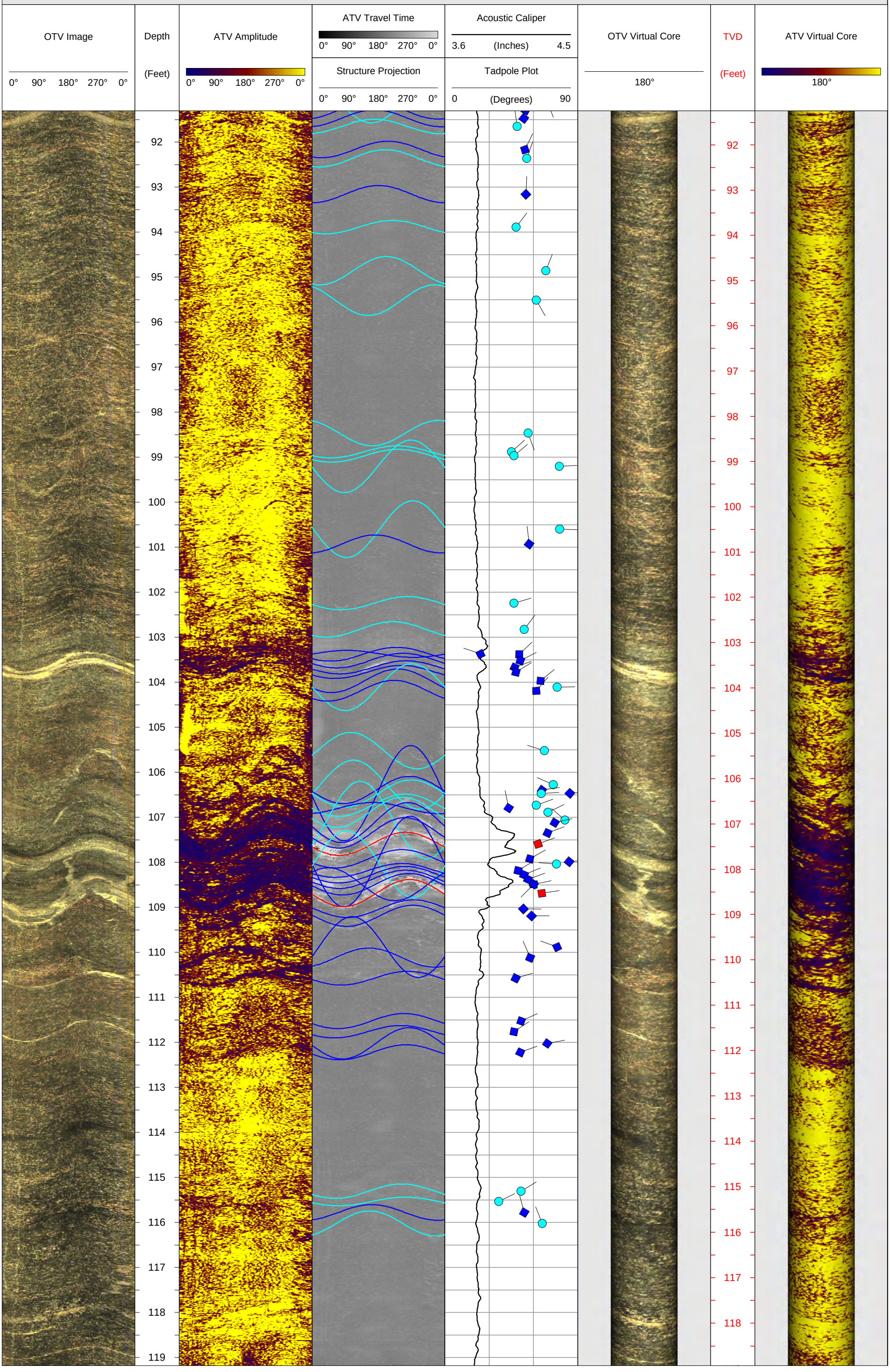
MW-32B - Borehole Image Logs



MW-32B - Borehole Image Logs



MW-32B - Borehole Image Logs



MW-32B - Borehole Image Logs

OTV Image
0° 90° 180° 270° 0°

Depth
(Feet)

ATV Amplitude
0° 90° 180° 270° 0°

ATV Travel Time
0° 90° 180° 270° 0°

Structure Projection
0° 90° 180° 270° 0°

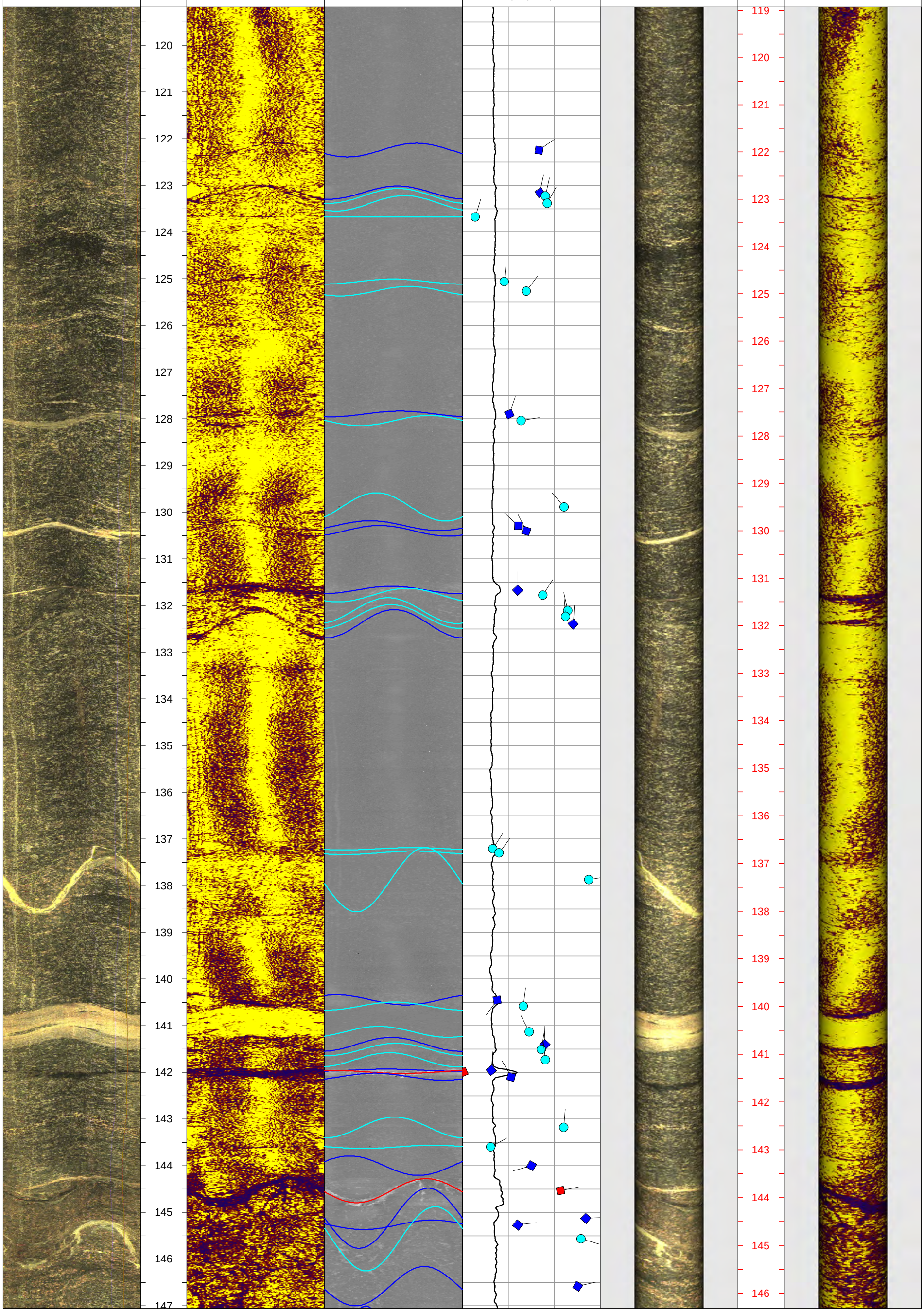
Acoustic Caliper
3.6 (Inches) 4.5

Tadpole Plot
0 (Degrees) 90

OTV Virtual Core
180°

TVD
(Feet)

ATV Virtual Core
180°



MW-32B - Borehole Image Logs

OTV Image
0° 90° 180° 270° 0°

Depth
(Feet)

ATV Amplitude
0° 90° 180° 270° 0°

ATV Travel Time
0° 90° 180° 270° 0°

Structure Projection
0° 90° 180° 270° 0°

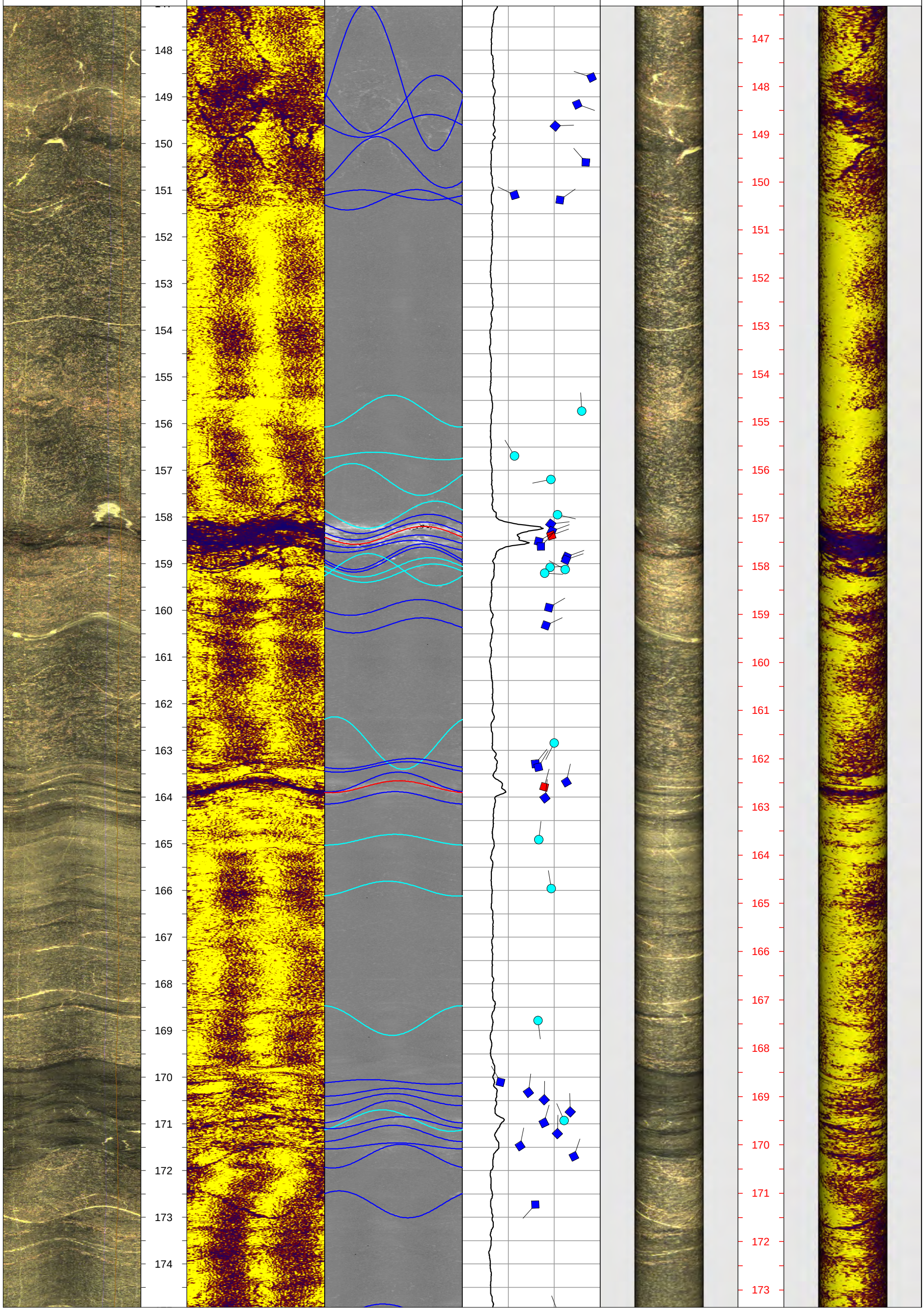
Acoustic Caliper
3.6 (Inches) 4.5

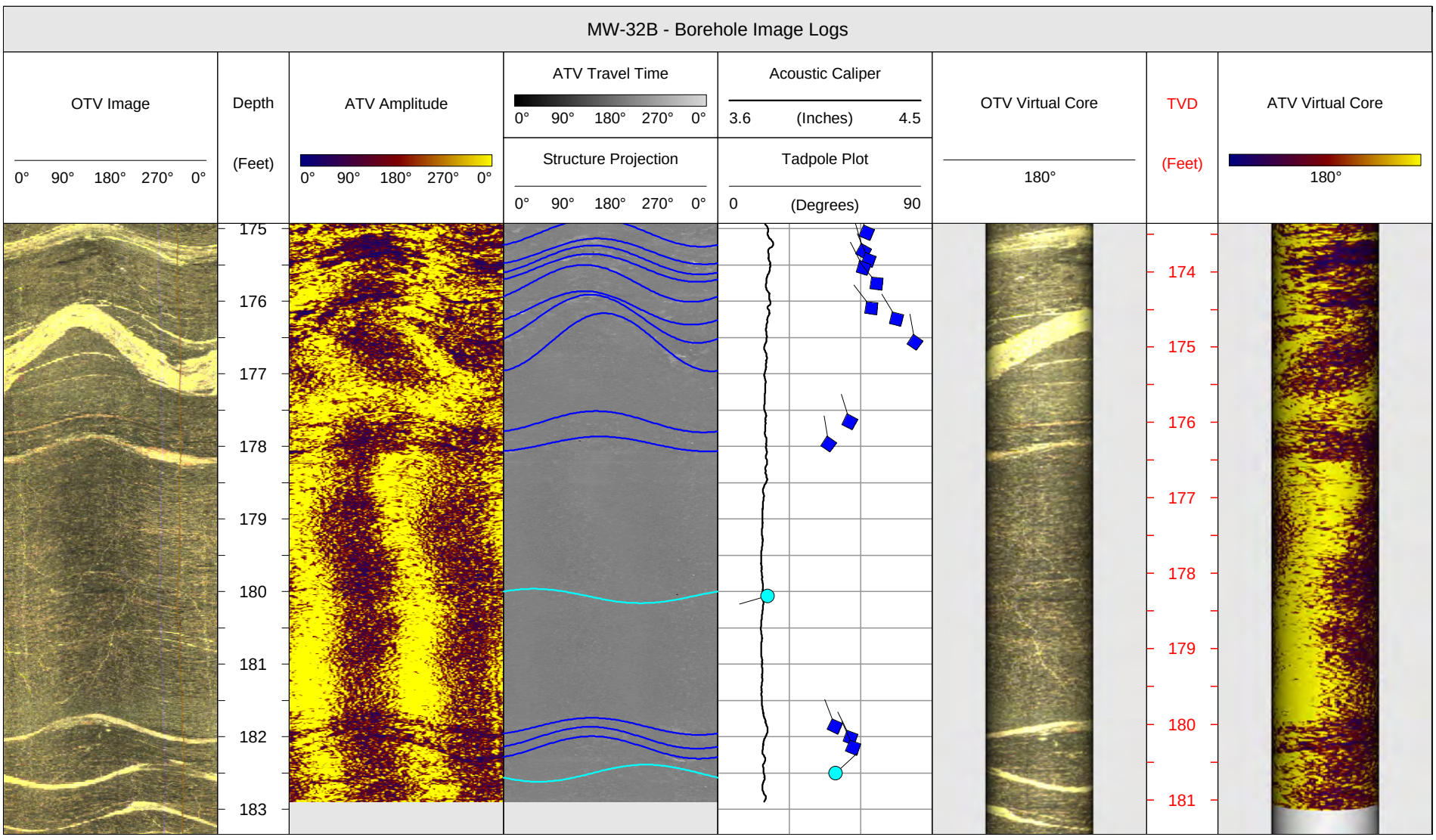
Tadpole Plot
0 (Degrees) 90

OTV Virtual Core
180°

TVD
(Feet)

ATV Virtual Core
180°




MW-32B - Borehole Image Logs
OTV Image
0° 90° 180° 270° 0°
Depth
(Feet)
ATV Amplitude
0° 90° 180° 270° 0°
ATV Travel Time
0° 90° 180° 270° 0°
Structure Projection
0° 90° 180° 270° 0°
Acoustic Caliper
3.6 (Inches) 4.5
Tadpole Plot
0 (Degrees) 90
OTV Virtual Core
180°
TVD
(Feet)
ATV Virtual Core
180°
175
176
177
178
179
180
181
182
183
174
175
176
177
178
179
180
181

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Fax: 603-893-8313

MW-32B - BOREHOLE GEOPHYSICAL LOGS

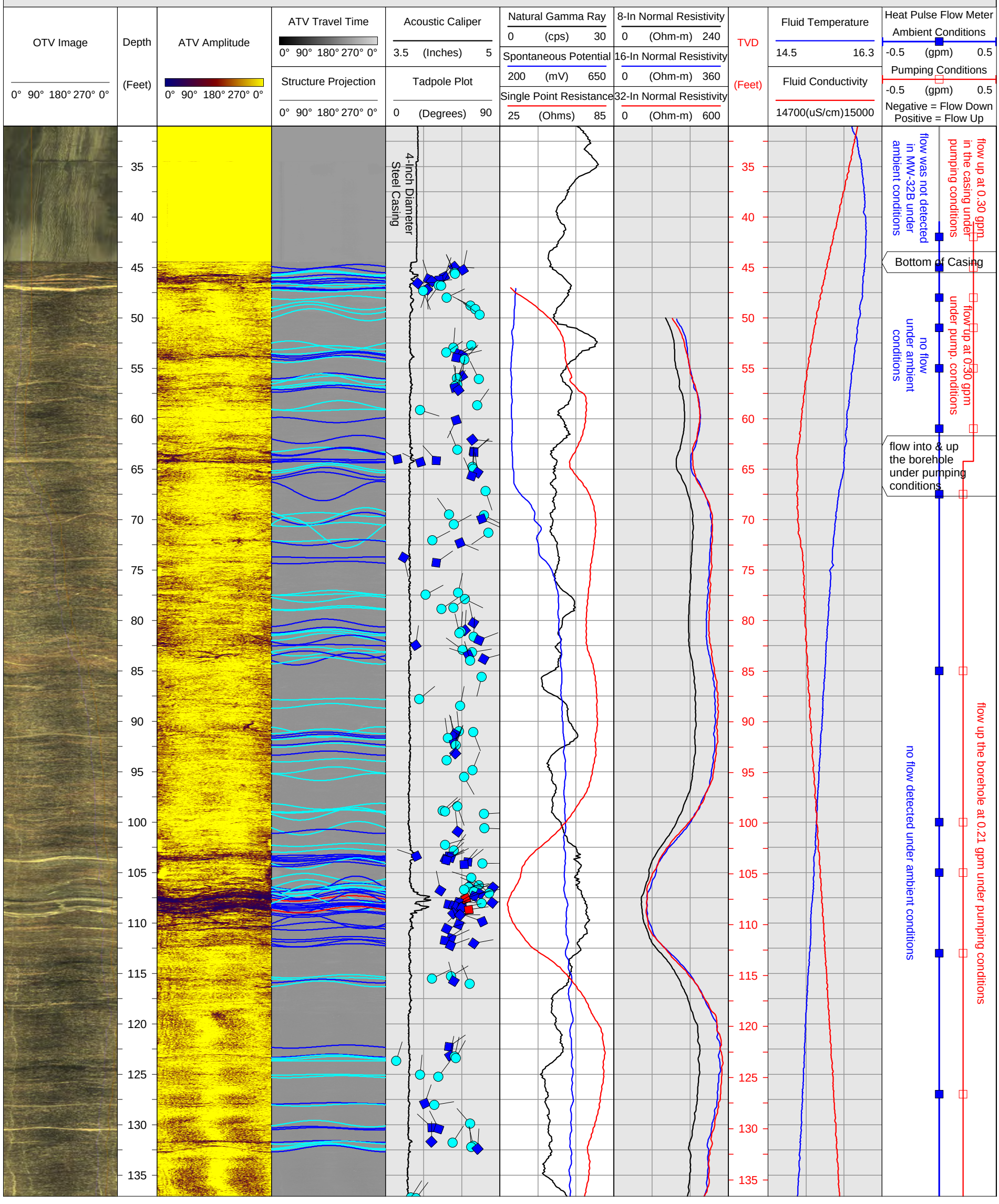
DATE(S) LOGGED: May 20, 2015

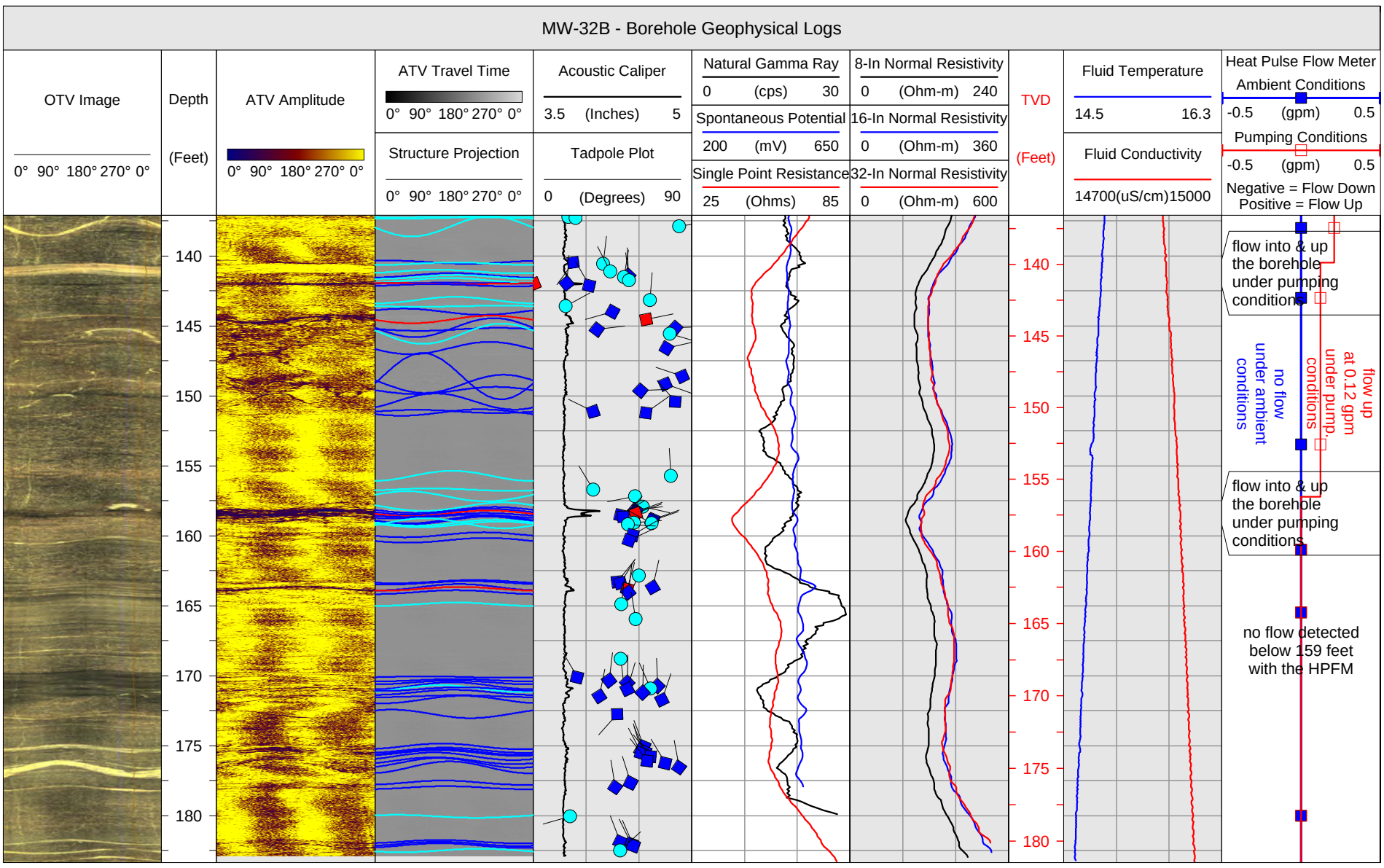
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	1.0 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	3.0 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-32B - Borehole Geophysical Logs




MW-32B - Borehole Geophysical Logs
OTV Image
0° 90° 180° 270° 0°
Depth
(Feet)
ATV Amplitude
0° 90° 180° 270° 0°
ATV Travel Time
0° 90° 180° 270° 0°
Structure Projection
0° 90° 180° 270° 0°
Acoustic Caliper
3.5 (Inches) 5
Tadpole Plot
0 (Degrees) 90
Natural Gamma Ray
0 (cps) 30
Spontaneous Potential
200 (mV) 650
Single Point Resistance
25 (Ohms) 85
8-In Normal Resistivity
0 (Ohm-m) 240
16-In Normal Resistivity
0 (Ohm-m) 360
32-In Normal Resistivity
0 (Ohm-m) 600
TVD
(Feet)
Fluid Temperature
14.5 16.3
Fluid Conductivity
14700(uS/cm)15000
Heat Pulse Flow Meter
Ambient Conditions
-0.5 (gpm) 0.5
Pumping Conditions
-0.5 (gpm) 0.5
Negative = Flow Down
Positive = Flow Up
flow into & up the borehole under pumping conditions
no flow under ambient conditions
flow up at 0.12 gpm under pump conditions
flow into & up the borehole under pumping conditions
no flow detected below 159 feet with the HPFM
140
145
150
155
160
165
170
175
180

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MW-33B - BOREHOLE IMAGE LOGS

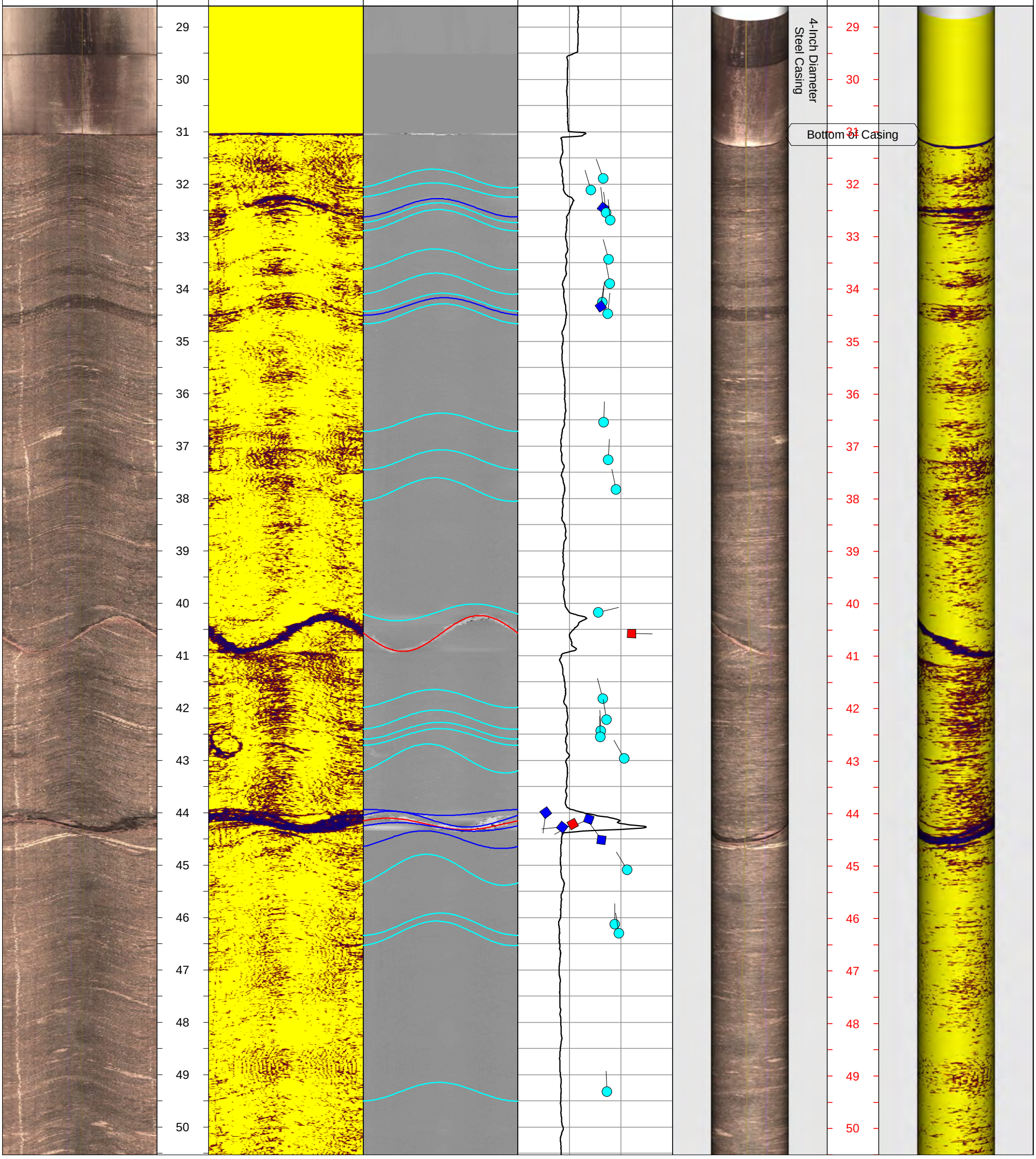
DATE(S) LOGGED: May 19, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	1.0 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	4.8 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-33B - Borehole Image Logs



MW-33B - Borehole Image Logs

OTV Image

0° 90° 180° 270° 0°

Depth

(Feet)

ATV Amplitude

0° 90° 180° 270° 0°

ATV Travel Time

0° 90° 180° 270° 0°

Structure Projection

0° 90° 180° 270° 0°

Acoustic Caliper

3.6 (Inches) 4.5

Tadpole Plot

0 (Degrees) 90

OTV Virtual Core

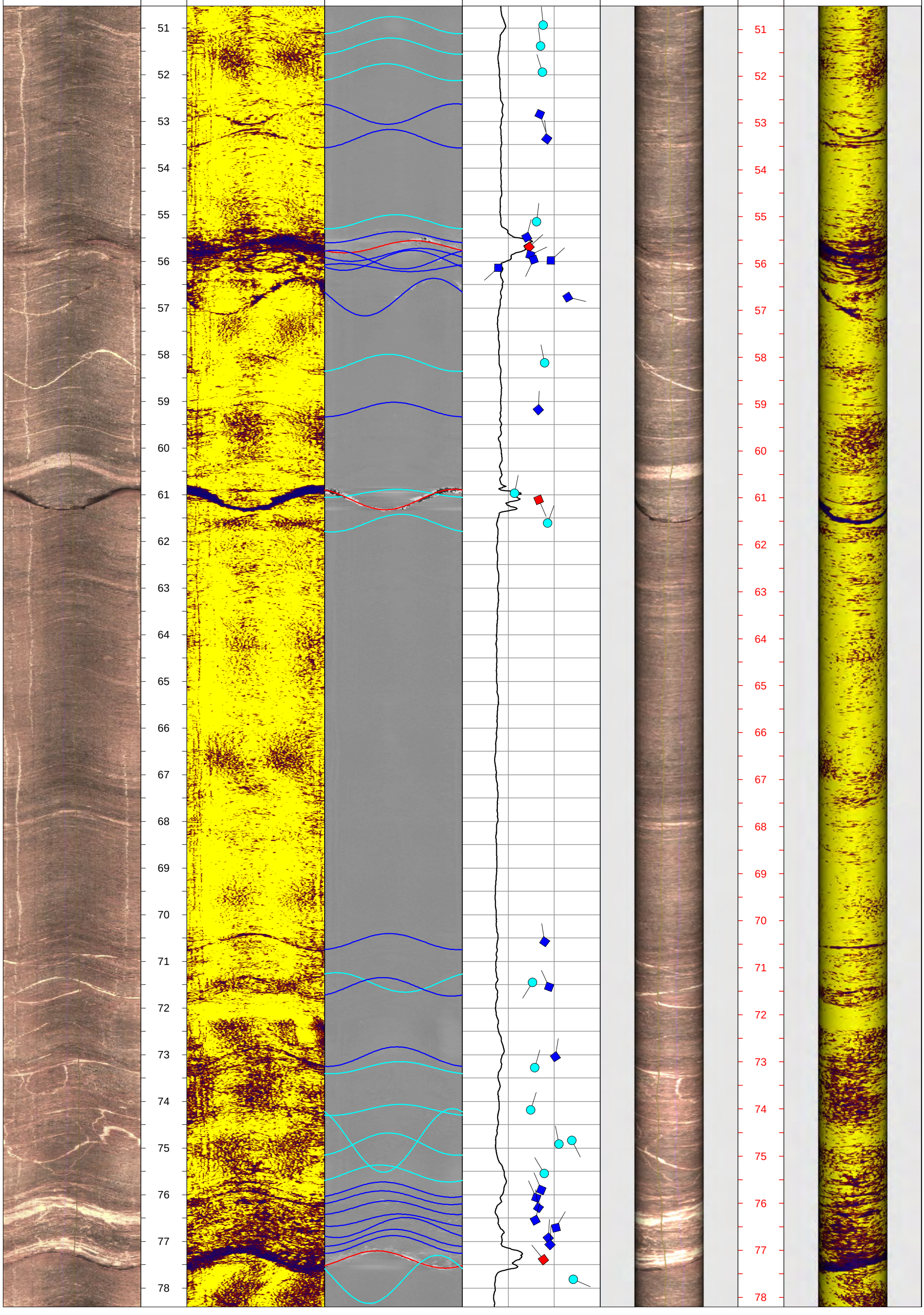
180°

TVD

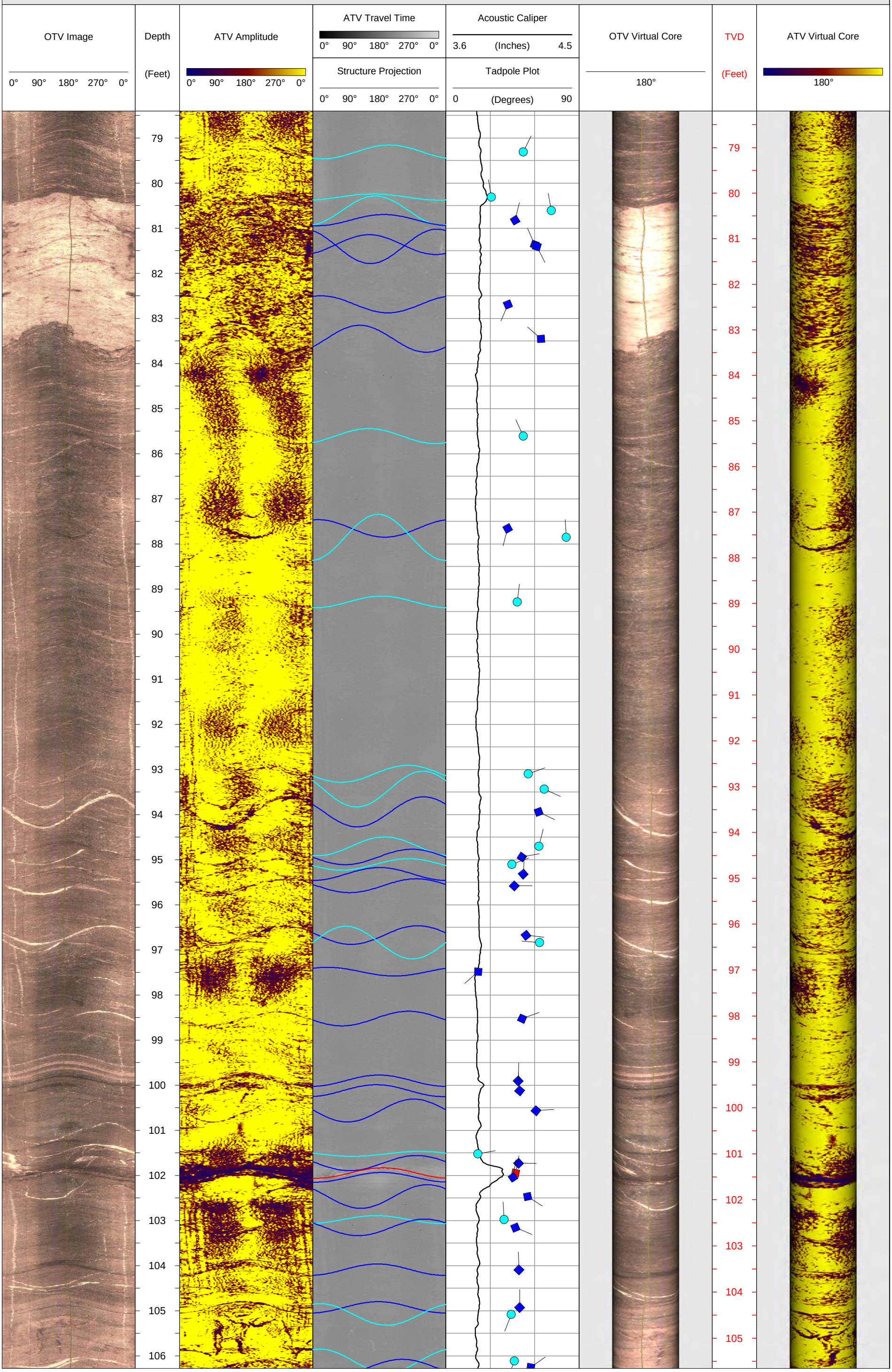
(Feet)

ATV Virtual Core

180°



MW-33B - Borehole Image Logs



MW-33B - Borehole Image Logs

OTV Image
0° 90° 180° 270° 0°

Depth
(Feet)

ATV Amplitude
0° 90° 180° 270° 0°

ATV Travel Time
0° 90° 180° 270° 0°

Structure Projection
0° 90° 180° 270° 0°

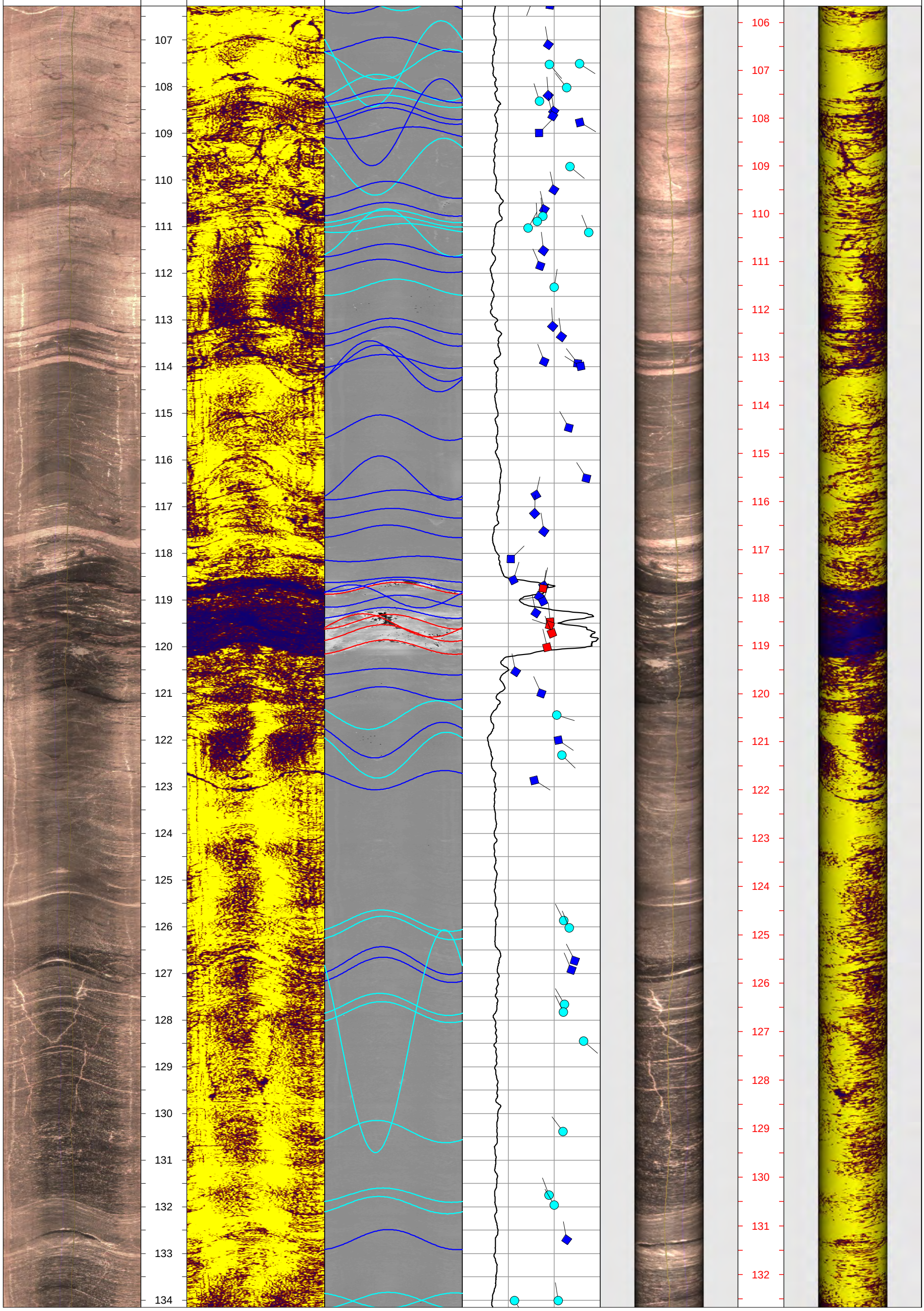
Acoustic Caliper
3.6 (Inches) 4.5

Tadpole Plot
0 (Degrees) 90

OTV Virtual Core
180°

TVD
(Feet)

ATV Virtual Core
180°



MW-33B - Borehole Image Logs

OTV Image

0° 90° 180° 270° 0°

Depth

(Feet)

ATV Amplitude

0° 90° 180° 270° 0°

ATV Travel Time

0° 90° 180° 270° 0°

Structure Projection

0° 90° 180° 270° 0°

Acoustic Caliper

3.6 (Inches) 4.5

Tadpole Plot

0 (Degrees) 90

OTV Virtual Core

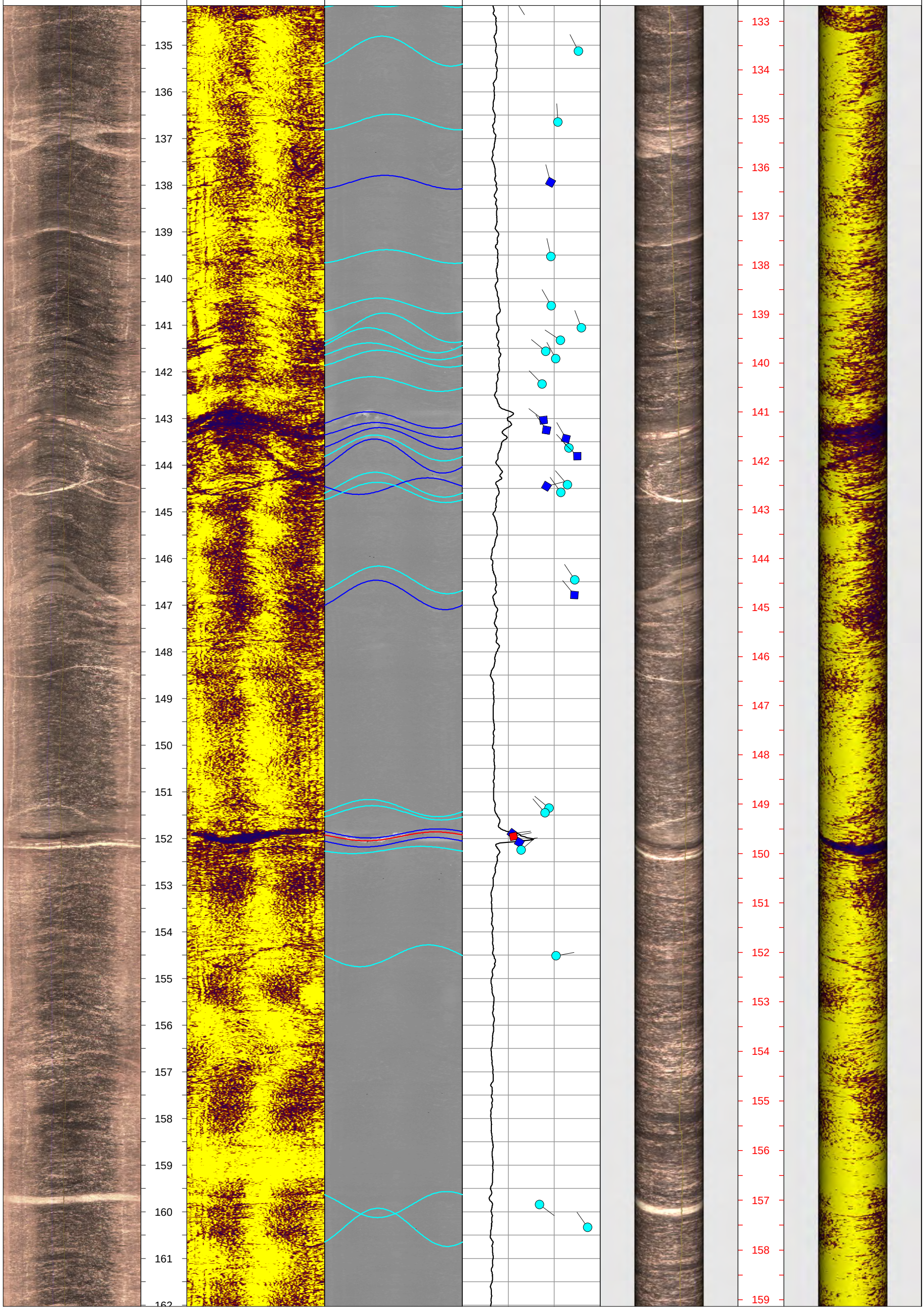
180°

TVD

(Feet)

ATV Virtual Core

180°



MW-33B - Borehole Image Logs

OTV Image

0° 90° 180° 270° 0°

Depth

(Feet)

ATV Amplitude

0° 90° 180° 270° 0°

ATV Travel Time

0° 90° 180° 270° 0°

Structure Projection

0° 90° 180° 270° 0°

Acoustic Caliper

3.6 (Inches) 4.5

Tadpole Plot

0 (Degrees) 90

OTV Virtual Core

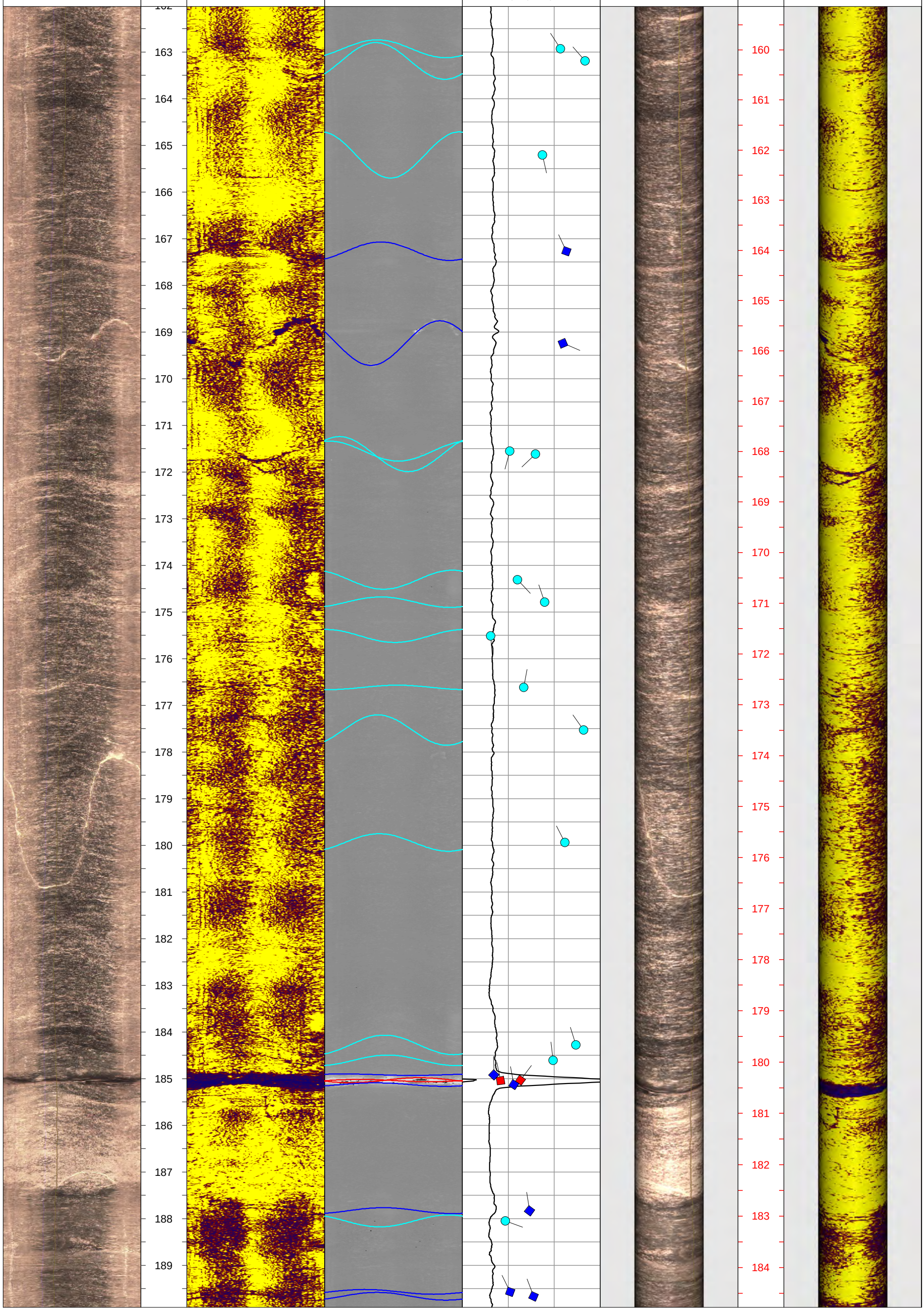
180°

TVD

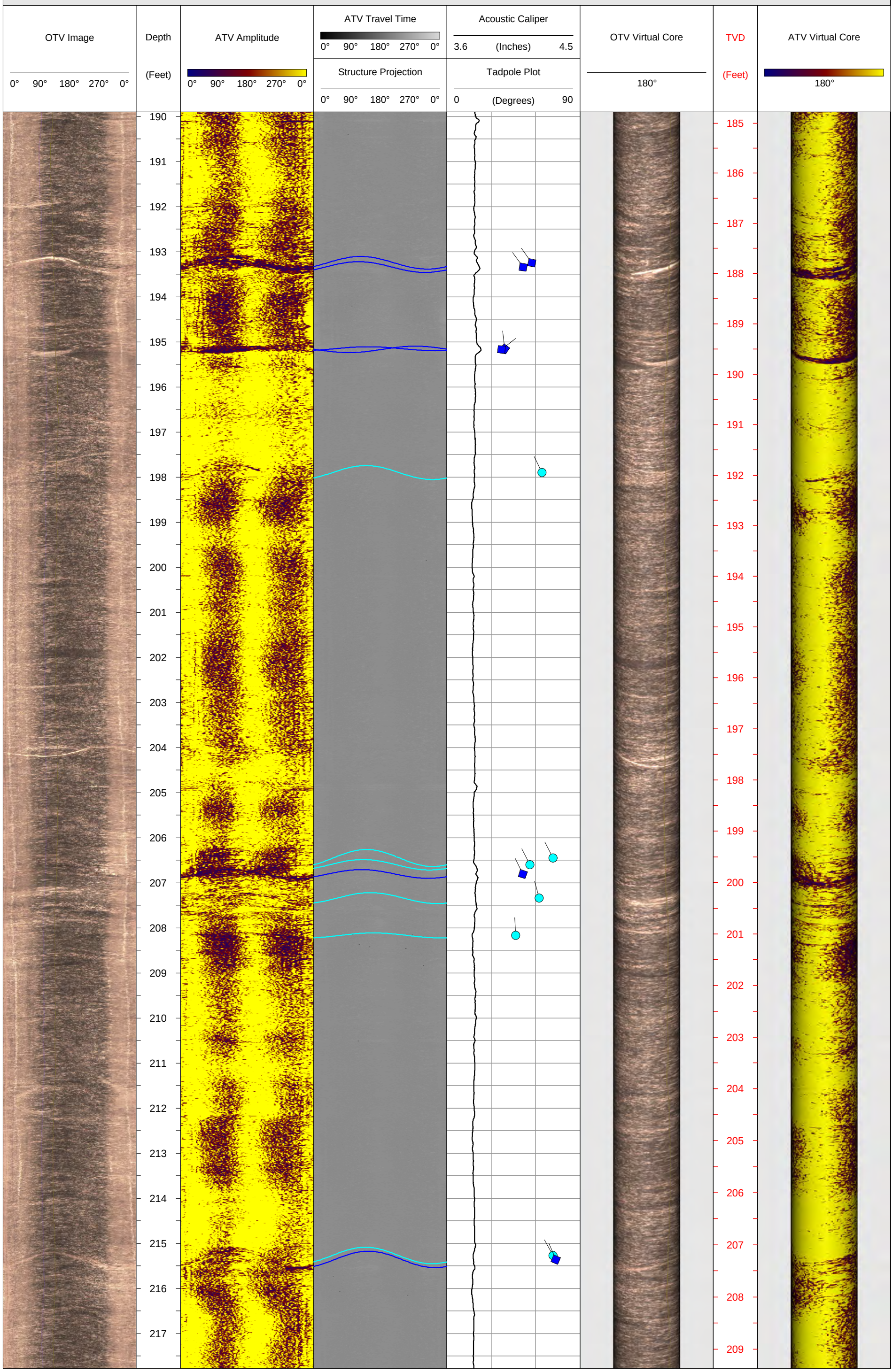
(Feet)

ATV Virtual Core

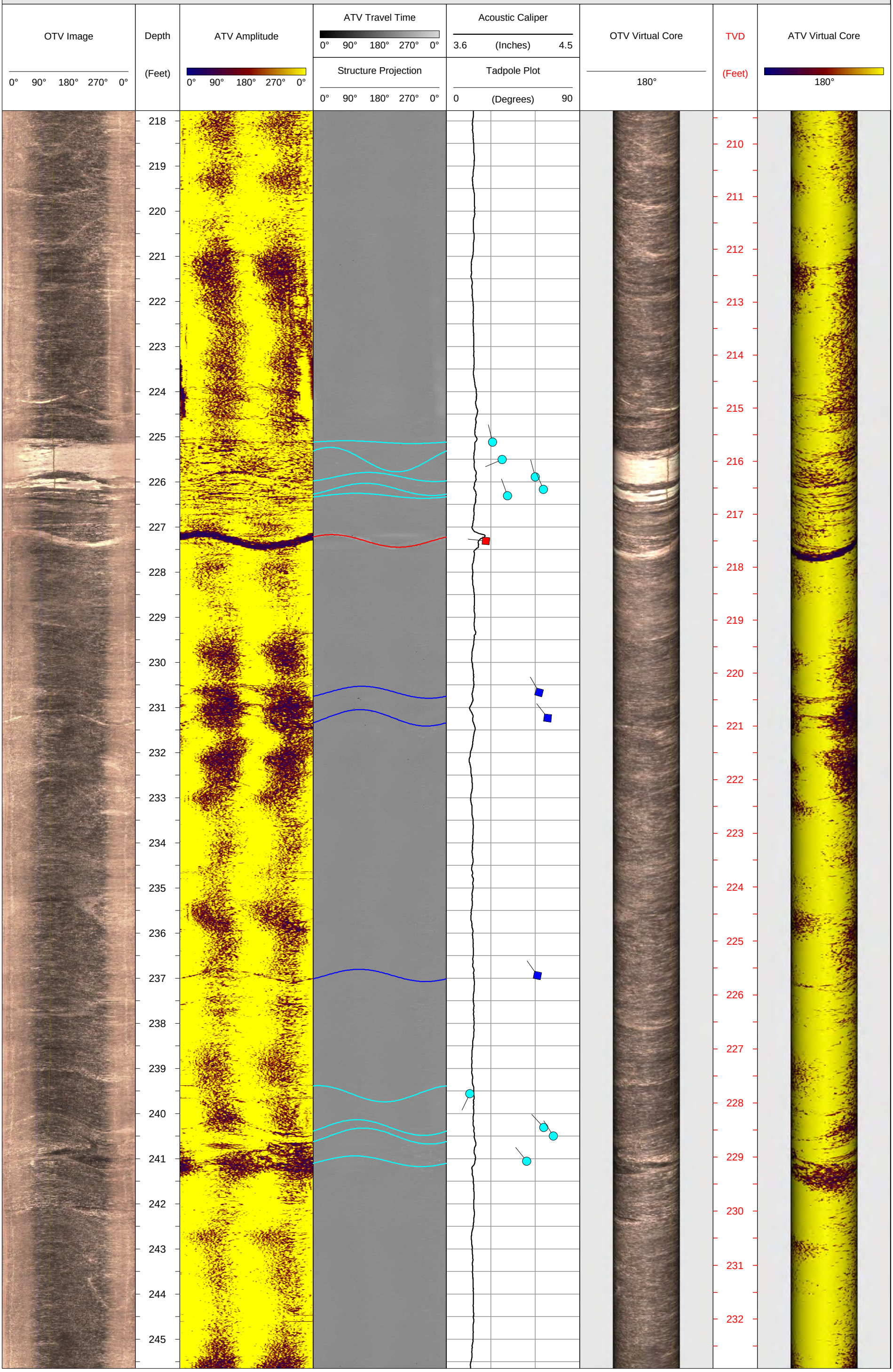
180°



MW-33B - Borehole Image Logs



MW-33B - Borehole Image Logs



MW-33B - Borehole Image Logs

OTV Image
0° 90° 180° 270° 0°

Depth
(Feet)

ATV Amplitude
0° 90° 180° 270° 0°

ATV Travel Time
0° 90° 180° 270° 0°

Structure Projection
0° 90° 180° 270° 0°

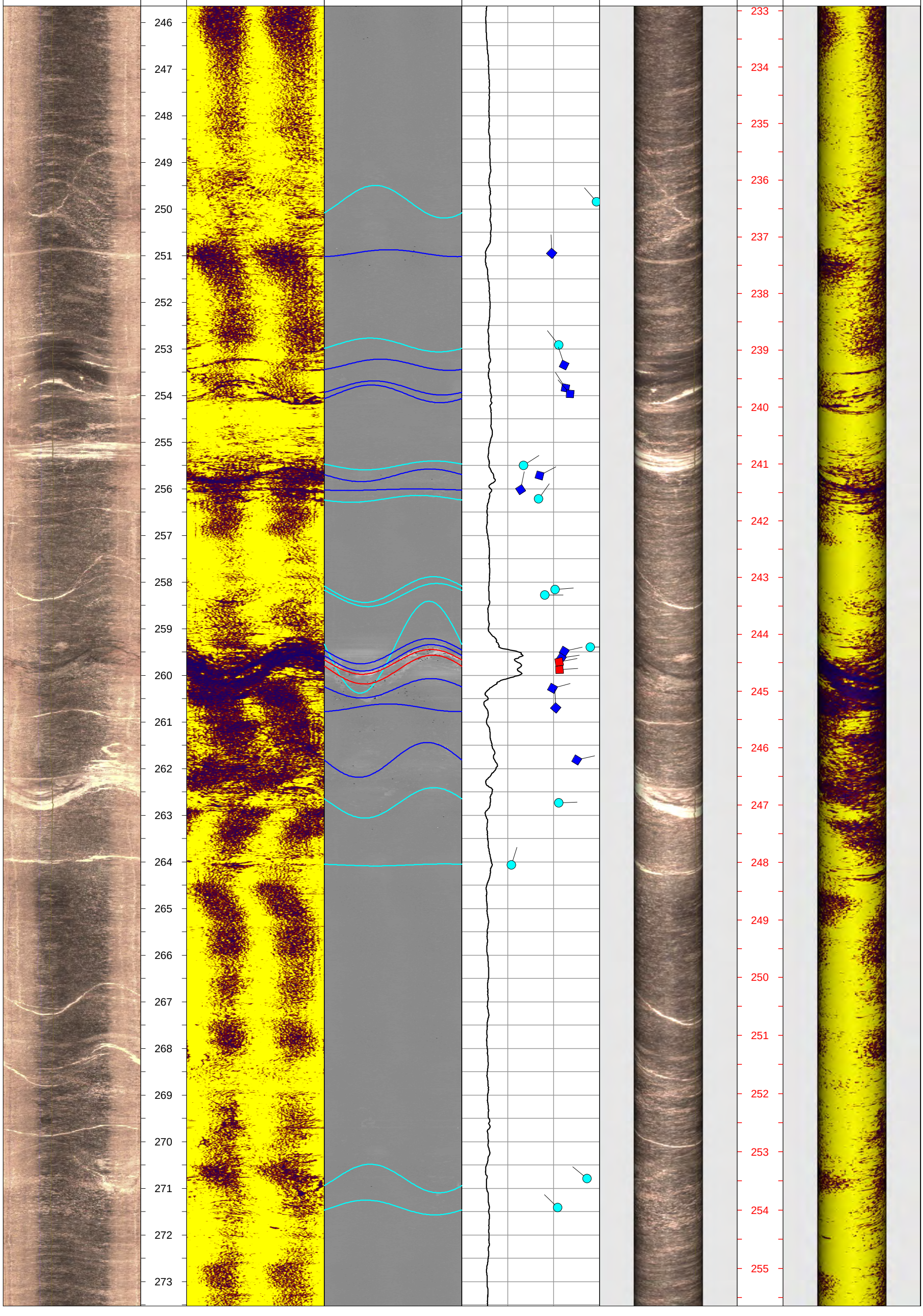
Acoustic Caliper
3.6 (Inches) 4.5

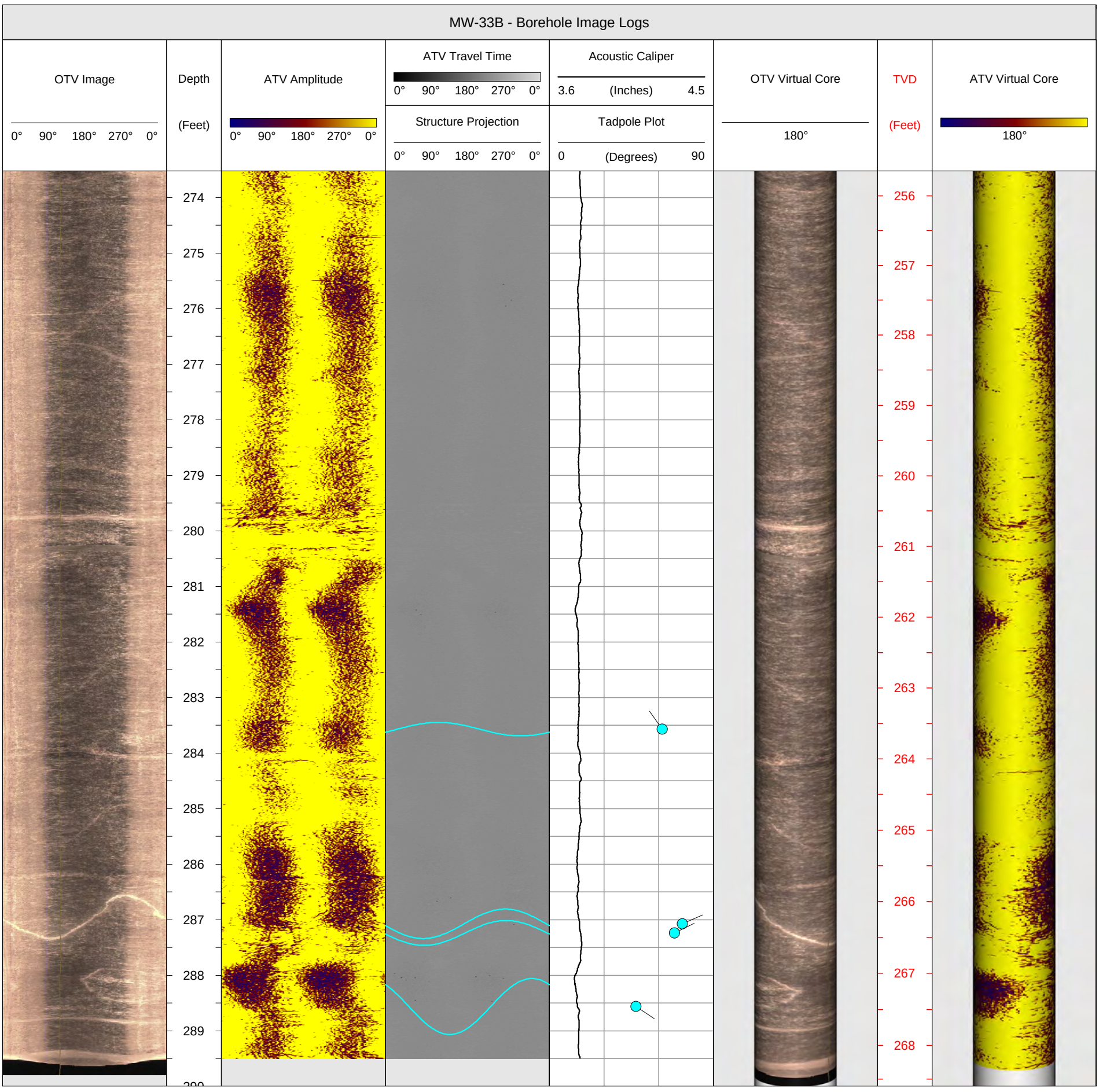
Tadpole Plot
0 (Degrees) 90

OTV Virtual Core
180°

TVD
(Feet)

ATV Virtual Core
180°




MW-33B - Borehole Image Logs
OTV Image
0° 90° 180° 270° 0°
Depth
(Feet)
ATV Amplitude
0° 90° 180° 270° 0°
ATV Travel Time
0° 90° 180° 270° 0°
Structure Projection
0° 90° 180° 270° 0°
Acoustic Caliper
3.6 (Inches) 4.5
Tadpole Plot
0 (Degrees) 90
OTV Virtual Core
180°
TVD
(Feet)
ATV Virtual Core
180°
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
256
257
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Fax: 603-893-8313

MW-33B - BOREHOLE GEOPHYSICAL LOGS

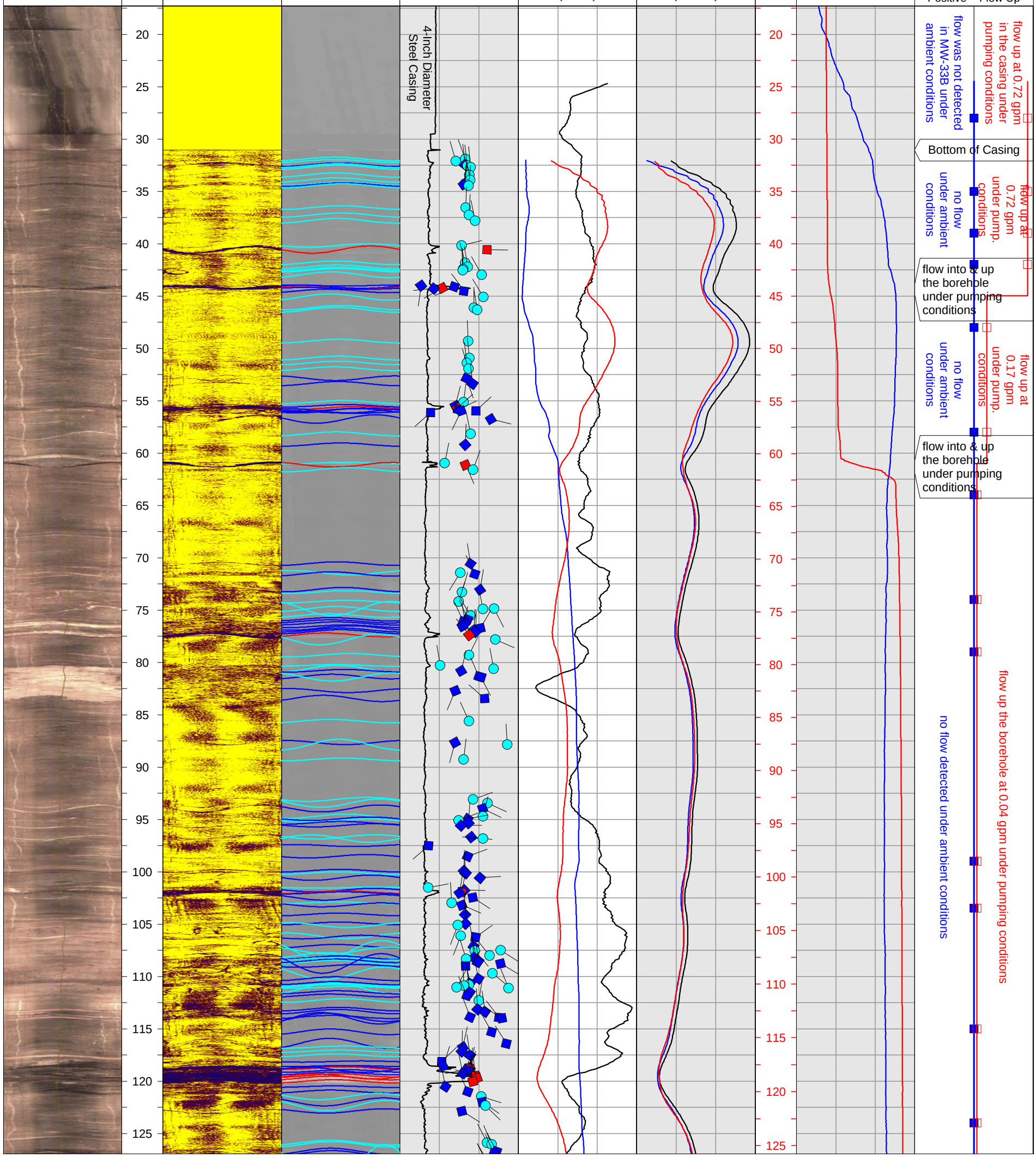
DATE(S) LOGGED: May 19, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	1.0 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	4.8 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-33B - Borehole Geophysical Logs



MW-33B - Borehole Geophysical Logs

OTV Image
0° 90° 180° 270° 0°

Depth
(Feet)

ATV Amplitude
0° 90° 180° 270° 0°

ATV Travel Time
0° 90° 180° 270° 0°

Structure Projection
0° 90° 180° 270° 0°

Acoustic Caliper
3.5 (Inches) 5

Tadpole Plot
0 (Degrees) 90

Natural Gamma Ray
0 (cps) 45

Spontaneous Potential
350 (mV) 950

Single Point Resistance
0 (Ohms) 240

8-In Normal Resistivity
0 (Ohm-m) 450

16-In Normal Resistivity
0 (Ohm-m) 900

32-In Normal Resistivity
0 (Ohm-m) 1500

TVD
(Feet)

Fluid Temperature
12.5 15.5

Fluid Conductivity
0 (uS/cm) 24000

Heat Pulse Flow Meter
Ambient Conditions
-0.8 (gpm) 0.8
Pumping Conditions
-0.8 (gpm) 0.8
Negative = Flow Down
Positive = Flow Up

no flow detected under ambient conditions

flow up at 0.04 gpm under pumping conditions

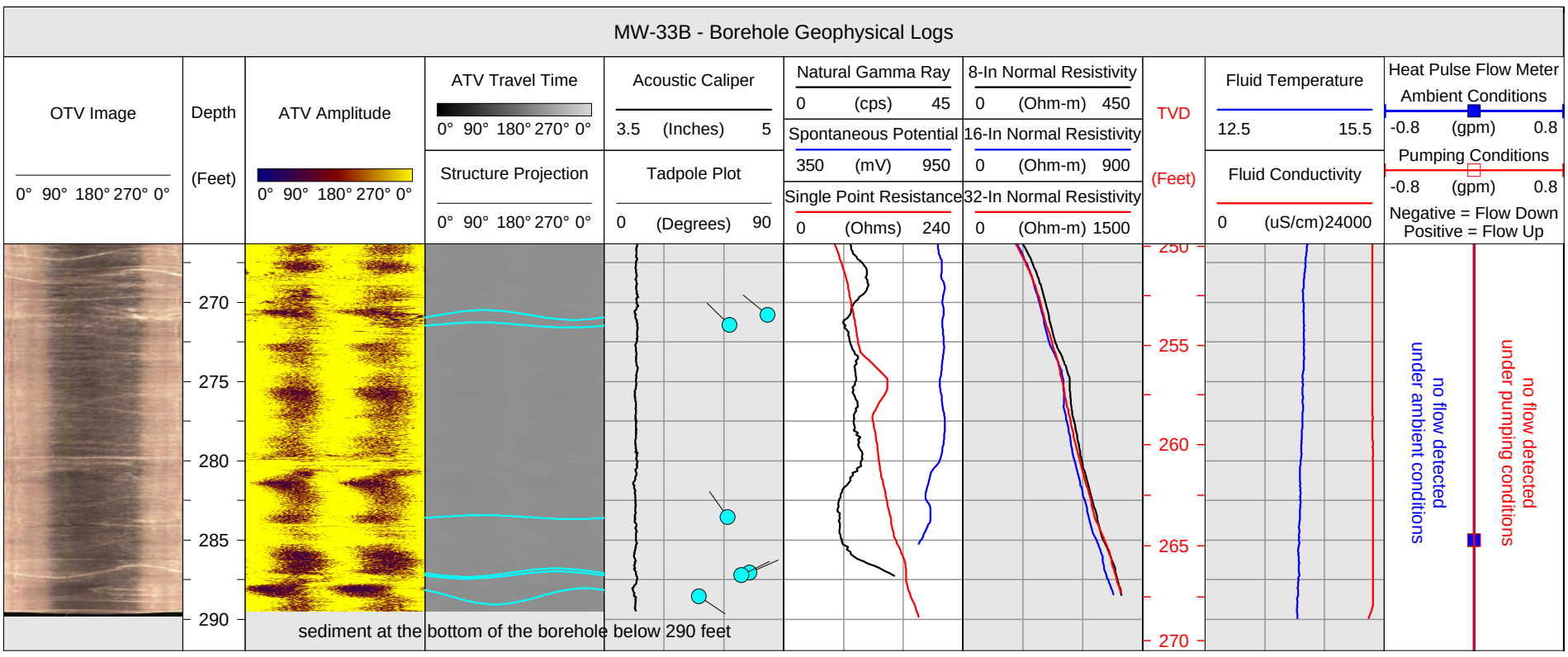
flow into & up the borehole under pumping conditions

flow up the borehole at 0.02 gpm under pumping conditions

no flow detected under ambient conditions

flow into & up the borehole under pumping conditions

no flow detected below 185 feet with the HPFM


MW-33B - Borehole Geophysical Logs
OTV Image
0° 90° 180° 270° 0°
Depth
(Feet)
ATV Amplitude
0° 90° 180° 270° 0°
ATV Travel Time
0° 90° 180° 270° 0°
Structure Projection
0° 90° 180° 270° 0°
Acoustic Caliper
3.5 (Inches) 5
Tadpole Plot
0 (Degrees) 90
Natural Gamma Ray
0 (cps) 45
Spontaneous Potential
350 (mV) 950
Single Point Resistance
0 (Ohms) 240
8-In Normal Resistivity
0 (Ohm-m) 450
16-In Normal Resistivity
0 (Ohm-m) 900
32-In Normal Resistivity
0 (Ohm-m) 1500
TVD
(Feet)
Fluid Temperature
12.5 15.5
Fluid Conductivity
0 (uS/cm) 24000
Heat Pulse Flow Meter
Ambient Conditions
-0.8 (gpm) 0.8
Pumping Conditions
-0.8 (gpm) 0.8
Negative = Flow Down
Positive = Flow Up
270
275
280
285
290
250
255
260
265
270
no flow detected under ambient conditions
no flow detected under pumping conditions
sediment at the bottom of the borehole below 290 feet

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MW-34B - BOREHOLE IMAGE LOGS

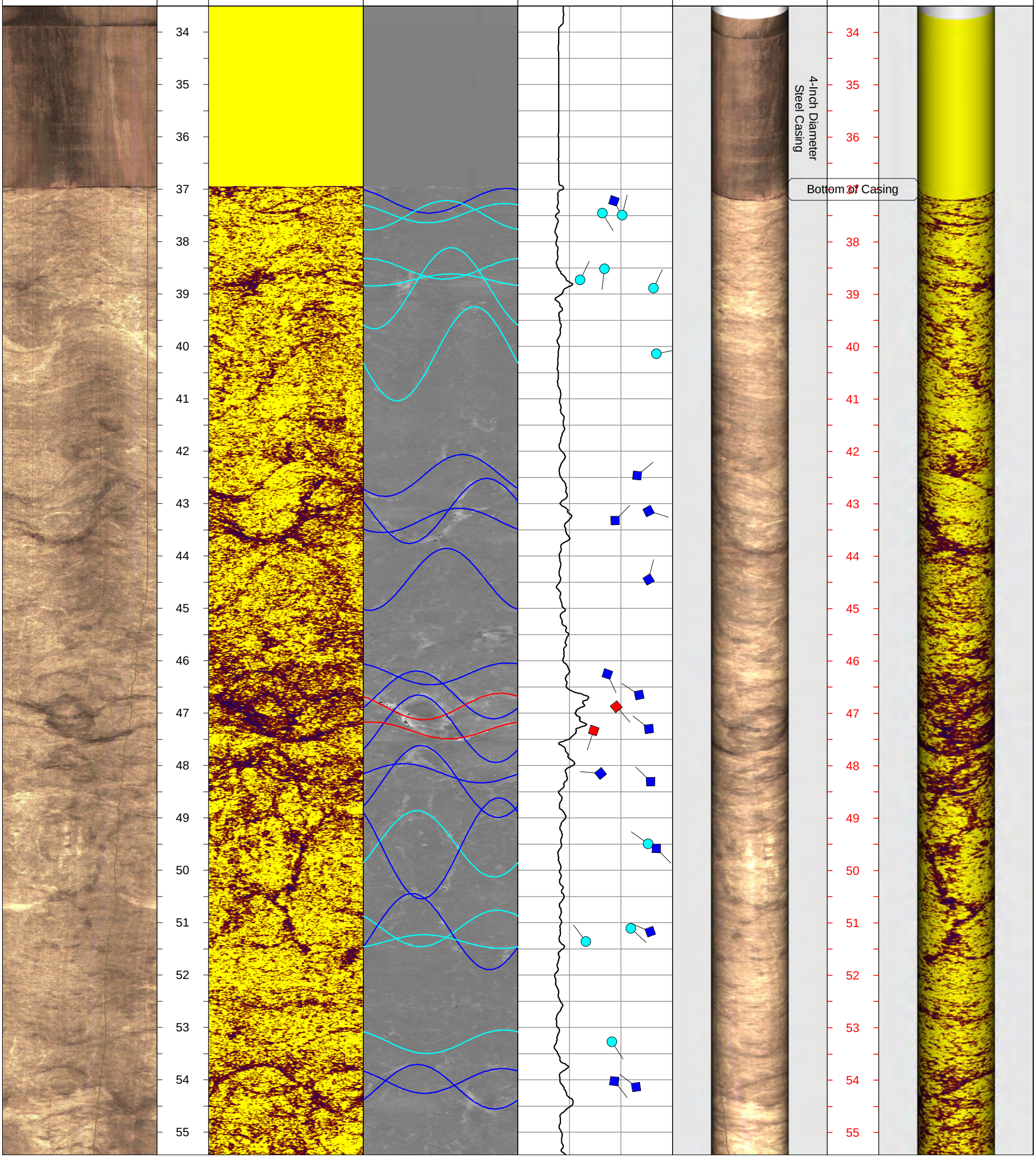
DATE(S) LOGGED: May 20, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	1.0 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	3.2 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-34B - Borehole Image Logs



MW-34B - Borehole Image Logs

OTV Image

0° 90° 180° 270° 0°

Depth

(Feet)

ATV Amplitude

0° 90° 180° 270° 0°

ATV Travel Time

0° 90° 180° 270° 0°

Structure Projection

0° 90° 180° 270° 0°

Acoustic Caliper

3.5 (Inches) 5

Tadpole Plot

0 (Degrees) 90

OTV Virtual Core

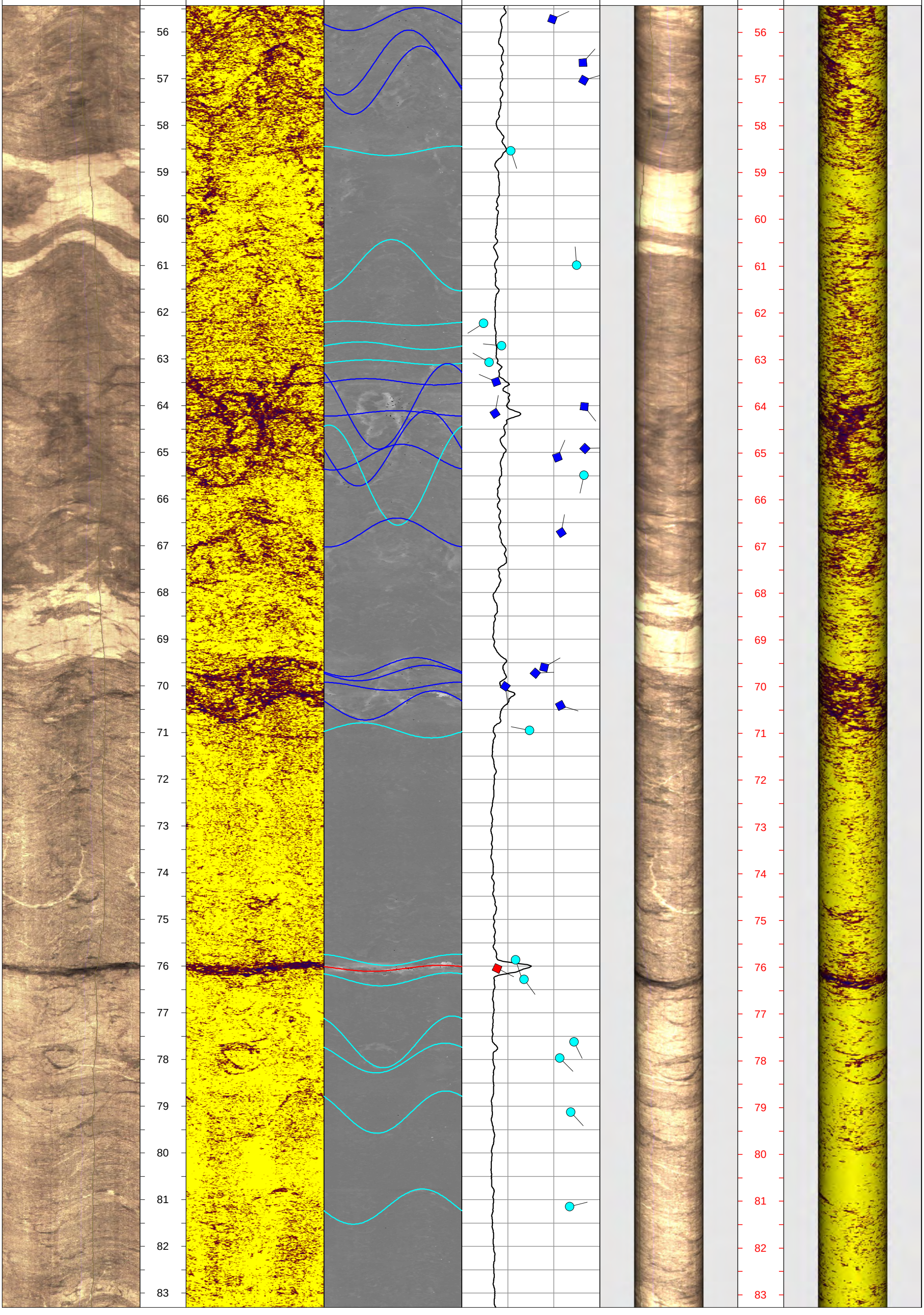
180°

TVD

(Feet)

ATV Virtual Core

180°



MW-34B - Borehole Image Logs

OTV Image

0° 90° 180° 270° 0°

Depth

(Feet)

ATV Amplitude

0° 90° 180° 270° 0°

ATV Travel Time

0° 90° 180° 270° 0°

Structure Projection

0° 90° 180° 270° 0°

Acoustic Caliper

3.5 (Inches) 5

Tadpole Plot

0 (Degrees) 90

OTV Virtual Core

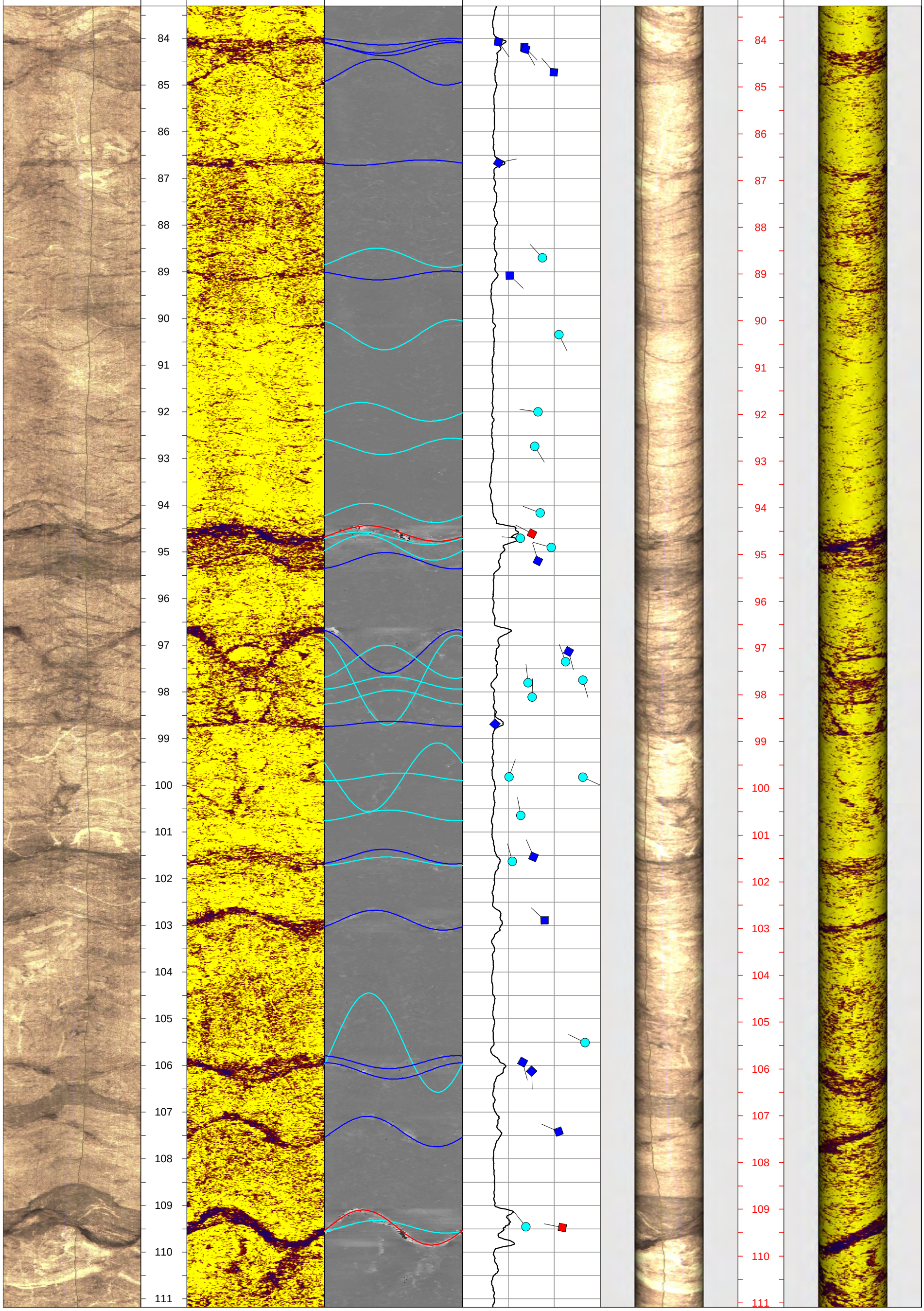
180°

TVD

(Feet)

ATV Virtual Core

180°



MW-34B - Borehole Image Logs

OTV Image
0° 90° 180° 270° 0°

Depth
(Feet)

ATV Amplitude
0° 90° 180° 270° 0°

ATV Travel Time
0° 90° 180° 270° 0°

Structure Projection
0° 90° 180° 270° 0°

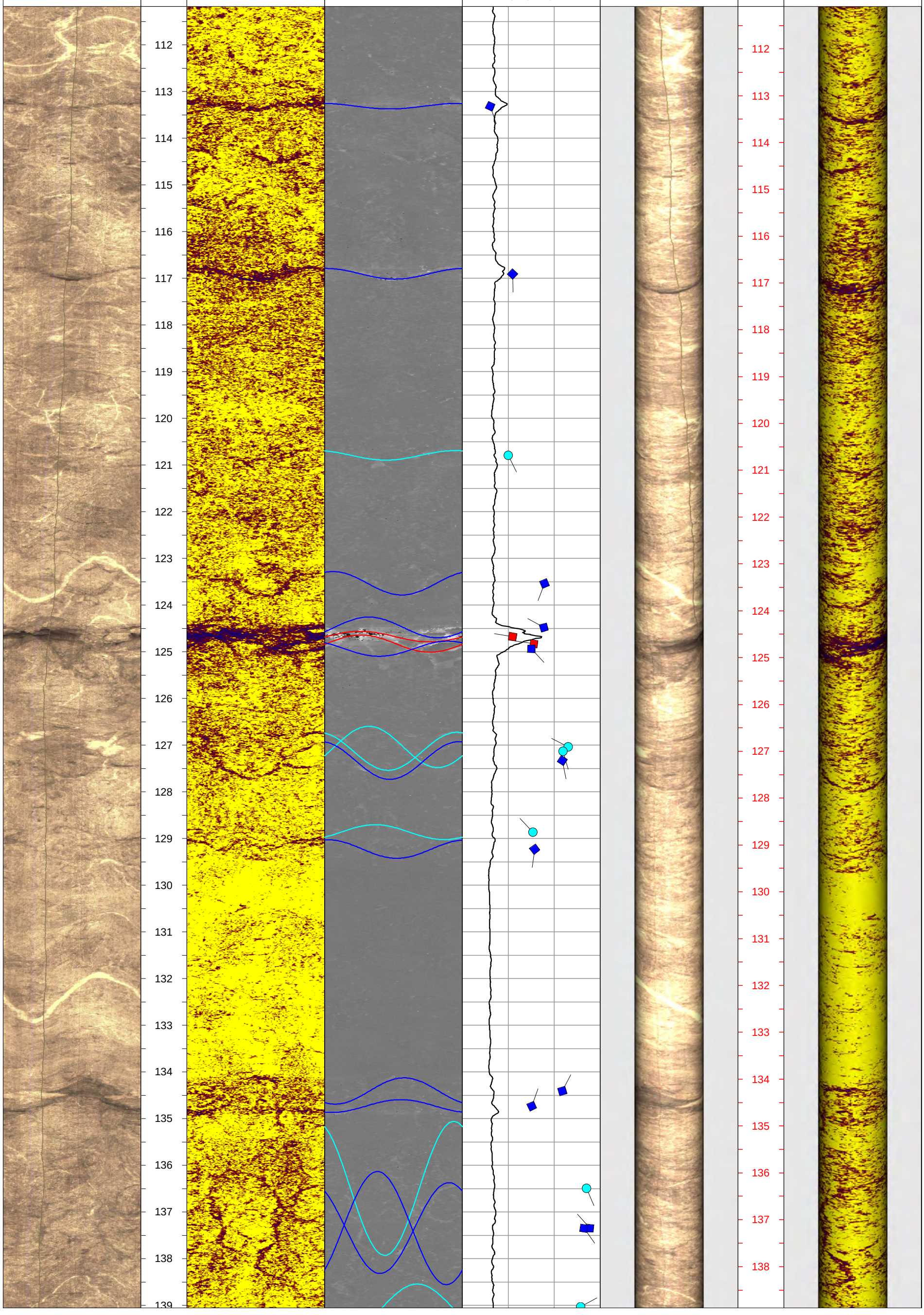
Acoustic Caliper
3.5 (Inches) 5

Tadpole Plot
0 (Degrees) 90

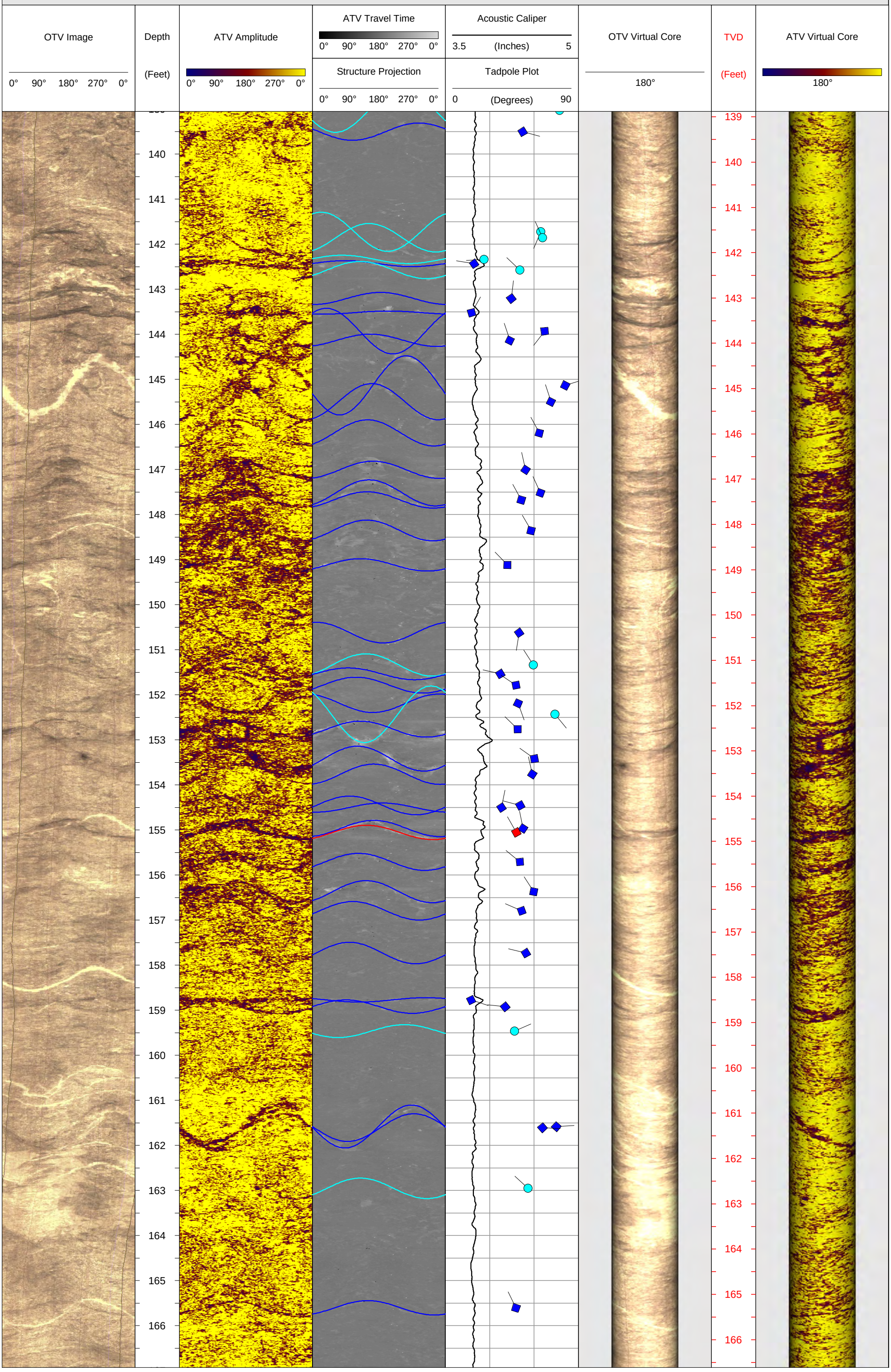
OTV Virtual Core
180°

TVD
(Feet)

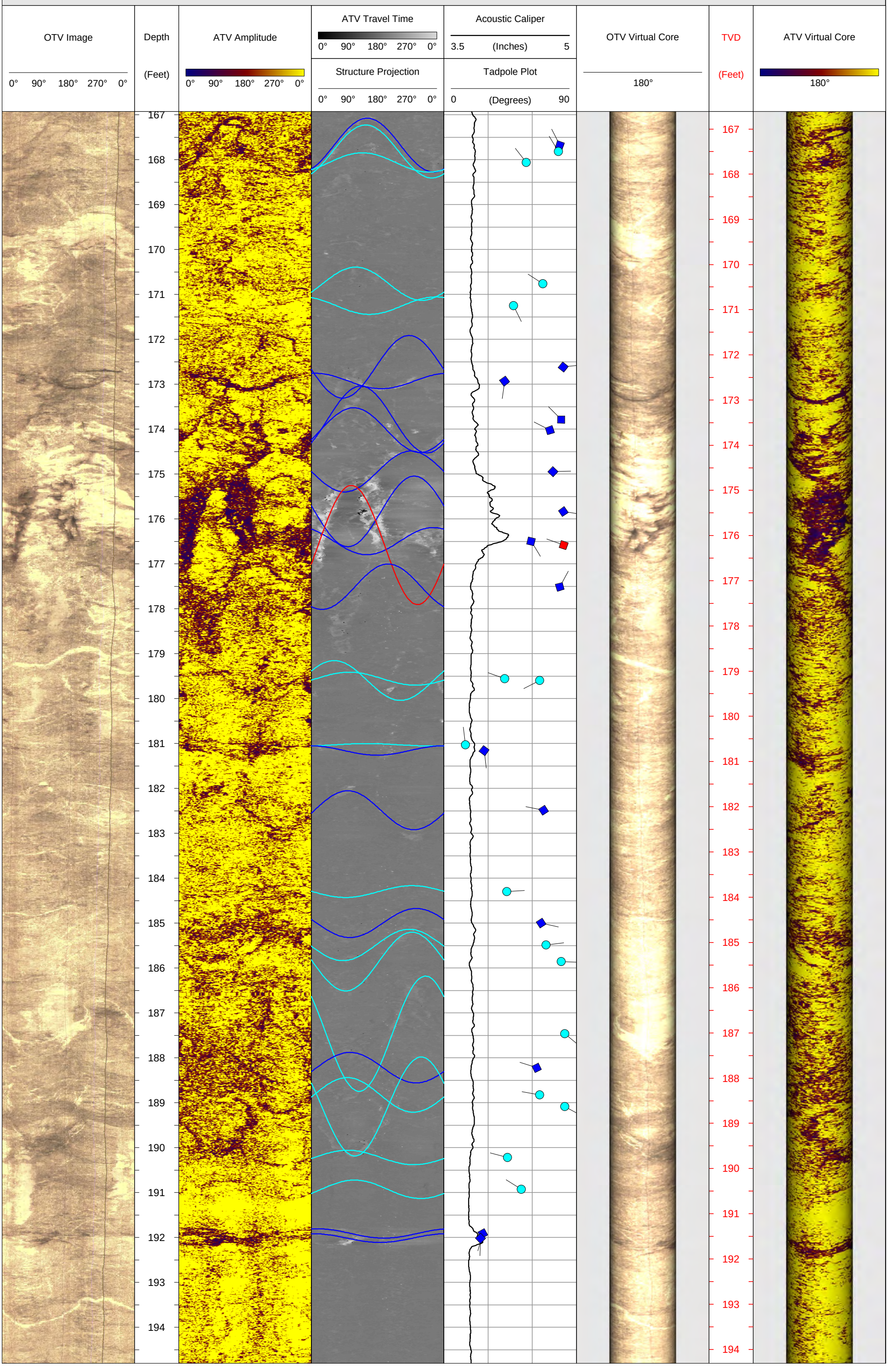
ATV Virtual Core
180°

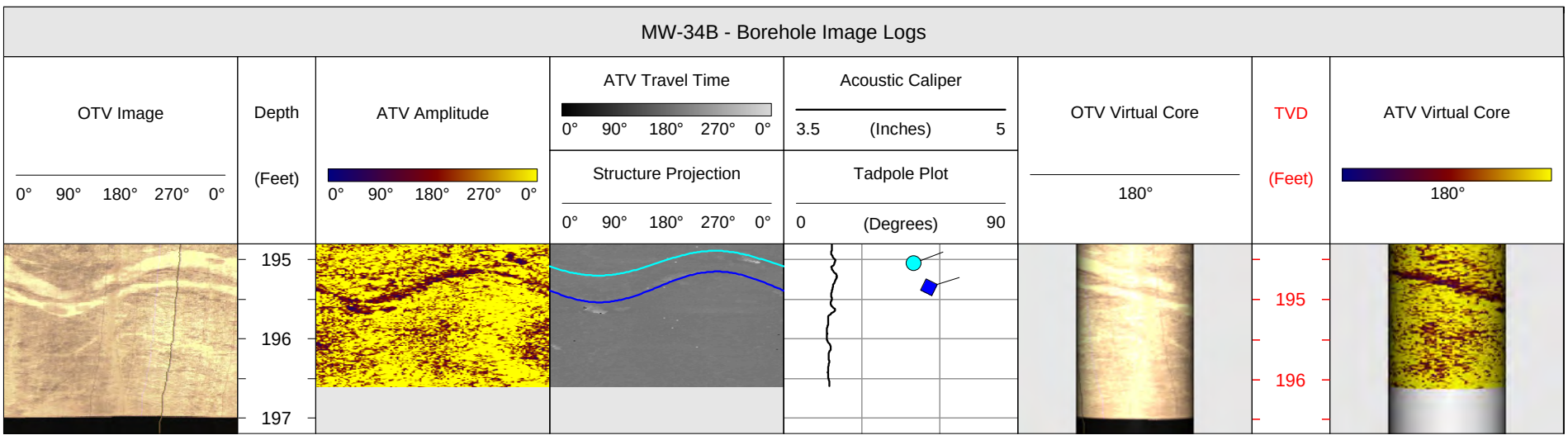


MW-34B - Borehole Image Logs



MW-34B - Borehole Image Logs




MW-34B - Borehole Image Logs
OTV Image
0° 90° 180° 270° 0°
Depth
(Feet)
ATV Amplitude
0° 90° 180° 270° 0°
ATV Travel Time
0° 90° 180° 270° 0°
Structure Projection
0° 90° 180° 270° 0°
Acoustic Caliper
3.5 (Inches) 5
Tadpole Plot
0 (Degrees) 90
OTV Virtual Core
180°
TVD
(Feet)
ATV Virtual Core
180°
195
196
197
195
196

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MW-34B - BOREHOLE GEOPHYSICAL LOGS

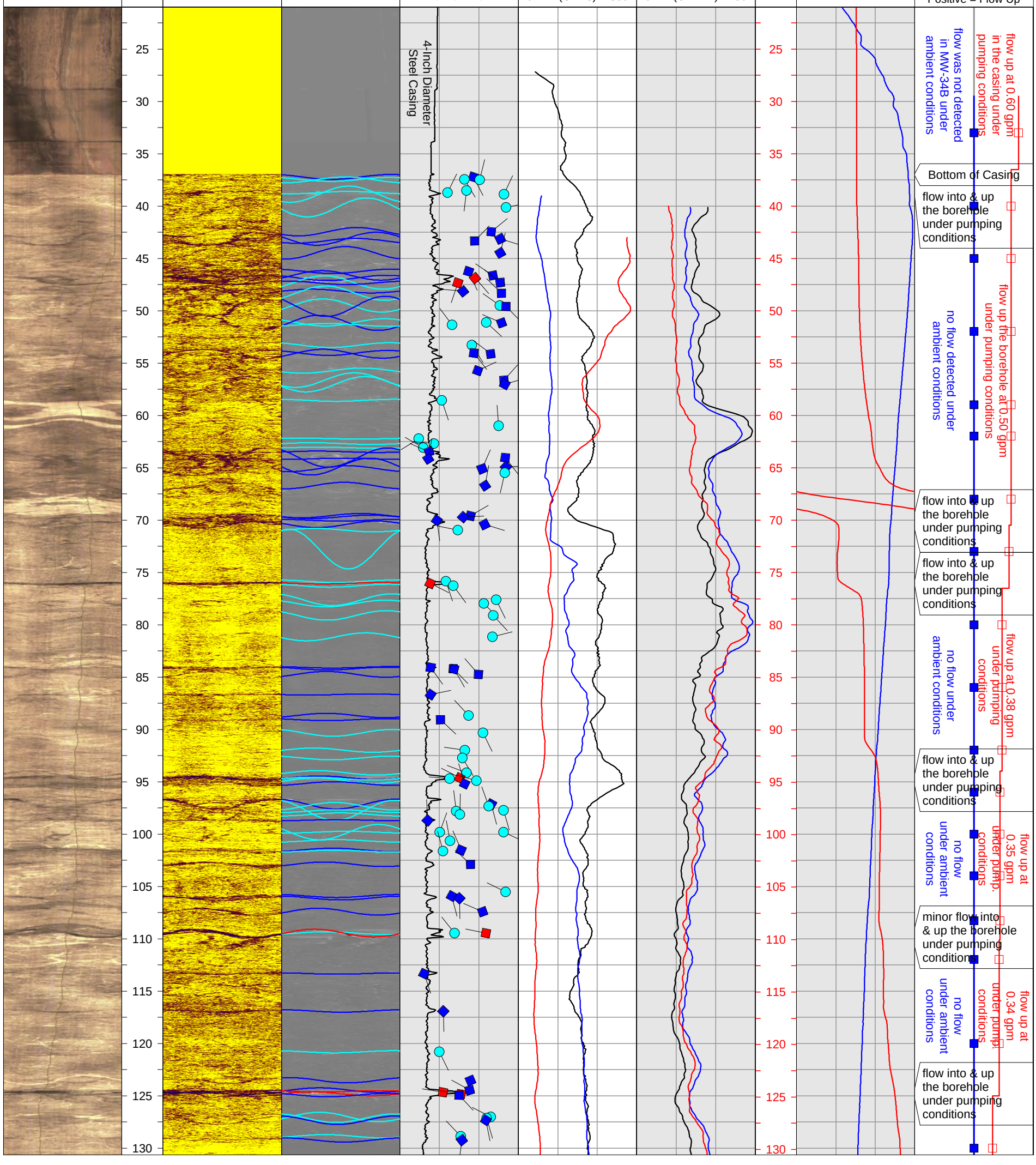
DATE(S) LOGGED: May 20, 2015

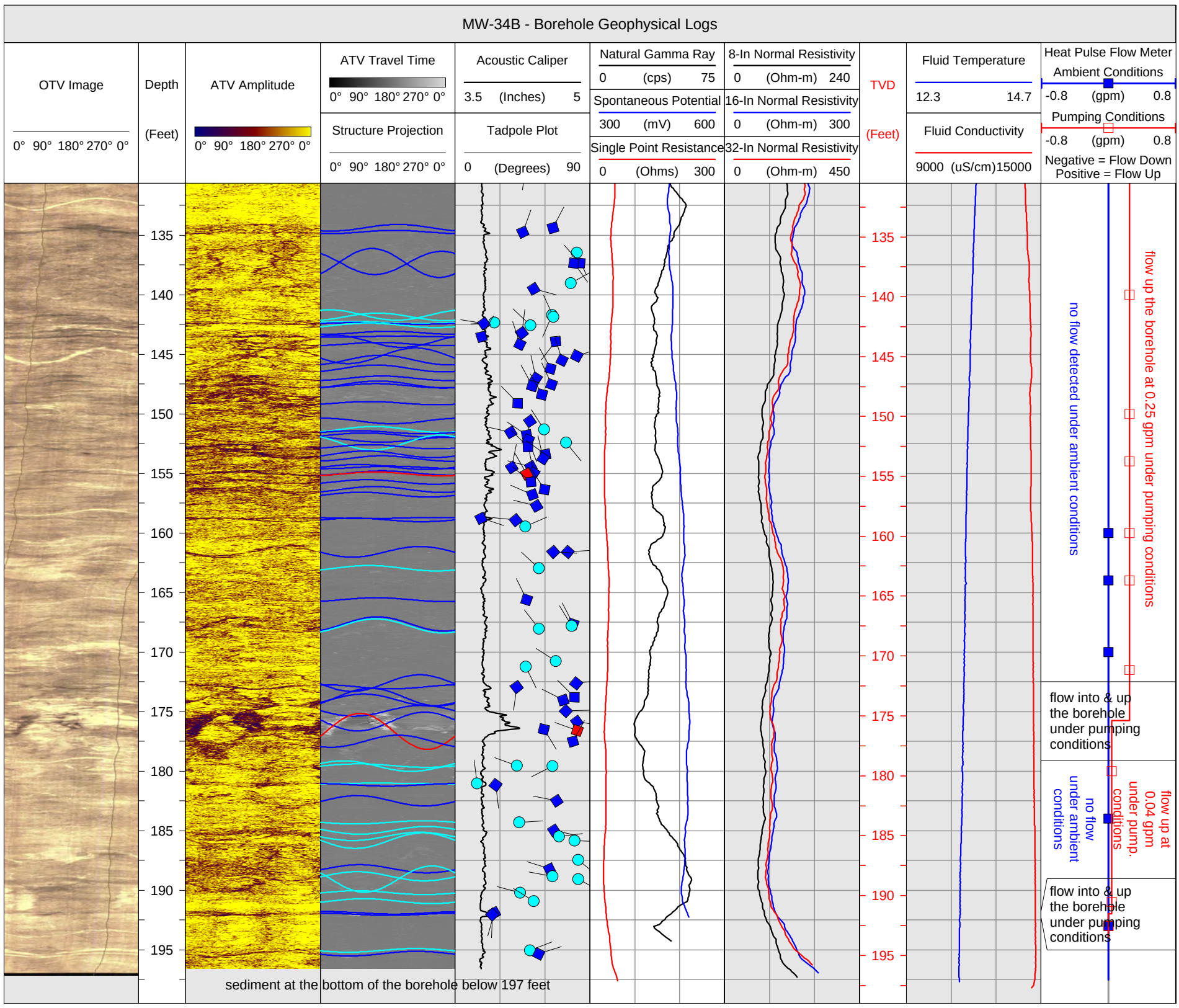
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of the 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, Massachusetts	ORIENTATION REFERENCE:	True North (Magnetic Declination = 15° West)
LOGGING GEOPHYSICIST(S):	Nick DeCristofaro & Mikko Aarnio	TOP OF CASING:	1.0 Feet Below the Ground Surface
CLIENT REP(S) ON-SITE:	Jeff Harshman	BOREHOLE DIAMETER:	4 Inches
LOGS PROCESSED BY:	Robert Garfield	WATER LEVEL DEPTH:	3.2 Feet

STRUCTURE LEGEND

Fracture Rank 1 Fracture Rank 2 Fracture Rank 3

MW-34B - Borehole Geophysical Logs




MW-34B - Borehole Geophysical Logs
OTV Image
0° 90° 180° 270° 0°
Depth
(Feet)
ATV Amplitude
0° 90° 180° 270° 0°
ATV Travel Time
0° 90° 180° 270° 0°
Structure Projection
0° 90° 180° 270° 0°
Acoustic Caliper
3.5 (Inches) 5
Tadpole Plot
0 (Degrees) 90
Natural Gamma Ray
0 (cps) 75
Spontaneous Potential
300 (mV) 600
Single Point Resistance
0 (Ohms) 300
8-In Normal Resistivity
0 (Ohm-m) 240
16-In Normal Resistivity
0 (Ohm-m) 300
32-In Normal Resistivity
0 (Ohm-m) 450
TVD
(Feet)
Fluid Temperature
12.3 14.7
Fluid Conductivity
9000 (uS/cm) 15000
Heat Pulse Flow Meter
Ambient Conditions
-0.8 (gpm) 0.8
Pumping Conditions
-0.8 (gpm) 0.8
Negative = Flow Down
Positive = Flow Up
135
140
145
150
155
160
165
170
175
180
185
190
195
sediment at the bottom of the borehole below 197 feet
no flow detected under ambient conditions
flow up the borehole at 0.25 gpm under pumping conditions
flow into & up the borehole under pumping conditions
no flow under ambient conditions
flow up at 0.04 gpm under pump. conditions
flow into & up the borehole under pumping conditions

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MW-29B - BEDROCK FRACTURE STATISTICS PLOTS

DATE LOGGED: May 21, 2015

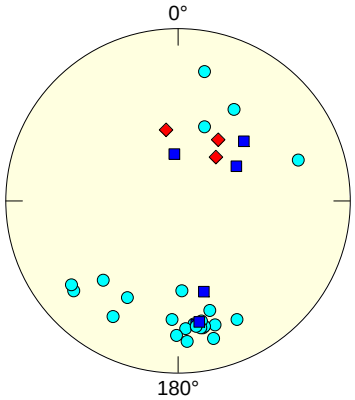
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	ORIENTATION REFERENCE:	True North
LOCATION:	740 Belleville Avenue, New Bedford, MA	MAGNETIC DECLINATION:	15° West

STRUCTURE LEGEND

Fracture Rank 1 ■ Fracture Rank 2 ◆ Fracture Rank 3

Stereogram - Lower Hemisphere of Fractures

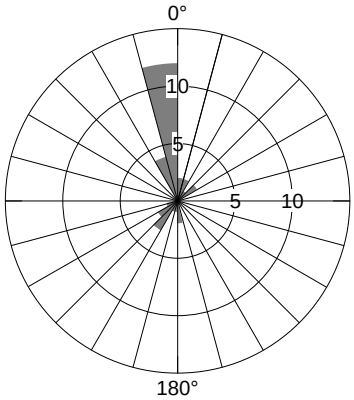
Schmidt Plot - LH - Bedrock Structures



	Counts	Dip[deg]	Azi[deg]
Mean	33	55.69	341.99
○	24	61.27	355.33
◆	3	32.49	201.78
■	6	44.46	289.57

Dip Azimuth Rose Diagram of Fractures

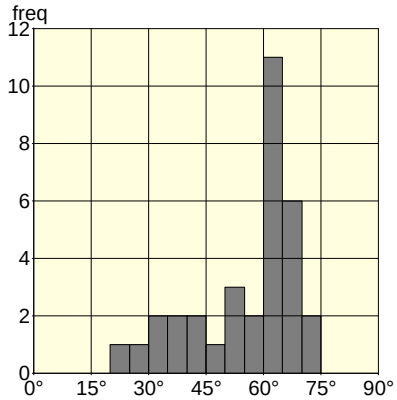
Azimuth - Absolute (Count)



Counts:	33.00
Mean:	341.99
Std.Dev.:	74.40
Min:	0.67
Max:	357.48

Dip Angle Histogram of Fractures

Dip Histogram (Count)



Counts:	33.00
Mean:	55.69
Std.Dev.:	13.40
Min:	22.45
Max:	71.59

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MW-30B - BEDROCK FRACTURE STATISTICS PLOTS

DATE LOGGED: May 21, 2015

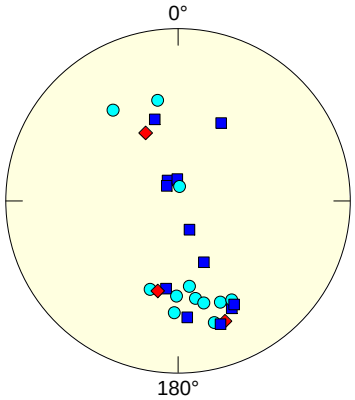
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	ORIENTATION REFERENCE:	True North
LOCATION:	740 Belleville Avenue, New Bedford, MA	MAGNETIC DECLINATION:	15° West

STRUCTURE LEGEND

Fracture Rank 1 ■ Fracture Rank 2 ◆ Fracture Rank 3

Stereogram - Lower Hemisphere of Fractures

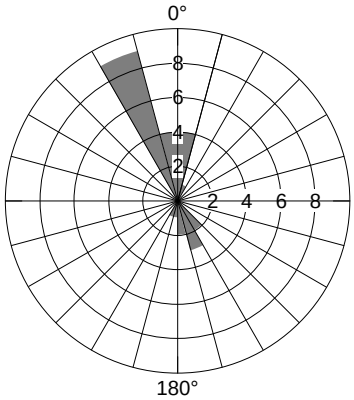
Schmidt Plot - LH - Bedrock Structures



	Counts	Dip[deg]	Azi[deg]
Mean	27	43.23	350.83
■	12	37.08	333.00
●	12	47.87	353.33
◆	3	48.34	16.09

Dip Azimuth Rose Diagram of Fractures

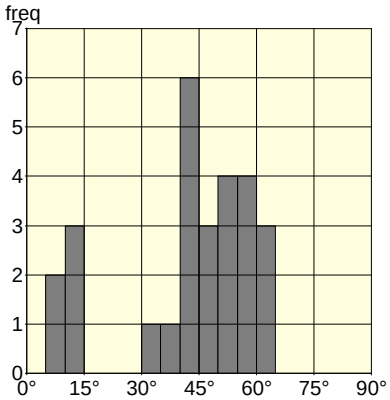
Azimuth - Absolute (Count)



Counts:	27.00
Mean:	350.83
Std.Dev.:	84.82
Min:	1.00
Max:	355.34

Dip Angle Histogram of Fractures

Dip Histogram (Count)



Counts:	27.00
Mean:	43.23
Std.Dev.:	17.50
Min:	6.82
Max:	64.87

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MW-31B - BEDROCK FRACTURE STATISTICS PLOTS

DATE LOGGED: May 21, 2015

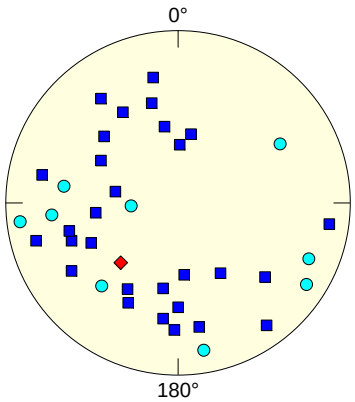
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	ORIENTATION REFERENCE:	True North
LOCATION:	740 Belleville Avenue, New Bedford, MA	MAGNETIC DECLINATION:	15° West

STRUCTURE LEGEND

○ Fracture Rank 1 ■ Fracture Rank 2 ◆ Fracture Rank 3

Stereogram - Lower Hemisphere of Fractures

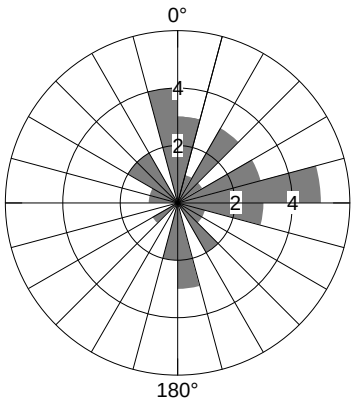
Schmidt Plot - LH - Bedrock Structures



	Counts	Dip[deg]	Azi[deg]
Mean	39	54.44	58.53
■	29	52.39	65.86
○	9	62.84	38.89
◆	1	39.98	43.69

Dip Azimuth Rose Diagram of Fractures

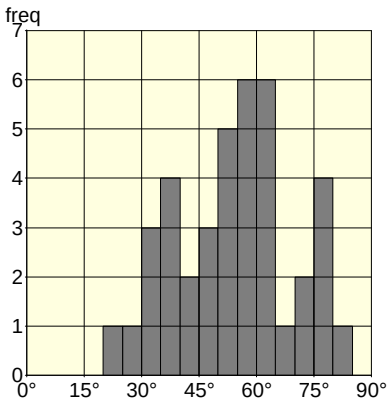
Azimuth - Absolute (Count)



Counts:	39.00
Mean:	58.53
Std.Dev.:	83.65
Min:	1.73
Max:	359.97

Dip Angle Histogram of Fractures

Dip Histogram (Count)



Counts:	39.00
Mean:	54.44
Std.Dev.:	15.03
Min:	22.54
Max:	81.92

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MW-32B - BEDROCK FRACTURE STATISTICS PLOTS

DATE LOGGED: May 20, 2015

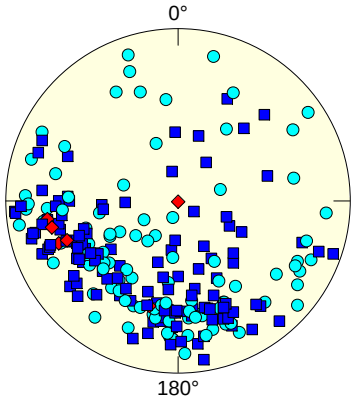
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	ORIENTATION REFERENCE:	True North
LOCATION:	740 Belleville Avenue, New Bedford, MA	MAGNETIC DECLINATION:	15° West

STRUCTURE LEGEND

Fracture Rank 1 ■ Fracture Rank 2 ◆ Fracture Rank 3

Stereogram - Lower Hemisphere of Fractures

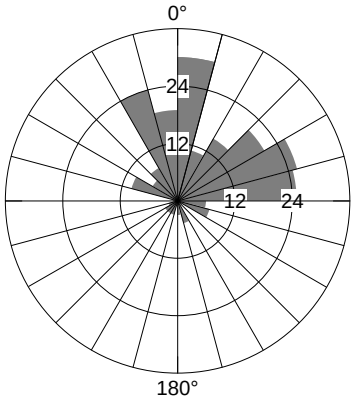
Schmidt Plot - LH - Bedrock Structures



	Counts	Dip[deg]	Azi[deg]
Mean	230	55.45	26.44
■	123	54.83	26.95
●	101	56.41	23.39
◆	6	51.90	52.08

Dip Azimuth Rose Diagram of Fractures

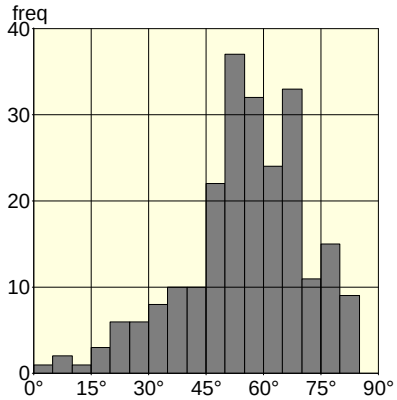
Azimuth - Absolute (Count)



Counts:	230.00
Mean:	26.44
Std.Dev.:	62.73
Min:	0.47
Max:	358.75

Dip Angle Histogram of Fractures

Dip Histogram (Count)



Counts:	230.00
Mean:	55.45
Std.Dev.:	15.79
Min:	0.74
Max:	84.64

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MW-33B - BEDROCK FRACTURE STATISTICS PLOTS

DATE LOGGED: May 19, 2015

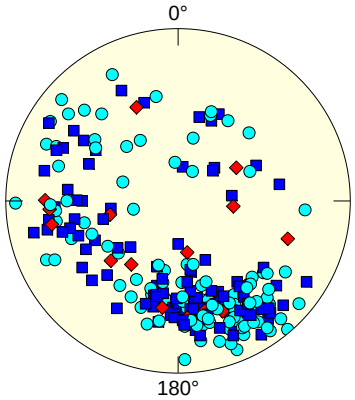
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	ORIENTATION REFERENCE:	True North
LOCATION:	740 Belleville Avenue, New Bedford, MA	MAGNETIC DECLINATION:	15° West

STRUCTURE LEGEND

Fracture Rank 1 ■ Fracture Rank 2 ◆ Fracture Rank 3

Stereogram - Lower Hemisphere of Fractures

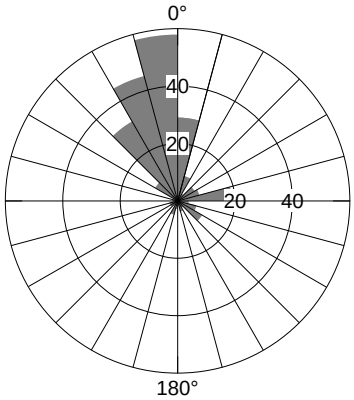
Schmidt Plot - LH - Bedrock Structures



	Counts	Dip[deg]	Azi[deg]
Mean	269	54.85	359.25
●	135	56.74	354.56
■	117	53.59	3.03
◆	17	48.49	13.11

Dip Azimuth Rose Diagram of Fractures

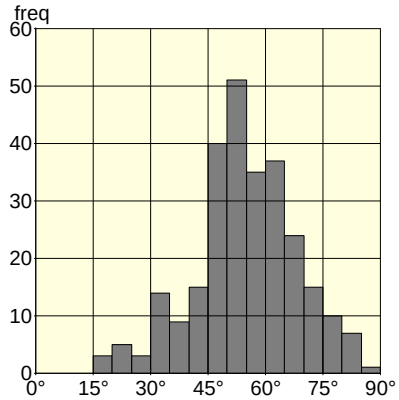
Azimuth - Absolute (Count)



Counts:	269.00
Mean:	359.25
Std.Dev.:	61.57
Min:	0.28
Max:	359.77

Dip Angle Histogram of Fractures

Dip Histogram (Count)



Counts:	269.00
Mean:	54.85
Std.Dev.:	13.37
Min:	15.77
Max:	88.16

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MW-34B - BEDROCK FRACTURE STATISTICS PLOTS

DATE LOGGED: May 20, 2015

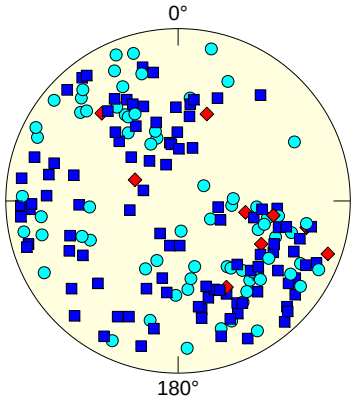
CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	ORIENTATION REFERENCE:	True North
LOCATION:	740 Belleville Avenue, New Bedford, MA	MAGNETIC DECLINATION:	15° West

STRUCTURE LEGEND

Fracture Rank 1 ■ Fracture Rank 2 ◆ Fracture Rank 3

Stereogram - Lower Hemisphere of Fractures

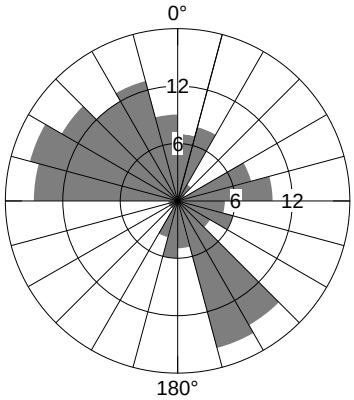
Schmidt Plot - LH - Bedrock Structures



	Counts	Dip[deg]	Azi[deg]
Mean	180	54.92	340.25
■	101	55.01	6.75
●	70	55.50	319.87
◆	9	49.28	270.51

Dip Azimuth Rose Diagram of Fractures

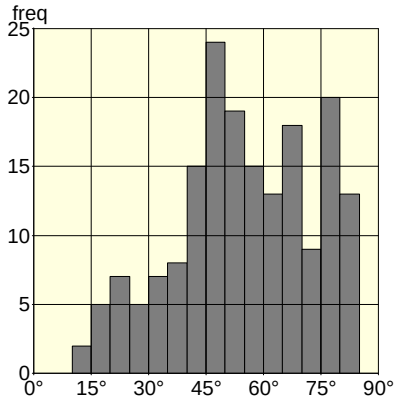
Azimuth - Absolute (Count)



Counts:	180.00
Mean:	340.25
Std.Dev.:	119.67
Min:	1.48
Max:	357.23

Dip Angle Histogram of Fractures

Dip Histogram (Count)



Counts:	180.00
Mean:	54.92
Std.Dev.:	17.93
Min:	14.26
Max:	83.30

HAGER-RICHTER GEOSCIENCE, INC.	
MW-29B - TABLE OF BEDROCK FRACTURES	
CLIENT	AECOM
PROJECT	Former Aerovox Property - Borehole Geophysical Logging
LOCATION	740 Belleville Avenue, New Bedford, Massachusetts
H-R FILE	15RG09
DATE LOGGED	May 21, 2015
LOG DATUM	Top of the 4-Inch Steel Casing
DIP AZIMUTH	True North (Magnetic Declination = 15° West)
DIP ANGLE	Measured from Horizontal

MW-29B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
41.5	49	69	Fracture Rank 1
41.8	43	53	Fracture Rank 1
44.0	343	64	Fracture Rank 1
44.1	170	35	Fracture Rank 3
44.2	344	56	Fracture Rank 1
44.5	175	22	Fracture Rank 2
44.6	352	62	Fracture Rank 1
44.8	356	63	Fracture Rank 1
45.6	212	53	Fracture Rank 1
46.0	200	38	Fracture Rank 1
46.4	251	63	Fracture Rank 1
47.5	52	68	Fracture Rank 1
48.2	1	67	Fracture Rank 1
48.3	356	71	Fracture Rank 1
50.1	349	65	Fracture Rank 1
50.7	348	64	Fracture Rank 1
52.1	192	66	Fracture Rank 1
52.5	349	61	Fracture Rank 1
53.4	345	72	Fracture Rank 1
54.4	239	32	Fracture Rank 2
54.5	213	35	Fracture Rank 3
54.5	29	66	Fracture Rank 1
54.6	221	28	Fracture Rank 3
55.2	352	62	Fracture Rank 2
55.7	350	64	Fracture Rank 1
56.5	351	63	Fracture Rank 1
58.1	333	66	Fracture Rank 1
58.6	3	59	Fracture Rank 1
59.0	357	44	Fracture Rank 1
59.6	28	54	Fracture Rank 1
60.0	350	61	Fracture Rank 2
60.9	228	43	Fracture Rank 2
61.9	344	46	Fracture Rank 2

HAGER-RICHTER GEOSCIENCE, INC.	
MW-30B - TABLE OF BEDROCK FRACTURES	
CLIENT	AECOM
PROJECT	Former Aerovox Property - Borehole Geophysical Logging
LOCATION	740 Belleville Avenue, New Bedford, Massachusetts
H-R FILE	15RG09
DATE LOGGED	May 21, 2015
LOG DATUM	Top of the 4-Inch Steel Casing
DIP AZIMUTH	True North (Magnetic Declination = 15° West)
DIP ANGLE	Measured from Horizontal

MW-30B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
32.5	152	11	Fracture Rank 2
32.6	143	9	Fracture Rank 2
32.7	177	10	Fracture Rank 2
33.1	337	32	Fracture Rank 2
33.3	339	15	Fracture Rank 2
35.1	2	55	Fracture Rank 1
35.5	209	43	Fracture Rank 2
35.5	8	43	Fracture Rank 2
35.9	333	59	Fracture Rank 2
36.0	164	41	Fracture Rank 2
36.0	350	48	Fracture Rank 1
36.1	155	36	Fracture Rank 3
36.6	18	45	Fracture Rank 1
36.8	1	46	Fracture Rank 1
38.9	337	54	Fracture Rank 1
43.6	331	56	Fracture Rank 1
44.2	187	7	Fracture Rank 1
45.1	168	50	Fracture Rank 1
46.3	352	42	Fracture Rank 1
46.6	343	63	Fracture Rank 1
46.9	355	57	Fracture Rank 2
47.1	13	45	Fracture Rank 3
47.4	339	64	Fracture Rank 3
47.6	341	65	Fracture Rank 2
47.9	331	58	Fracture Rank 2
48.8	144	55	Fracture Rank 1
49.4	346	51	Fracture Rank 1

HAGER-RICHTER GEOSCIENCE, INC.	
MW-31B - TABLE OF BEDROCK FRACTURES	
CLIENT	AECOM
PROJECT	Former Aerovox Property - Borehole Geophysical Logging
LOCATION	740 Belleville Avenue, New Bedford, Massachusetts
H-R FILE	15RG09
DATE LOGGED	May 21, 2015
LOG DATUM	Top of the 4-Inch Steel Casing
DIP AZIMUTH	True North (Magnetic Declination = 15° West)
DIP ANGLE	Measured from Horizontal

MW-31B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
37.7	182	28	Fracture Rank 2
38.0	191	34	Fracture Rank 2
39.4	83	82	Fracture Rank 1
39.5	169	64	Fracture Rank 2
39.9	165	50	Fracture Rank 2
40.1	355	35	Fracture Rank 2
40.5	169	37	Fracture Rank 2
40.8	10	42	Fracture Rank 2
41.2	278	78	Fracture Rank 2
41.3	102	70	Fracture Rank 2
41.9	2	63	Fracture Rank 2
42.3	310	56	Fracture Rank 2
43.6	86	23	Fracture Rank 1
44.1	293	72	Fracture Rank 1
44.6	119	43	Fracture Rank 2
46.7	83	40	Fracture Rank 2
47.6	99	57	Fracture Rank 1
49.1	303	78	Fracture Rank 1
49.7	75	75	Fracture Rank 2
50.3	70	55	Fracture Rank 2
50.5	65	47	Fracture Rank 2
50.8	360	51	Fracture Rank 2
51.2	100	31	Fracture Rank 2
52.6	149	52	Fracture Rank 2
52.6	324	77	Fracture Rank 2
52.8	329	40	Fracture Rank 2
53.2	350	62	Fracture Rank 2
54.1	350	76	Fracture Rank 1
54.8	84	63	Fracture Rank 1
55.1	132	49	Fracture Rank 2
55.6	240	58	Fracture Rank 1
56.1	44	40	Fracture Rank 3
56.6	75	55	Fracture Rank 2
57.0	143	65	Fracture Rank 2
57.9	31	49	Fracture Rank 2

MW-31B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
58.0	43	55	Fracture Rank 1
58.2	57	63	Fracture Rank 2
58.5	27	55	Fracture Rank 2
58.8	8	57	Fracture Rank 2

HAGER-RICHTER GEOSCIENCE, INC.	
MW-32B - TABLE OF BEDROCK FRACTURES	
CLIENT	AECOM
PROJECT	Former Aerovox Property - Borehole Geophysical Logging
LOCATION	740 Belleville Avenue, New Bedford, Massachusetts
H-R FILE	15RG09
DATE LOGGED	May 20, 2015
LOG DATUM	Top of the 4-Inch Steel Casing
DIP AZIMUTH	True North (Magnetic Declination = 15° West)
DIP ANGLE	Measured from Horizontal

MW-32B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
45.0	93	54	Fracture Rank 2
45.3	12	61	Fracture Rank 2
45.5	336	54	Fracture Rank 1
45.6	336	55	Fracture Rank 1
45.9	18	46	Fracture Rank 2
46.2	343	34	Fracture Rank 2
46.2	42	42	Fracture Rank 2
46.4	87	37	Fracture Rank 2
46.5	88	25	Fracture Rank 2
46.8	214	42	Fracture Rank 1
46.8	31	44	Fracture Rank 1
47.1	198	33	Fracture Rank 2
47.2	177	33	Fracture Rank 2
47.3	159	30	Fracture Rank 1
48.0	64	48	Fracture Rank 1
48.8	297	67	Fracture Rank 1
49.2	300	71	Fracture Rank 1
49.7	305	74	Fracture Rank 1
52.8	238	68	Fracture Rank 1
53.0	5	53	Fracture Rank 1
53.4	56	48	Fracture Rank 1
53.6	70	58	Fracture Rank 2
53.7	76	60	Fracture Rank 2
54.0	57	56	Fracture Rank 2
54.1	42	62	Fracture Rank 1
55.8	8	60	Fracture Rank 2
56.0	23	56	Fracture Rank 1
56.1	335	73	Fracture Rank 1
56.6	350	57	Fracture Rank 1
56.8	2	55	Fracture Rank 1
56.9	32	55	Fracture Rank 2
57.1	7	58	Fracture Rank 2
58.7	36	72	Fracture Rank 1
59.2	107	27	Fracture Rank 1
60.1	206	56	Fracture Rank 2

MW-32B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
62.1	95	68	Fracture Rank 2
63.1	339	56	Fracture Rank 1
63.3	52	69	Fracture Rank 2
63.3	47	70	Fracture Rank 2
64.0	303	9	Fracture Rank 2
64.2	318	40	Fracture Rank 2
64.3	296	27	Fracture Rank 2
64.8	4	68	Fracture Rank 1
65.0	3	69	Fracture Rank 1
65.3	352	73	Fracture Rank 2
65.7	337	68	Fracture Rank 2
67.2	161	79	Fracture Rank 1
69.5	326	50	Fracture Rank 1
69.6	117	78	Fracture Rank 1
69.9	114	76	Fracture Rank 2
70.5	62	54	Fracture Rank 1
71.3	236	81	Fracture Rank 1
72.1	63	37	Fracture Rank 1
72.3	112	59	Fracture Rank 2
73.8	168	15	Fracture Rank 2
74.3	54	40	Fracture Rank 2
77.2	12	57	Fracture Rank 1
77.5	62	32	Fracture Rank 1
77.9	116	62	Fracture Rank 1
78.7	54	54	Fracture Rank 1
78.9	55	44	Fracture Rank 1
80.2	349	69	Fracture Rank 2
81.0	3	63	Fracture Rank 2
81.1	5	59	Fracture Rank 1
81.3	348	58	Fracture Rank 1
81.6	2	69	Fracture Rank 1
81.9	69	74	Fracture Rank 2
82.5	8	24	Fracture Rank 2
82.9	307	61	Fracture Rank 1
83.2	81	68	Fracture Rank 1
83.4	289	65	Fracture Rank 2
83.9	75	77	Fracture Rank 2
84.0	345	67	Fracture Rank 1
85.6	194	76	Fracture Rank 1
87.8	50	26	Fracture Rank 1
88.5	11	59	Fracture Rank 1
91.0	355	58	Fracture Rank 1
91.1	159	69	Fracture Rank 1
91.3	344	55	Fracture Rank 2
91.5	352	53	Fracture Rank 2

MW-32B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
91.7	352	49	Fracture Rank 1
92.2	26	54	Fracture Rank 2
92.4	20	55	Fracture Rank 1
93.2	2	55	Fracture Rank 2
93.9	36	48	Fracture Rank 1
94.9	22	68	Fracture Rank 1
95.5	150	62	Fracture Rank 1
98.5	161	57	Fracture Rank 1
98.9	48	45	Fracture Rank 1
99.0	50	47	Fracture Rank 1
99.2	87	78	Fracture Rank 1
100.6	92	78	Fracture Rank 1
100.9	353	57	Fracture Rank 2
102.2	73	47	Fracture Rank 1
102.8	37	54	Fracture Rank 1
103.4	288	24	Fracture Rank 2
103.4	47	50	Fracture Rank 2
103.5	63	51	Fracture Rank 2
103.7	70	47	Fracture Rank 2
103.8	58	48	Fracture Rank 2
104.0	51	65	Fracture Rank 2
104.1	89	76	Fracture Rank 1
104.2	41	62	Fracture Rank 2
105.5	287	68	Fracture Rank 1
106.3	294	73	Fracture Rank 1
106.4	82	66	Fracture Rank 2
106.5	86	85	Fracture Rank 2
106.5	87	65	Fracture Rank 1
106.7	70	62	Fracture Rank 1
106.8	349	43	Fracture Rank 2
106.9	64	70	Fracture Rank 1
107.1	311	81	Fracture Rank 1
107.1	77	74	Fracture Rank 2
107.4	70	70	Fracture Rank 2
107.6	71	63	Fracture Rank 3
107.9	60	58	Fracture Rank 2
108.0	86	84	Fracture Rank 2
108.0	275	76	Fracture Rank 1
108.2	59	50	Fracture Rank 2
108.3	67	54	Fracture Rank 2
108.4	70	56	Fracture Rank 2
108.5	225	60	Fracture Rank 2
108.5	79	60	Fracture Rank 2
108.7	82	66	Fracture Rank 3
109.0	90	53	Fracture Rank 2

MW-32B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
109.2	90	59	Fracture Rank 2
109.9	290	76	Fracture Rank 2
110.1	337	58	Fracture Rank 2
110.6	73	48	Fracture Rank 2
111.5	66	52	Fracture Rank 2
111.8	56	47	Fracture Rank 2
112.0	80	69	Fracture Rank 2
112.2	71	51	Fracture Rank 2
115.3	59	52	Fracture Rank 1
115.5	64	37	Fracture Rank 1
115.8	346	54	Fracture Rank 2
116.0	339	66	Fracture Rank 1
122.2	54	50	Fracture Rank 2
123.2	12	51	Fracture Rank 2
123.2	12	54	Fracture Rank 1
123.4	28	55	Fracture Rank 1
123.7	18	8	Fracture Rank 1
125.1	6	27	Fracture Rank 1
125.3	37	42	Fracture Rank 1
127.9	19	31	Fracture Rank 2
128.0	81	38	Fracture Rank 1
129.9	319	67	Fracture Rank 1
130.3	313	36	Fracture Rank 2
130.4	334	42	Fracture Rank 2
131.7	0	36	Fracture Rank 2
131.8	33	53	Fracture Rank 1
132.1	348	69	Fracture Rank 1
132.2	356	68	Fracture Rank 1
132.4	3	72	Fracture Rank 2
137.2	33	20	Fracture Rank 1
137.3	38	24	Fracture Rank 1
137.9	81	83	Fracture Rank 1
140.5	216	23	Fracture Rank 2
140.6	7	40	Fracture Rank 1
141.1	333	44	Fracture Rank 1
141.4	359	54	Fracture Rank 2
141.5	9	52	Fracture Rank 1
141.7	354	54	Fracture Rank 1
142.0	5	19	Fracture Rank 2
142.0	336	1	Fracture Rank 3
142.1	330	32	Fracture Rank 2
143.2	5	66	Fracture Rank 1
143.6	61	19	Fracture Rank 1
144.0	254	45	Fracture Rank 2
144.5	78	64	Fracture Rank 3

MW-32B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
145.1	88	81	Fracture Rank 2
145.3	83	36	Fracture Rank 2
145.6	106	78	Fracture Rank 1
146.6	77	75	Fracture Rank 2
148.6	289	85	Fracture Rank 2
149.2	109	75	Fracture Rank 2
149.6	87	61	Fracture Rank 2
150.4	320	81	Fracture Rank 2
151.1	296	34	Fracture Rank 2
151.2	54	64	Fracture Rank 2
155.7	357	78	Fracture Rank 1
156.7	329	34	Fracture Rank 1
157.2	259	58	Fracture Rank 1
158.0	103	62	Fracture Rank 1
158.2	83	58	Fracture Rank 2
158.3	70	59	Fracture Rank 2
158.4	70	58	Fracture Rank 3
158.5	59	50	Fracture Rank 2
158.6	42	51	Fracture Rank 2
158.9	70	68	Fracture Rank 2
158.9	71	68	Fracture Rank 2
159.1	85	57	Fracture Rank 1
159.1	299	67	Fracture Rank 1
159.2	92	54	Fracture Rank 1
159.9	60	57	Fracture Rank 2
160.3	65	54	Fracture Rank 2
162.8	207	60	Fracture Rank 1
163.3	38	48	Fracture Rank 2
163.4	31	50	Fracture Rank 2
163.7	13	68	Fracture Rank 2
163.8	15	54	Fracture Rank 3
164.0	7	54	Fracture Rank 2
164.9	7	50	Fracture Rank 1
166.0	351	58	Fracture Rank 1
168.8	173	50	Fracture Rank 1
170.1	330	25	Fracture Rank 2
170.3	6	43	Fracture Rank 2
170.5	1	54	Fracture Rank 2
170.7	359	71	Fracture Rank 2
170.9	337	66	Fracture Rank 1
171.0	17	53	Fracture Rank 2
171.2	1	62	Fracture Rank 2
171.5	11	38	Fracture Rank 2
171.7	18	73	Fracture Rank 2
172.7	222	48	Fracture Rank 2

MW-32B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
175.1	339	63	Fracture Rank 2
175.3	344	61	Fracture Rank 2
175.4	337	63	Fracture Rank 2
175.5	333	61	Fracture Rank 2
175.8	322	67	Fracture Rank 2
176.1	323	65	Fracture Rank 2
176.2	330	75	Fracture Rank 2
176.6	351	83	Fracture Rank 2
177.7	344	55	Fracture Rank 2
178.0	351	46	Fracture Rank 2
180.1	255	21	Fracture Rank 1
181.9	339	49	Fracture Rank 2
182.0	335	56	Fracture Rank 2
182.2	337	57	Fracture Rank 2
182.5	48	49	Fracture Rank 1

HAGER-RICHTER GEOSCIENCE, INC.	
MW-33B - TABLE OF BEDROCK FRACTURES	
CLIENT	AECOM
PROJECT	Former Aerovox Property - Borehole Geophysical Logging
LOCATION	740 Belleville Avenue, New Bedford, Massachusetts
H-R FILE	15RG09
DATE LOGGED	May 19, 2015
LOG DATUM	Top of the 4-Inch Steel Casing
DIP AZIMUTH	True North (Magnetic Declination = 15° West)
DIP ANGLE	Measured from Horizontal

MW-33B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
31.9	341	50	Fracture Rank 1
32.1	344	42	Fracture Rank 1
32.5	354	50	Fracture Rank 2
32.6	354	51	Fracture Rank 1
32.7	355	54	Fracture Rank 1
33.4	346	53	Fracture Rank 1
33.9	350	54	Fracture Rank 1
34.3	6	49	Fracture Rank 1
34.3	8	48	Fracture Rank 2
34.5	6	52	Fracture Rank 1
36.5	3	50	Fracture Rank 1
37.3	3	53	Fracture Rank 1
37.8	349	57	Fracture Rank 1
40.2	77	47	Fracture Rank 1
40.6	90	66	Fracture Rank 3
41.8	346	50	Fracture Rank 1
42.2	351	52	Fracture Rank 1
42.4	359	48	Fracture Rank 1
42.6	358	48	Fracture Rank 1
43.0	331	62	Fracture Rank 1
44.0	188	16	Fracture Rank 2
44.1	245	41	Fracture Rank 2
44.2	240	32	Fracture Rank 3
44.3	264	26	Fracture Rank 2
44.5	324	49	Fracture Rank 2
45.1	329	64	Fracture Rank 1
46.1	1	56	Fracture Rank 1
46.3	351	59	Fracture Rank 1
49.3	358	52	Fracture Rank 1
50.9	355	53	Fracture Rank 1
51.4	353	51	Fracture Rank 1
51.9	343	52	Fracture Rank 1
52.8	161	51	Fracture Rank 2
53.4	354	55	Fracture Rank 2
55.2	7	49	Fracture Rank 1

MW-33B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
55.5	14	42	Fracture Rank 2
55.7	49	44	Fracture Rank 3
55.9	65	45	Fracture Rank 2
56.0	205	47	Fracture Rank 2
56.0	47	58	Fracture Rank 2
56.1	228	23	Fracture Rank 2
56.8	103	69	Fracture Rank 2
58.2	349	54	Fracture Rank 1
59.2	2	50	Fracture Rank 2
61.0	11	34	Fracture Rank 1
61.1	156	50	Fracture Rank 3
61.6	19	56	Fracture Rank 1
70.6	351	54	Fracture Rank 2
71.5	212	46	Fracture Rank 1
71.5	335	57	Fracture Rank 2
73.0	9	61	Fracture Rank 2
73.3	16	47	Fracture Rank 1
74.2	17	45	Fracture Rank 1
74.8	152	72	Fracture Rank 1
74.9	349	63	Fracture Rank 1
75.6	329	54	Fracture Rank 1
75.9	337	52	Fracture Rank 2
76.1	336	48	Fracture Rank 2
76.3	351	50	Fracture Rank 2
76.5	15	47	Fracture Rank 2
76.7	30	61	Fracture Rank 2
76.9	4	56	Fracture Rank 2
77.1	2	57	Fracture Rank 2
77.4	321	53	Fracture Rank 3
77.8	114	72	Fracture Rank 1
79.3	26	52	Fracture Rank 1
80.3	352	31	Fracture Rank 1
80.6	351	71	Fracture Rank 1
80.8	13	47	Fracture Rank 2
81.4	336	60	Fracture Rank 2
81.4	153	62	Fracture Rank 2
82.7	203	42	Fracture Rank 2
83.5	311	64	Fracture Rank 2
85.6	336	52	Fracture Rank 1
87.7	194	42	Fracture Rank 2
87.9	358	81	Fracture Rank 1
89.3	7	48	Fracture Rank 1
93.1	71	56	Fracture Rank 1
93.4	114	66	Fracture Rank 1
93.9	115	63	Fracture Rank 2

MW-33B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
94.7	14	63	Fracture Rank 1
94.9	80	51	Fracture Rank 2
95.1	69	45	Fracture Rank 1
95.3	3	52	Fracture Rank 2
95.6	90	46	Fracture Rank 2
96.7	96	54	Fracture Rank 2
96.8	274	63	Fracture Rank 1
97.5	229	22	Fracture Rank 2
98.5	71	52	Fracture Rank 2
99.9	2	49	Fracture Rank 2
100.1	356	50	Fracture Rank 2
100.6	87	61	Fracture Rank 2
101.5	79	22	Fracture Rank 1
101.7	90	49	Fracture Rank 2
102.0	11	47	Fracture Rank 3
102.0	10	45	Fracture Rank 2
102.5	123	55	Fracture Rank 2
103.0	357	39	Fracture Rank 1
103.2	113	47	Fracture Rank 2
104.1	359	50	Fracture Rank 2
104.9	0	50	Fracture Rank 2
105.1	201	44	Fracture Rank 1
106.1	200	46	Fracture Rank 1
106.3	55	57	Fracture Rank 2
107.1	351	56	Fracture Rank 2
107.5	122	76	Fracture Rank 1
107.5	139	57	Fracture Rank 1
108.0	322	68	Fracture Rank 1
108.2	357	56	Fracture Rank 2
108.3	343	50	Fracture Rank 1
108.5	353	60	Fracture Rank 2
108.6	346	59	Fracture Rank 2
108.8	121	77	Fracture Rank 2
109.0	44	50	Fracture Rank 2
109.7	128	70	Fracture Rank 1
110.2	349	60	Fracture Rank 2
110.6	347	54	Fracture Rank 2
110.8	355	52	Fracture Rank 1
110.9	357	49	Fracture Rank 1
111.0	28	43	Fracture Rank 1
111.1	338	83	Fracture Rank 1
111.5	354	53	Fracture Rank 2
111.8	337	51	Fracture Rank 2
112.3	9	60	Fracture Rank 1
113.1	357	59	Fracture Rank 2

MW-33B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
113.4	352	65	Fracture Rank 2
113.9	340	54	Fracture Rank 2
113.9	323	75	Fracture Rank 2
114.0	302	77	Fracture Rank 2
115.3	331	70	Fracture Rank 2
116.4	328	81	Fracture Rank 2
116.8	13	48	Fracture Rank 2
117.1	1	47	Fracture Rank 2
117.5	352	53	Fracture Rank 2
118.1	46	32	Fracture Rank 2
118.6	18	33	Fracture Rank 2
118.7	13	53	Fracture Rank 2
118.8	9	53	Fracture Rank 3
118.9	261	50	Fracture Rank 2
119.0	18	53	Fracture Rank 2
119.3	349	48	Fracture Rank 2
119.5	355	57	Fracture Rank 3
119.5	289	57	Fracture Rank 3
119.7	338	59	Fracture Rank 3
120.0	346	56	Fracture Rank 3
120.5	350	35	Fracture Rank 2
121.0	336	52	Fracture Rank 2
121.5	106	62	Fracture Rank 1
122.0	124	63	Fracture Rank 2
122.3	134	65	Fracture Rank 1
122.9	122	47	Fracture Rank 2
125.9	334	66	Fracture Rank 1
126.0	338	70	Fracture Rank 1
126.7	334	73	Fracture Rank 2
126.9	337	71	Fracture Rank 2
127.7	330	67	Fracture Rank 1
127.8	335	66	Fracture Rank 1
128.5	131	79	Fracture Rank 1
130.4	324	66	Fracture Rank 1
131.8	340	57	Fracture Rank 1
132.0	330	60	Fracture Rank 1
132.7	351	68	Fracture Rank 2
134.0	351	63	Fracture Rank 1
134.0	148	34	Fracture Rank 1
135.1	334	76	Fracture Rank 1
136.7	357	62	Fracture Rank 1
137.9	345	58	Fracture Rank 2
139.5	348	58	Fracture Rank 1
140.6	331	58	Fracture Rank 1
141.1	340	78	Fracture Rank 1

MW-33B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
141.3	304	64	Fracture Rank 1
141.6	310	55	Fracture Rank 1
141.7	332	61	Fracture Rank 1
142.3	316	52	Fracture Rank 1
143.0	308	53	Fracture Rank 2
143.2	325	55	Fracture Rank 2
143.4	330	68	Fracture Rank 2
143.6	319	70	Fracture Rank 1
143.8	315	75	Fracture Rank 2
144.4	320	69	Fracture Rank 1
144.5	76	55	Fracture Rank 2
144.6	325	64	Fracture Rank 1
146.5	326	73	Fracture Rank 1
146.8	320	73	Fracture Rank 2
151.4	309	57	Fracture Rank 1
151.5	319	54	Fracture Rank 1
151.9	84	33	Fracture Rank 2
152.0	79	33	Fracture Rank 3
152.1	76	37	Fracture Rank 2
152.3	49	38	Fracture Rank 1
154.5	80	61	Fracture Rank 1
159.8	126	50	Fracture Rank 1
160.3	325	82	Fracture Rank 1
162.9	327	64	Fracture Rank 1
163.2	319	80	Fracture Rank 1
165.2	168	52	Fracture Rank 1
167.3	335	68	Fracture Rank 2
169.2	113	66	Fracture Rank 2
171.6	194	31	Fracture Rank 1
171.6	226	48	Fracture Rank 1
174.3	136	36	Fracture Rank 1
174.8	342	54	Fracture Rank 1
175.5	175	19	Fracture Rank 1
176.6	11	40	Fracture Rank 1
177.5	325	79	Fracture Rank 1
179.9	333	67	Fracture Rank 1
184.3	343	74	Fracture Rank 1
184.6	354	59	Fracture Rank 1
184.9	360	21	Fracture Rank 2
185.0	37	38	Fracture Rank 3
185.0	350	25	Fracture Rank 3
185.1	350	34	Fracture Rank 2
187.8	352	44	Fracture Rank 2
188.1	109	28	Fracture Rank 1
189.6	335	31	Fracture Rank 2

MW-33B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
189.7	340	47	Fracture Rank 2
193.2	326	57	Fracture Rank 2
193.3	324	52	Fracture Rank 2
195.2	353	39	Fracture Rank 2
195.2	52	37	Fracture Rank 2
197.9	334	64	Fracture Rank 1
206.5	333	72	Fracture Rank 1
206.6	333	56	Fracture Rank 1
206.8	334	51	Fracture Rank 2
207.3	345	62	Fracture Rank 1
208.2	357	46	Fracture Rank 1
215.3	332	72	Fracture Rank 1
215.4	338	74	Fracture Rank 2
225.1	346	31	Fracture Rank 1
225.5	247	38	Fracture Rank 1
225.9	346	60	Fracture Rank 1
226.2	337	65	Fracture Rank 1
226.3	341	41	Fracture Rank 1
227.3	276	27	Fracture Rank 3
230.7	330	63	Fracture Rank 2
231.2	322	68	Fracture Rank 2
236.9	326	62	Fracture Rank 2
239.6	205	16	Fracture Rank 1
240.3	317	66	Fracture Rank 1
240.5	328	72	Fracture Rank 1
241.1	322	54	Fracture Rank 1
249.8	320	88	Fracture Rank 1
251.0	358	59	Fracture Rank 2
252.9	322	63	Fracture Rank 1
253.3	342	67	Fracture Rank 2
253.8	327	68	Fracture Rank 2
254.0	320	71	Fracture Rank 2
255.5	57	40	Fracture Rank 1
255.7	62	51	Fracture Rank 2
256.0	12	38	Fracture Rank 2
256.2	35	50	Fracture Rank 1
258.2	85	61	Fracture Rank 1
258.3	90	54	Fracture Rank 1
259.4	89	84	Fracture Rank 1
259.5	77	67	Fracture Rank 2
259.6	81	65	Fracture Rank 2
259.7	79	64	Fracture Rank 3
259.9	86	64	Fracture Rank 3
260.3	75	59	Fracture Rank 2
260.7	357	61	Fracture Rank 2

MW-33B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
261.8	78	75	Fracture Rank 2
262.7	88	63	Fracture Rank 1
264.1	17	32	Fracture Rank 1
270.8	310	82	Fracture Rank 1
271.4	314	63	Fracture Rank 1
283.6	325	62	Fracture Rank 1
287.1	66	73	Fracture Rank 1
287.2	64	69	Fracture Rank 1
288.6	123	48	Fracture Rank 1

HAGER-RICHTER GEOSCIENCE, INC.	
MW-34B - TABLE OF BEDROCK FRACTURES	
CLIENT	AECOM
PROJECT	Former Aerovox Property - Borehole Geophysical Logging
LOCATION	740 Belleville Avenue, New Bedford, Massachusetts
H-R FILE	15RG09
DATE LOGGED	May 20, 2015
LOG DATUM	Top of the 4-Inch Steel Casing
DIP AZIMUTH	True North (Magnetic Declination = 15° West)
DIP ANGLE	Measured from Horizontal

MW-34B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
37.2	153	56	Fracture Rank 2
37.5	148	49	Fracture Rank 1
37.5	13	61	Fracture Rank 1
38.5	187	51	Fracture Rank 1
38.7	26	36	Fracture Rank 1
38.9	25	79	Fracture Rank 1
40.1	79	81	Fracture Rank 1
42.5	50	69	Fracture Rank 2
43.1	107	76	Fracture Rank 2
43.3	44	57	Fracture Rank 2
44.5	14	76	Fracture Rank 2
46.3	155	52	Fracture Rank 2
46.7	304	71	Fracture Rank 2
46.9	139	57	Fracture Rank 3
47.3	309	76	Fracture Rank 2
47.3	198	44	Fracture Rank 3
48.1	275	48	Fracture Rank 2
48.3	314	77	Fracture Rank 2
49.5	305	76	Fracture Rank 1
49.6	135	81	Fracture Rank 2
51.1	132	66	Fracture Rank 1
51.2	294	77	Fracture Rank 2
51.4	323	40	Fracture Rank 1
53.3	147	55	Fracture Rank 1
54.0	142	56	Fracture Rank 2
54.1	307	69	Fracture Rank 2
55.7	65	59	Fracture Rank 2
56.7	42	79	Fracture Rank 2
57.0	74	80	Fracture Rank 2
58.5	161	32	Fracture Rank 1
61.0	356	75	Fracture Rank 1
62.2	239	14	Fracture Rank 1
62.7	275	26	Fracture Rank 1
63.1	300	18	Fracture Rank 1
63.5	294	22	Fracture Rank 2

MW-34B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
64.0	142	80	Fracture Rank 2
64.2	11	22	Fracture Rank 2
64.9	88	81	Fracture Rank 2
65.1	23	62	Fracture Rank 2
65.5	193	80	Fracture Rank 1
66.7	11	65	Fracture Rank 2
69.6	60	54	Fracture Rank 2
69.7	88	48	Fracture Rank 2
70.0	172	28	Fracture Rank 2
70.4	107	64	Fracture Rank 2
71.0	281	44	Fracture Rank 1
75.9	161	35	Fracture Rank 1
76.1	116	23	Fracture Rank 3
76.3	144	41	Fracture Rank 1
77.6	154	73	Fracture Rank 1
78.0	135	64	Fracture Rank 1
79.1	137	71	Fracture Rank 1
81.2	76	70	Fracture Rank 1
84.1	145	24	Fracture Rank 2
84.2	135	40	Fracture Rank 2
84.2	151	41	Fracture Rank 2
84.7	319	60	Fracture Rank 2
86.7	79	23	Fracture Rank 2
88.7	318	52	Fracture Rank 1
89.1	133	31	Fracture Rank 2
90.3	154	63	Fracture Rank 1
92.0	279	49	Fracture Rank 1
92.7	149	47	Fracture Rank 1
94.2	291	51	Fracture Rank 1
94.6	297	46	Fracture Rank 3
94.7	275	38	Fracture Rank 1
94.9	286	58	Fracture Rank 1
95.2	343	49	Fracture Rank 2
97.1	165	69	Fracture Rank 2
97.4	341	67	Fracture Rank 1
97.7	163	79	Fracture Rank 1
97.8	354	43	Fracture Rank 1
98.1	1	46	Fracture Rank 1
98.7	357	21	Fracture Rank 2
99.8	20	30	Fracture Rank 1
99.8	114	79	Fracture Rank 1
100.6	351	38	Fracture Rank 1
101.5	338	46	Fracture Rank 2
101.6	345	33	Fracture Rank 1
102.9	313	54	Fracture Rank 2

MW-34B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
105.5	296	80	Fracture Rank 1
105.9	164	39	Fracture Rank 2
106.1	178	45	Fracture Rank 2
107.4	294	63	Fracture Rank 2
109.5	322	42	Fracture Rank 1
109.5	282	65	Fracture Rank 3
113.3	161	18	Fracture Rank 2
116.9	179	33	Fracture Rank 2
120.8	154	30	Fracture Rank 1
123.5	201	54	Fracture Rank 2
124.5	299	53	Fracture Rank 2
124.7	280	33	Fracture Rank 3
124.8	279	47	Fracture Rank 3
124.9	138	45	Fracture Rank 2
127.0	297	69	Fracture Rank 1
127.1	164	66	Fracture Rank 1
127.3	169	65	Fracture Rank 2
128.9	317	46	Fracture Rank 1
129.2	187	47	Fracture Rank 2
134.4	28	65	Fracture Rank 2
134.7	20	45	Fracture Rank 2
136.5	157	81	Fracture Rank 1
137.3	319	83	Fracture Rank 2
137.4	144	79	Fracture Rank 2
139.0	62	77	Fracture Rank 1
139.5	104	52	Fracture Rank 2
141.7	203	65	Fracture Rank 1
141.9	336	66	Fracture Rank 1
142.3	267	26	Fracture Rank 1
142.4	280	19	Fracture Rank 2
142.6	314	50	Fracture Rank 1
143.2	7	45	Fracture Rank 2
143.5	29	18	Fracture Rank 2
143.9	218	67	Fracture Rank 2
144.1	342	44	Fracture Rank 2
145.1	73	81	Fracture Rank 2
145.5	342	71	Fracture Rank 2
146.2	332	64	Fracture Rank 2
147.0	348	54	Fracture Rank 2
147.5	336	64	Fracture Rank 2
147.7	332	51	Fracture Rank 2
148.4	330	58	Fracture Rank 2
149.1	317	42	Fracture Rank 2
150.6	189	50	Fracture Rank 2
151.3	327	59	Fracture Rank 1

MW-34B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
151.5	283	37	Fracture Rank 2
151.8	303	48	Fracture Rank 2
152.2	160	49	Fracture Rank 2
152.4	140	74	Fracture Rank 1
152.8	314	49	Fracture Rank 2
153.4	305	60	Fracture Rank 2
153.8	348	59	Fracture Rank 2
154.5	285	51	Fracture Rank 2
154.5	12	38	Fracture Rank 2
155.0	349	53	Fracture Rank 2
155.1	331	48	Fracture Rank 3
155.7	309	51	Fracture Rank 2
156.4	328	60	Fracture Rank 2
156.8	294	52	Fracture Rank 2
157.7	284	54	Fracture Rank 2
158.8	108	17	Fracture Rank 2
158.9	276	41	Fracture Rank 2
159.5	66	47	Fracture Rank 1
161.6	87	75	Fracture Rank 2
161.6	92	66	Fracture Rank 2
163.0	314	56	Fracture Rank 1
165.6	335	48	Fracture Rank 2
167.7	333	79	Fracture Rank 2
167.8	329	78	Fracture Rank 1
168.1	323	56	Fracture Rank 1
170.8	303	67	Fracture Rank 1
171.3	153	47	Fracture Rank 1
172.6	84	81	Fracture Rank 2
172.9	188	41	Fracture Rank 2
173.8	315	80	Fracture Rank 2
174.0	297	72	Fracture Rank 2
174.9	89	74	Fracture Rank 2
175.8	98	81	Fracture Rank 2
176.5	148	59	Fracture Rank 2
176.6	290	81	Fracture Rank 3
177.5	29	79	Fracture Rank 2
179.6	290	41	Fracture Rank 1
179.6	243	65	Fracture Rank 1
181.0	354	15	Fracture Rank 1
181.2	173	27	Fracture Rank 2
182.5	281	68	Fracture Rank 2
184.3	86	43	Fracture Rank 1
185.0	102	66	Fracture Rank 2
185.5	83	69	Fracture Rank 1
185.9	92	80	Fracture Rank 1

MW-34B - TABLE OF BEDROCK FRACTURES

Depth (Feet)	Dip Azimuth (Degrees)	Dip Angle (Degrees)	Bedrock Structure Category
187.5	129	82	Fracture Rank 1
188.2	288	63	Fracture Rank 2
188.8	280	65	Fracture Rank 1
189.1	117	82	Fracture Rank 1
190.2	285	43	Fracture Rank 1
190.9	302	53	Fracture Rank 1
191.9	196	26	Fracture Rank 2
192.0	182	25	Fracture Rank 2
195.1	70	50	Fracture Rank 1
195.3	72	56	Fracture Rank 2

HAGER-RICHTER GEOSCIENCE, INC.

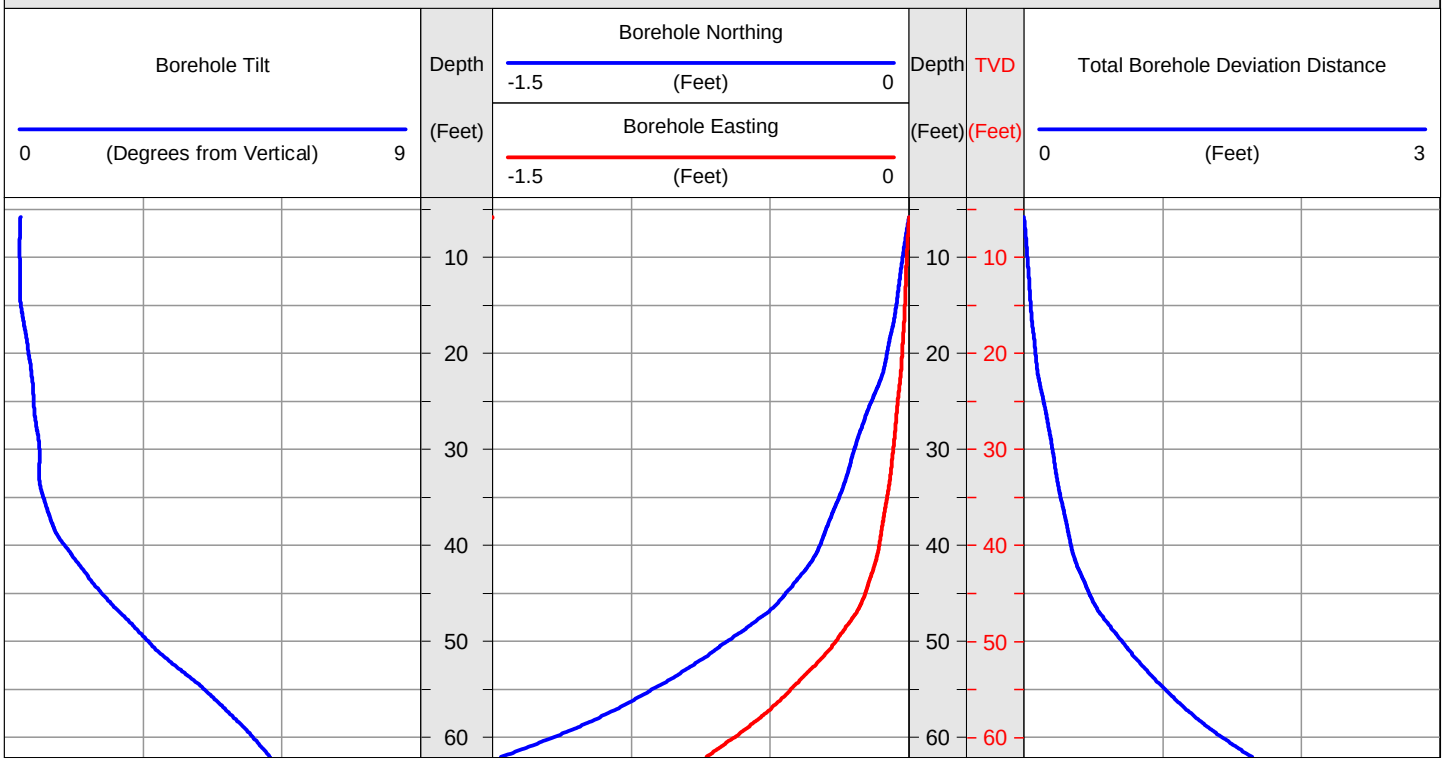
8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-29B - BOREHOLE DEVIATION LOGS

DATE(S) LOGGED: May 21, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, MA	ORIENTATION REFERENCE:	True North
GEOPHYSICISTS:	N. DeCristofaro & M. Aarnio	MAGNETIC DECLINATION:	15° West

MW-29B - Borehole Deviation Logs



HAGER-RICHTER GEOSCIENCE, INC.

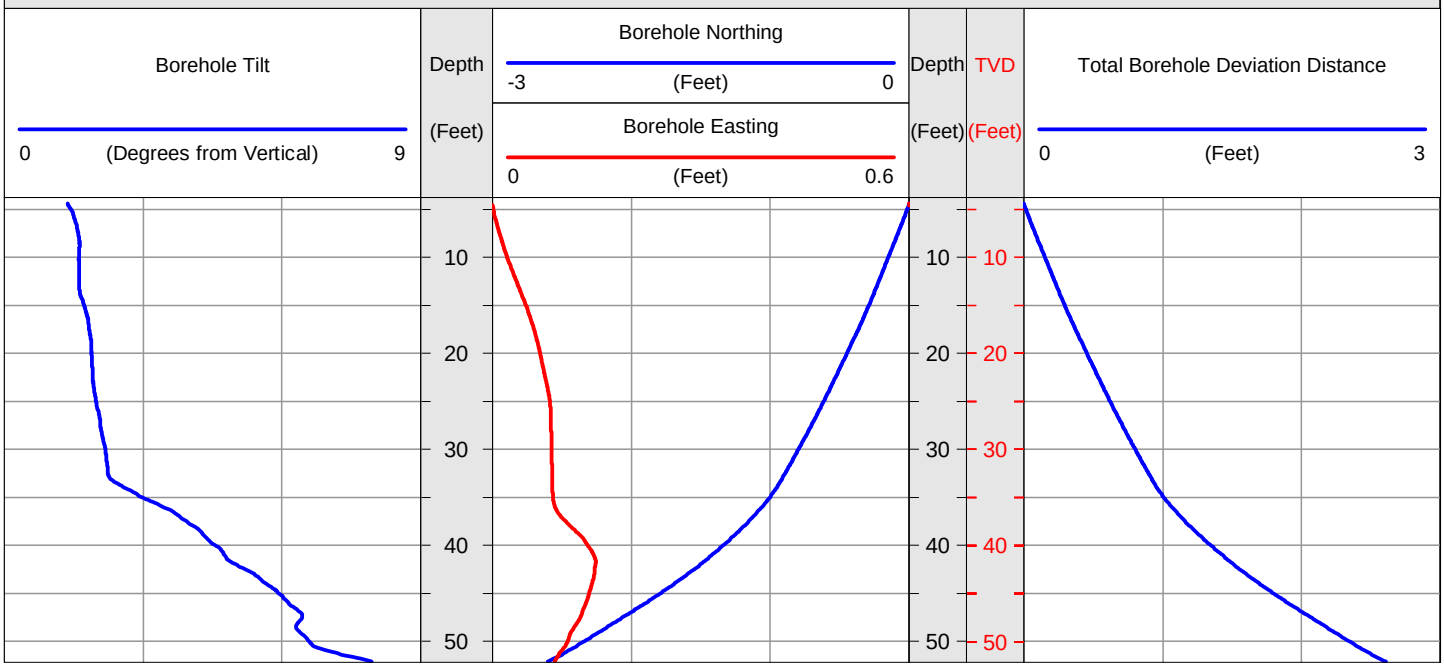
8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-30B - BOREHOLE DEVIATION LOGS

DATE(S) LOGGED: May 21, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, MA	ORIENTATION REFERENCE:	True North
GEOPHYSICISTS:	N. DeCristofaro & M. Aarnio	MAGNETIC DECLINATION:	15° West

MW-30B - Borehole Deviation Logs



HAGER-RICHTER GEOSCIENCE, INC.

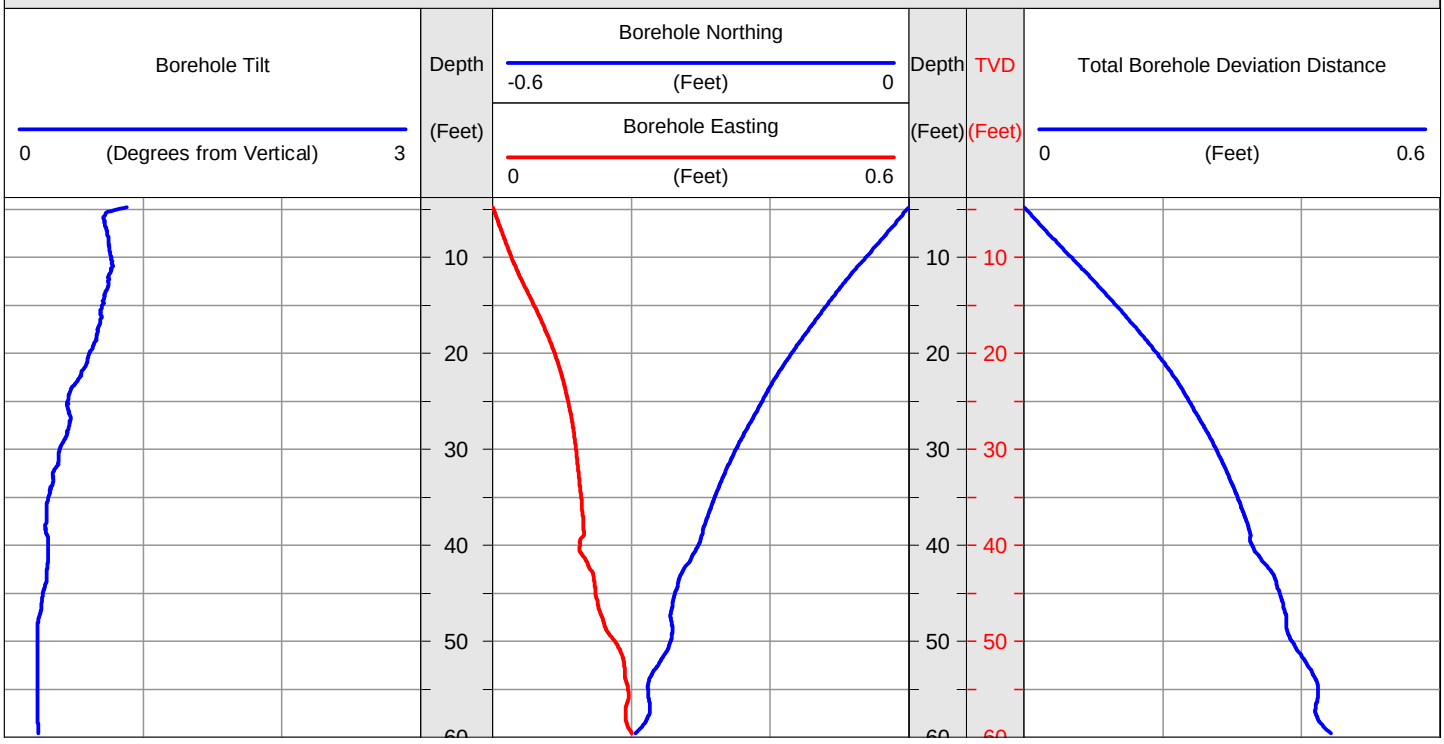
8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-31B - BOREHOLE DEVIATION LOGS

DATE(S) LOGGED: May 21, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, MA	ORIENTATION REFERENCE:	True North
GEOPHYSICISTS:	N. DeCristofaro & M. Aarnio	MAGNETIC DECLINATION:	15° West

MW-31B - Borehole Deviation Logs



HAGER-RICHTER GEOSCIENCE, INC.

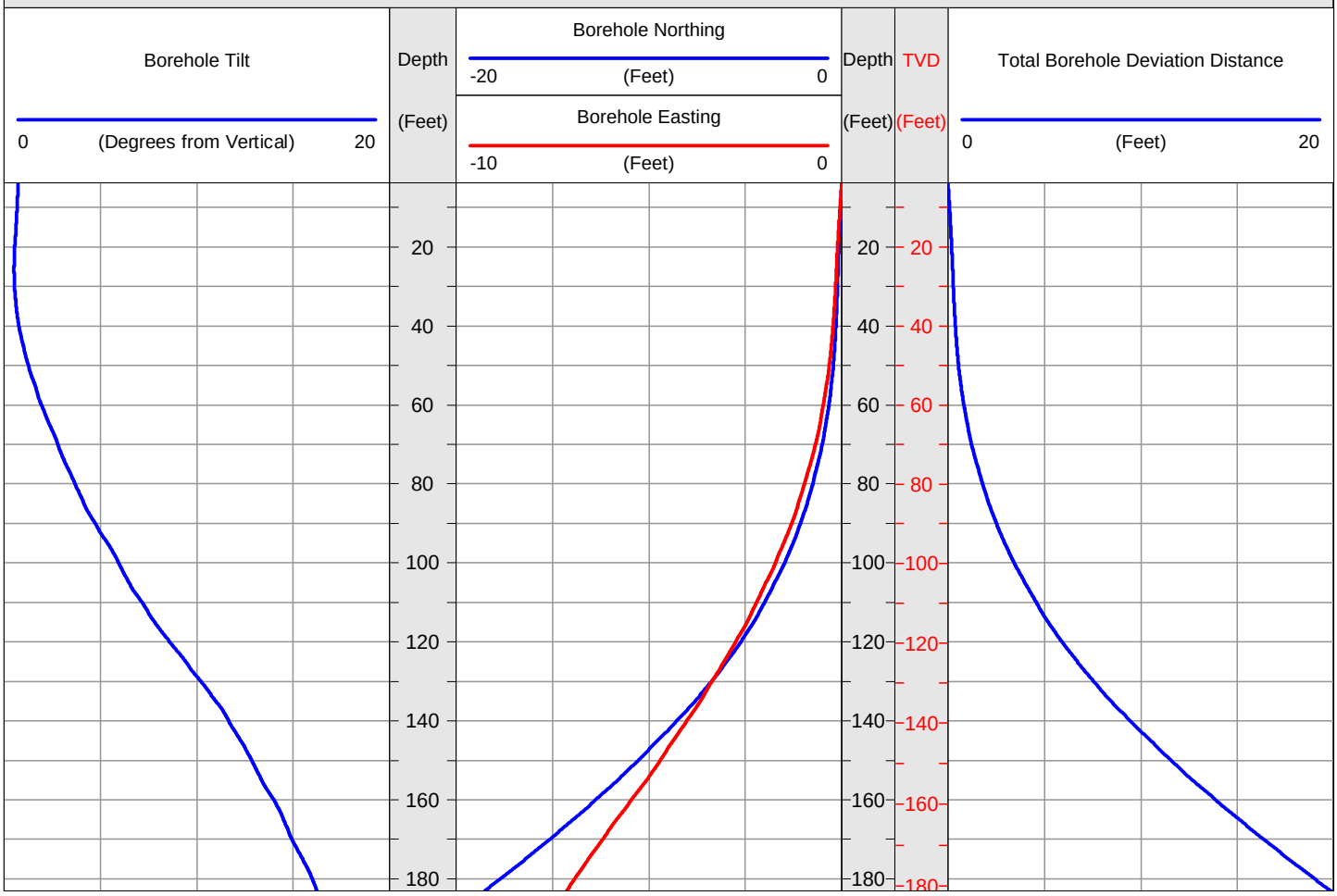
8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-32B - BOREHOLE DEVIATION LOGS

DATE(S) LOGGED: May 20, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, MA	ORIENTATION REFERENCE:	True North
GEOPHYSICISTS:	N. DeCristofaro & M. Aarnio	MAGNETIC DECLINATION:	15° West

MW-32B - Borehole Deviation Logs



HAGER-RICHTER GEOSCIENCE, INC.

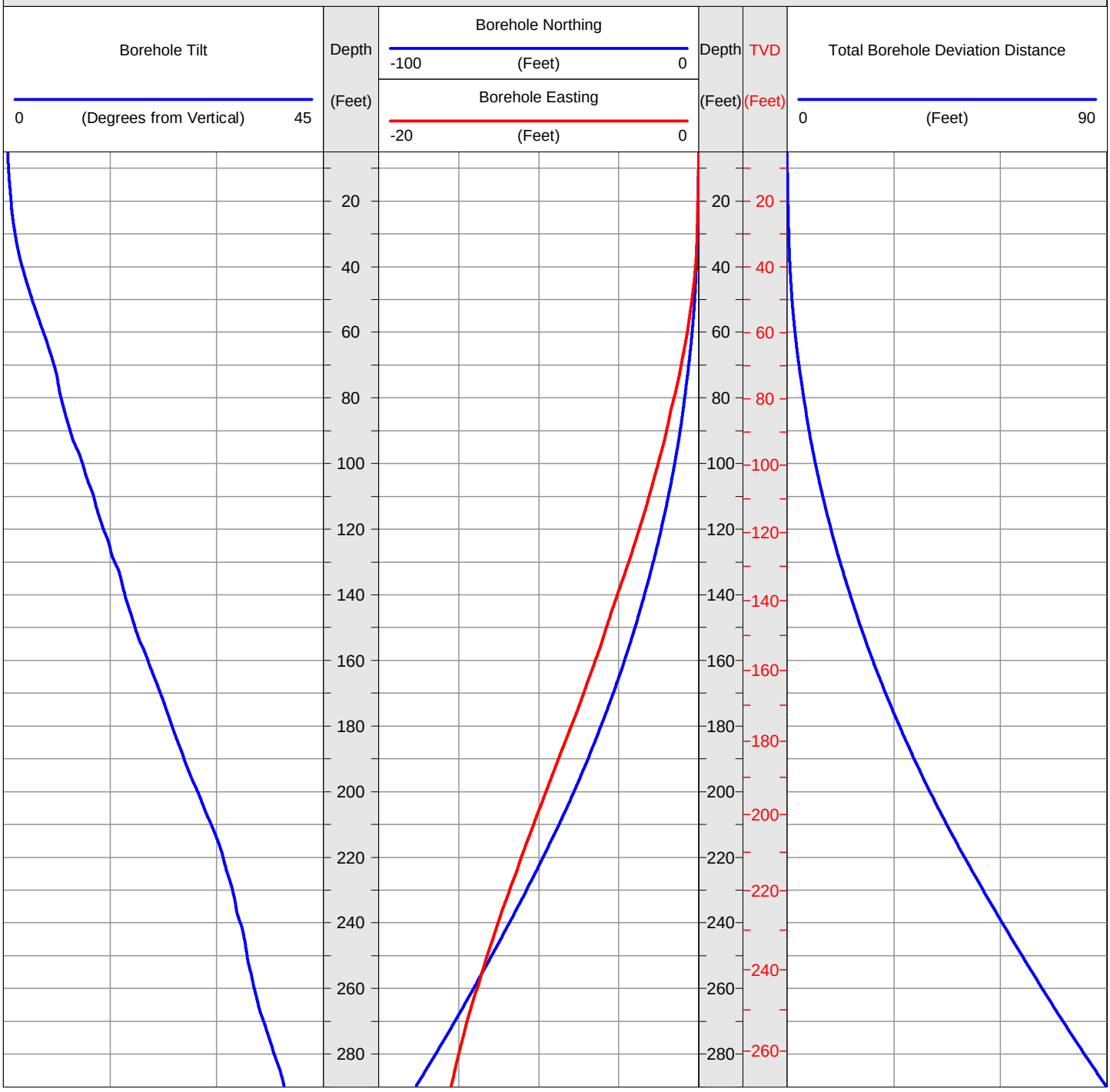
8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-33B - BOREHOLE DEVIATION LOGS

DATE(S) LOGGED: May 19, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, MA	ORIENTATION REFERENCE:	True North
GEOPHYSICISTS:	N. DeCristofaro & M. Aarnio	MAGNETIC DECLINATION:	15° West

MW-33B - Borehole Deviation Logs



HAGER-RICHTER GEOSCIENCE, INC.

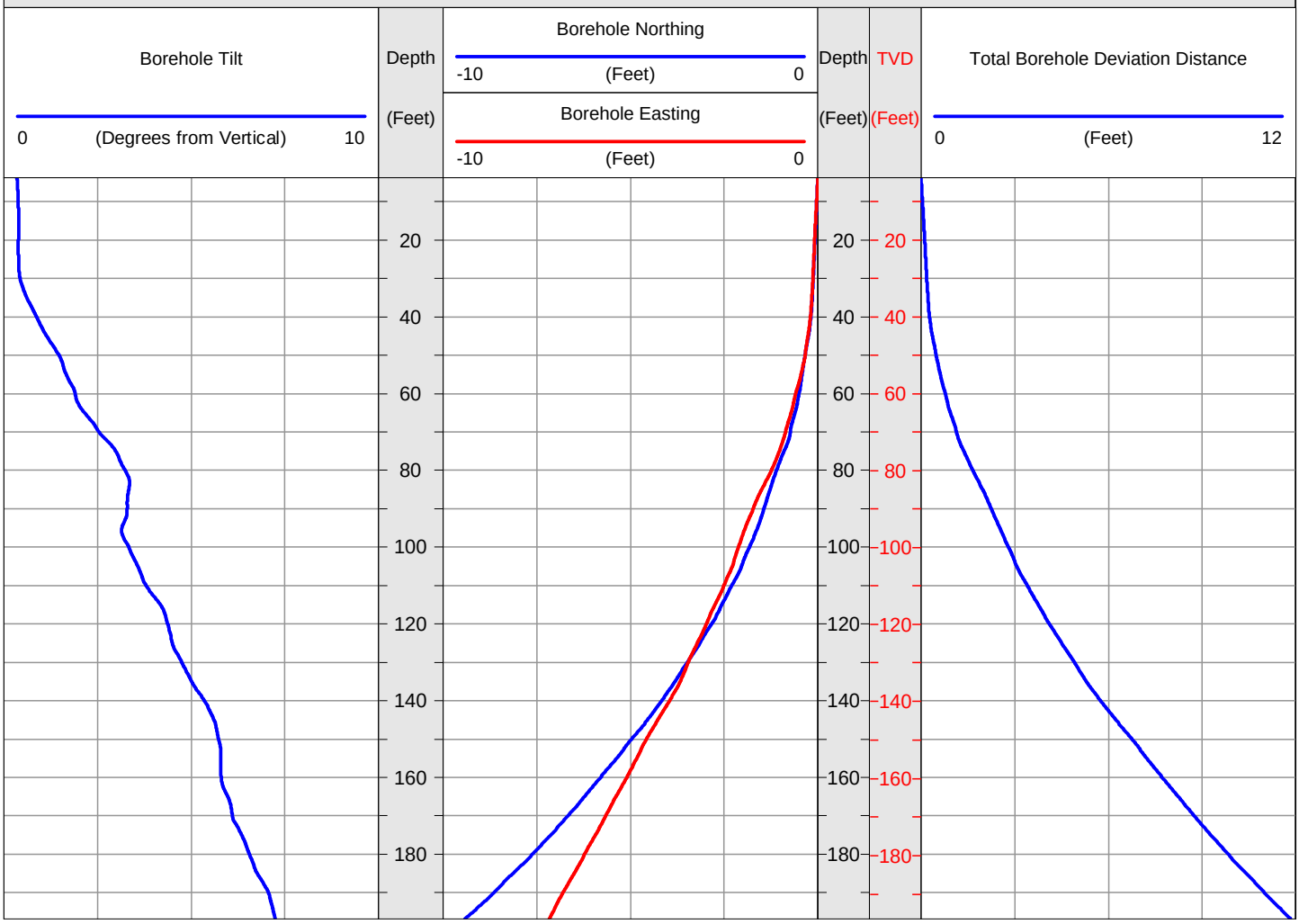
8 Industrial Way - D10
Salem, NH 03079
Phone: 603-893-9944
Fax: 603-893-8313

MW-34B - BOREHOLE DEVIATION LOGS

DATE(S) LOGGED: May 20, 2015

CLIENT:	AECOM	HAGER-RICHTER FILE:	15RG09
PROJECT:	Former Aerovox Property	LOG DATUM:	Top of 4-Inch Steel Casing
LOCATION:	740 Belleville Avenue, New Bedford, MA	ORIENTATION REFERENCE:	True North
GEOPHYSICISTS:	N. DeCristofaro & M. Aarnio	MAGNETIC DECLINATION:	15° West

MW-34B - Borehole Deviation Logs



Appendix D

2015 Spring Cap Inspection Memorandum

AECOM
1155 Elm Street, Suite 401
Manchester, NH 03101
www.aecom.com

603-606-4800 tel
603-606-4801 fax

Memorandum

To	File, MassDEP RTN 4-0601	Page	1
CC			
Subject	2015 Aerovox Cap Inspection		
From	Marilyn Wade, PE, LSP		
Date	June 26, 2015		

On June 5, 2015, Marilyn Wade from URS, an AECOM Technical Services company, completed the annual inspection of the cap and containment barrier currently in place at the former Aerovox facility, 740 Belleville Avenue, New Bedford, MA (the Site). This inspection was completed in fulfillment of the requirements under the "Monitoring and Maintenance Plan for the Former Aerovox Facility, New Bedford, MA" (the MM Plan), dated May 2013 and approved by the U.S. Environmental Protection Agency (EPA). Specifically, the MM Plan requires that while response actions under the Massachusetts Contingency Plan (MCP) are ongoing, the cap must be inspected once each calendar year in late spring, and states that "The purpose of the annual inspection will be to assess winter damage, weed growth and the potential for underlying soils to be exposed or to become exposed in the upcoming year." In addition, the MM Plan states that the "readily-visible portion of the containment barrier…annual inspection and repairs as necessary to ensure the containment barrier remains in place until the condition and effectiveness of the containment barrier to contain contamination at the site are addressed…" EPA's requirements for monitoring and maintenance of the cap were established pursuant to the Administrative Settlement Agreement and Order on Consent (AOC) for Non-Time Critical Removal Action (NTCRA) between AVX Corporation (AVX) and EPA, effective June 3, 2010, in order to maintain compliance with TSCA Determination Condition 5 (found in Appendix A of the AOC).

In addition to Ms. Wade, the following were also present on site during the inspection:

- Ms. Elaine Stanley, EPA Region 1 Remedial Project Manager for New Bedford Harbor
- Mr. Gerard Martin, MassDEP Section Chief, Southeast Region Bureau of Waste Site Cleanup (Aerovox MCP Designated Coordinator for MassDEP)
- Ms. Michele Paul, City of New Bedford Director of Environmental Stewardship
- Mr. Raymond Holberger, City of New Bedford, Environmental Planner, Office of Environmental Stewardship
- Ms. Judith LeClair, AECOM, Assistant Project Manager

The annual cap and containment barrier inspection was completed and documented using the Site cap O&M Inspection Checklist contained in the MM Plan. A copy of the completed checklist is provided in **Appendix A**. The inspection included a photographic record of Site conditions on June 5, 2015. The photographic log is provided in **Appendix B**. Where there was a question about changes in the cap since the completion of the NTCRA, reference was made to the U.S. Army Corps of

Engineers “Final Former Aerovox Property Photographic Record”, dated September 2012. The following observations were noted during the cap and containment barrier inspection:

- Restoration of areas of the cap that have been disturbed during implementation of the MCP work has been completed. Penetrations from Membrane Interface Probe (MIP), Ultra-violet Optical Screening Tool (UVOST) and soil borings have been grouted and the pavement patched. Monitoring well installations have been completed with flush mount road boxes and concrete.

- The readily visible portion of the containment barrier remains in place and effective. No evidence of breach, compromise or excessive decay was noted, and the condition appears to be the same as previously documented in the September 2012 record.

- Numerous cracks with a width of greater than ½-inch were identified for sealing along the HAC cap area along the shoreline.

- Numerous cracks were identified in the HAC cap with a width of great than ½-inch between the former north drainage ditch north of the former building and the northern fence line.

- Eight small (<5 square feet) areas within the extent of the HAC cap were identified for removal and replacement. These areas are located in the vicinity of MW-17D/MW-17B (3 areas), between the southern drainage ditch and the low point in the HAC cap east of the former building (3 areas); adjacent to the north section of the sheet pile wall (1 area); and, along the northern perimeter fence (1 area). Cracks and pavement deterioration in these areas would not be sufficiently addressed through sealing alone, and pavement replacement is required.

- Over half of the fence along the east end of the site has been removed. Holes were observed within the cap where the fence posts were removed. These areas were identified for repair.

- Two cracks were observed within the concrete southern drainage ditch that require sealing.

Based on the above observations, crack sealing and pavement replacement will be undertaken at the Site this summer. The completion of these repairs will be documented in the next regular MCP submittal after completion.

Appendix A

Cap O&M Inspection Checklist

AEROVOX
NEW BEDFORD, MASSACHUSETTS

CAP O&M INSPECTION CHECKLIST

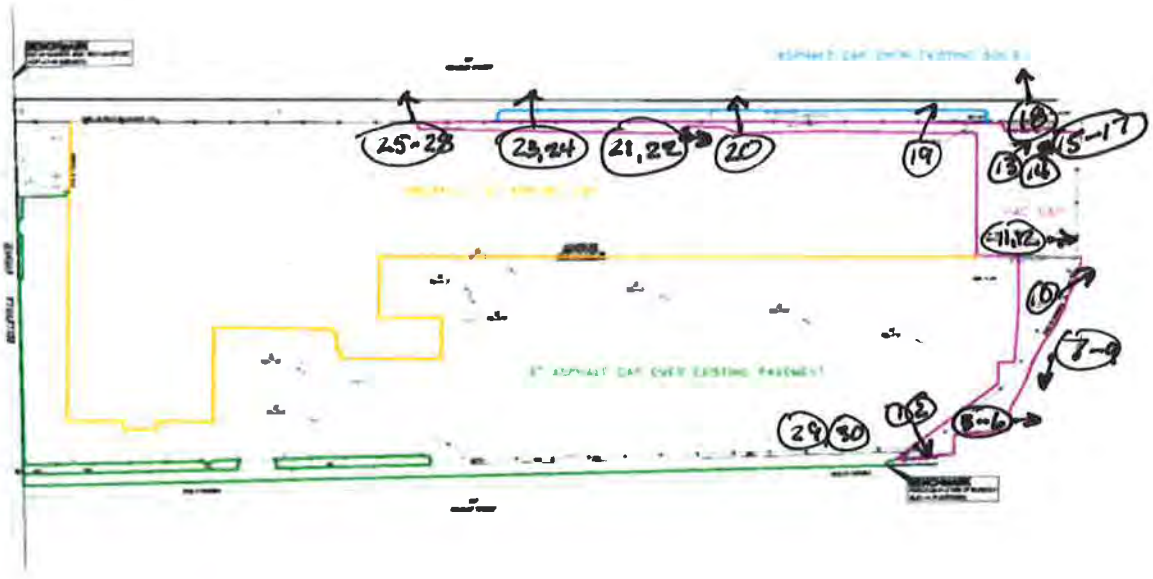
MM Team Leader	MARILYN WADE, AECOM
Other Field Team Member(s)	JUDY LECLAIR, AECOM
Date/Time of Inspection	JUNE 5, 2015 11 AM
Weather Conditions:	MOSTLY CLEAR, CALM, TEMP IN HIGH 50's.

→ HAC Cap

A1	Is there evidence of cracking?	Minor	(Moderate)	Severe
A2	Is there evidence of pavement settling?	(No)		Yes
A3	Is subgrade (soil) showing through pavement?	No		(Yes)
A4	Condition of pavement surrounding wells, catch basins, and manholes	(Good)		Poor
A5	Condition of pavement surrounding fence posts and gates	Good		(Poor) (POST HOLES TO BE FILLED)

Comments: ACCOMPANIED BY:
MICHELE PAUL (CITY), RAY HOLBERGER (CITY), GERARD MARTIN (MASS DEP), ELAIN STANLEY (EPA)
A.3 AREAS W/ DETERIORATION THAT NEED PAVEMENT REPLACEMENT, SEE PHOTOS 4,5,6,12,13,15,18,27
A.1 CRACKS TO BE CLEANED + FILLED, SEE PHOTOS 1,2,3,7,9,10, 11,14,15,16,17,19,20,21,22,23,24,25,26,28
A.5 FENCE REMOVED, FENCE POST HOLES TO BE FILLED, SEE PHOTOS 29,30
APPROXIMATE PHOTO LOCATIONS + DIRECTIONS SHOWN BELOW - ALL HAC

Indicate locations in need of repair on sketch - Refer to Figure 2 of MM Plan for a detailed drawing.



Source: Topographic information from As-Built Plan dated January 4, 2012, completed by ThompsonFarland Professional Engineers//Land Surveyors.

JLW 6/5/15

AEROVOX
NEW BEDFORD, MASSACHUSETTS

CAP O&M INSPECTION CHECKLIST

O&M Team Leader: MARILYN WADE, AECOM

Other Field Team Member(s): (SEE PAGE 1)

Date/Time of Inspection:

Weather Conditions:

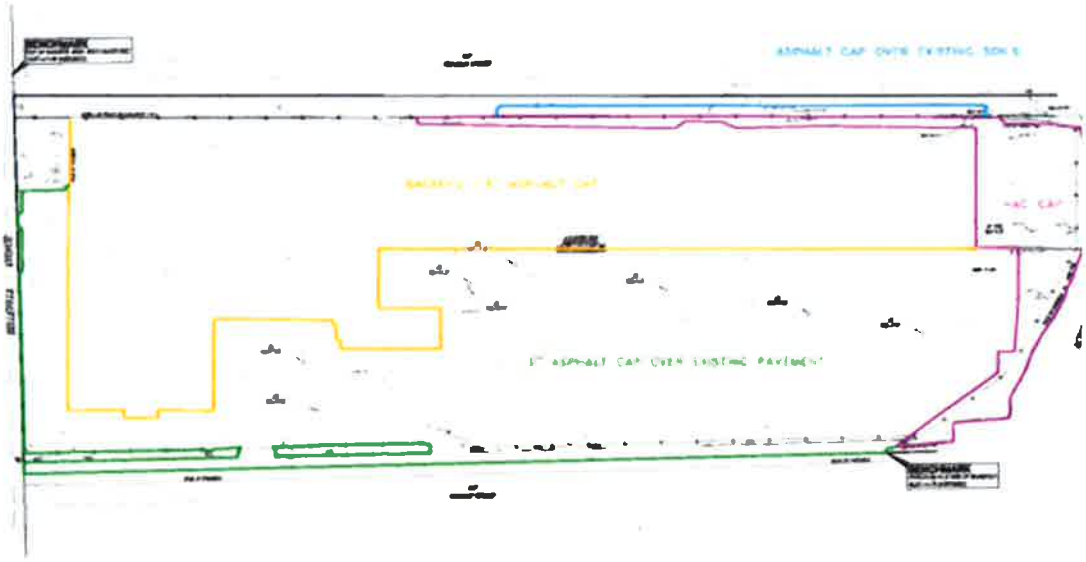
→ Asphalt Cap - Former Building footprint

B1	Is there evidence of cracking?	NONE Minor	Moderate	Severe
B2	Is there evidence of pavement settling?	(No)		Yes
B3	Is subgrade (soil) showing through pavement?	(No)		Yes

Comments:

PAVEMENT REMAINS INTACT

Indicate locations in need of repair on sketch - Refer to Figure 2 of MM Plan for a detailed drawing.



Source: Topographic information from As-Built Plan dated January 4, 2012, completed by ThompsonFarland Professional Engineers//Land Surveyors.

MW 6/5/15

AEROVOX
NEW BEDFORD, MASSACHUSETTS

CAP O&M INSPECTION CHECKLIST

MM Team Leader: MARILYN WADE, AECOM

Other Field Team Member(s): (SAME - SEE PAGE 1)

Date/Time of Inspection:

Weather Conditions:

Asphalt Cap Over Existing Pavement

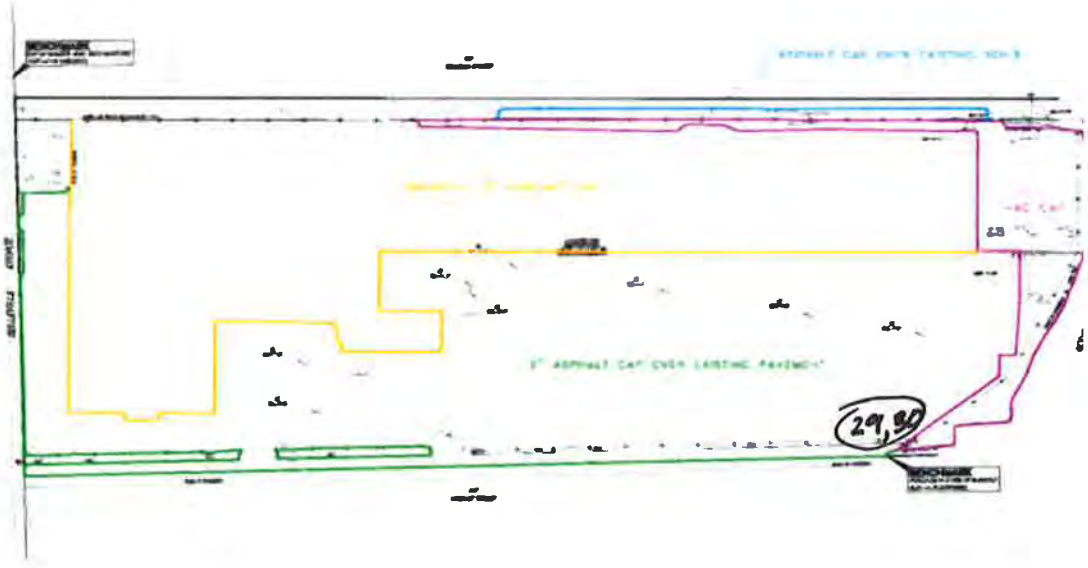
		Minor	Moderate	Severe
A1	Is there evidence of cracking?	NONE		
A2	Is there evidence of pavement settling?	No		Yes
A3	Is subgrade (soil) showing through pavement?	No		Yes
A4	Condition of pavement surrounding wells, catch basins, and manholes	Good		Poor
A5	Condition of pavement surrounding fence posts and gates	Good		Poor

Comments:

SEE FENCE POST HOLE PENETRATIONS, PHOTOS 29,30 (ON EAC AREA + THIS AREA, SE CORNER)

PAVEMENT REMAINS INTACT, INCLUDING HADLEY ST.

Indicate locations in need of repair on sketch - Refer to Figure 2 of MM Plan for a detailed drawing.



Source: Topographic information from As-Built Plan dated January 4, 2012, completed by ThompsonFarland Professional Engineers//Land Surveyors.

2/W 4/5/15

AEROVOX
NEW BEDFORD, MASSACHUSETTS

CAP O&M INSPECTION CHECKLIST

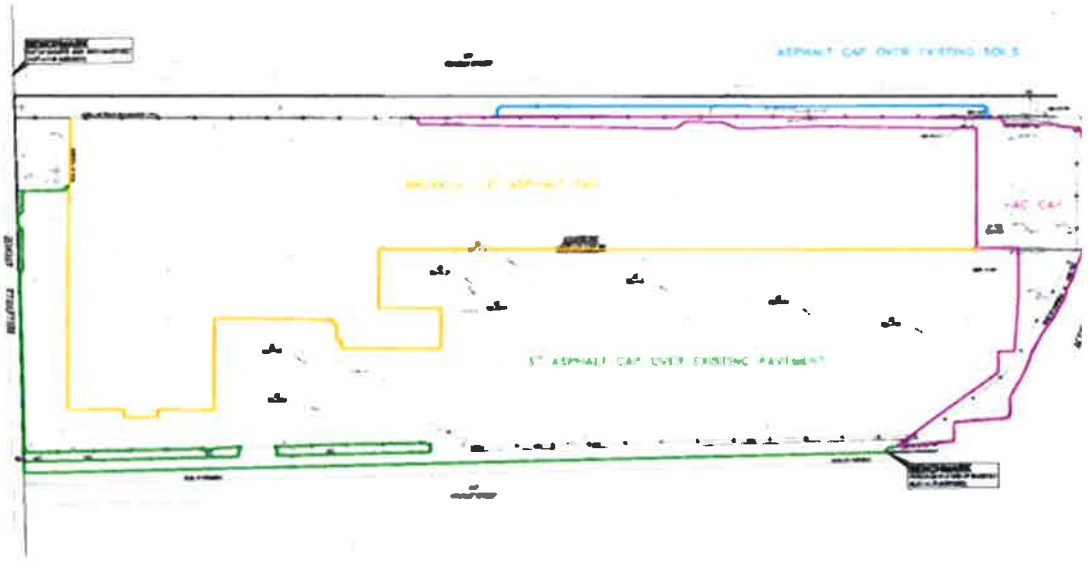
MM Team Leader: MARK VAN WADE, AECOM
Other Field Team Member(s): (SAME - SEE PAGE 1)
Date/Time of Inspection:
Weather Conditions:

→ Asphalt Cap Over Existing Soils

		Minor	Moderate	Severe
A1	Is there evidence of cracking?			
A2	Is there evidence of pavement settling?	No		Yes
A3	Is subgrade (soil) showing through pavement?	No		Yes
A4	Condition of pavement surrounding wells, catch basins, and manholes	Good		Poor

Comments:
PAVEMENT REMAINS INTACT

Indicate locations in need of repair on sketch



Source: Topographic information from As-Built Plan dated January 4, 2012, completed by ThompsonFarland Professional Engineers//Land Surveyors.

Appendix B

Photographic Log

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
1	6/5/2015

Direction Photo Taken:
South

Description:

Sheet pile wall, HAC cap with cracks identified for repair in the southeast corner of the Site.

Photo No.	Date:
2	6/5/15

Direction Photo Taken:

South-southwest

Description:

Sheet pile wall, HAC cap with cracks identified for repair in the southeast corner of the Site.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
3	6/5/2015

Direction Photo Taken:
East

Description:

Sheet pile wall, HAC cap with cracks identified for repair in along the east end of the Site near MW-32.

Photo No.	Date:
4	6/5/15

Direction Photo Taken:

East

Description:

HAC cap area in the southeast portion of the Site identified for replacement.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
5	6/5/2015

Direction Photo Taken:
East

Description:

HAC cap area in the southeast portion of the Site identified for replacement.

Photo No.	Date:
6	6/5/15

Direction Photo Taken:

South-southwest

Description:

All three HAC cap areas in the southeast portion of the Site identified for replacement.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
7	6/5/2015

Direction Photo Taken:
South-southwest

Description:

Cracks required to be sealed within the HAC cap along the east end of the Site near MW-2A/MW-2B/MW-2.

Photo No.	Date:
8	6/5/15

Direction Photo Taken:

South-southwest

Description:

Cracks required to be sealed within the HAC cap along the east end of the Site near UV-40 and UV-20.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
9	6/5/2015

Direction Photo Taken:
South-southwest

Description:

Cracks required to be sealed within the HAC cap along the east end of the Site near MIP-21.

Photo No.	Date:
10	6/5/15

Direction Photo Taken:

Northeast

Description:

Cracks required to be sealed within the HAC cap along the east end of the Site near UV-45.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
11	6/5/2015

Direction Photo Taken:
West

Description:

Cracks required to be sealed within the southern drainage ditch.

Photo No.	Date:
12	6/5/15

Direction Photo Taken:

East

Description:

HAC cap area to the north of the southern drainage ditch identified for replacement.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
13	6/5/2015

Direction Photo Taken:
East

Description:

Second HAC cap area to the north of the southern drainage ditch identified for replacement.

Photo No.	Date:
14	6/5/15

Direction Photo Taken:

Northeast

Description:

Cracks required to be sealed within the HAC cap along the east end of the Site near W-7A/MW-7B/MW-7.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
15	6/5/2015

Direction Photo Taken:
South-southwest

Description:

Third HAC cap area to the north of the southern drainage ditch identified for replacement, and crack required to be sealed.

Photo No.	Date:
16	6/5/15

Direction Photo Taken:

East

Description:

Cracks required to be sealed within the northeast corner of the HAC cap .

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
17	6/5/2015

Direction Photo Taken:
North

Description:

Cracks required to be sealed within the northeast corner of the HAC cap near MW-4A/MW-4.

Photo No.	Date:
18	6/5/15

Direction Photo Taken:

North

Description:

HAC cap area along the northern drainage ditch and sheet pile wall identified for replacement.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
19	6/5/2015

Direction Photo Taken:
North-Northeast

Description:

Cracks in the HAC cap required to be sealed near the northern section of the sheet pile wall..

Photo No.	Date:
20	6/5/15

Direction Photo Taken:

North

Description:

Crack required to be sealed within the HAC cap along the northern perimeter fence.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
21	6/5/2015

Direction Photo Taken:
East-northeast

Description:

Cracks required to be sealed within the HAC cap along the northern perimeter fence.

Photo No.	Date:
22	6/5/15

Direction Photo Taken:

East

Description:

Cracks required to be sealed within the HAC cap along the northern perimeter fence.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
23	6/5/2015

Direction Photo Taken:
South-southwest

Description:

Crack required to be sealed within the HAC cap along the northern perimeter fence near MIP-6.

Photo No.	Date:
24	6/5/15

Direction Photo Taken:

East

Description:

Cracks required to be sealed within the HAC cap along the northern perimeter fence near MIP-4.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
25	6/5/2015

Direction Photo Taken:
North

Description:

Cracks required to be sealed within the HAC cap along the northern perimeter fence.

Photo No.	Date:
26	6/5/15

Direction Photo Taken:

NA

Description:

Crack required to be sealed within the HAC cap along the northern perimeter fence.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
27	6/5/2015

Direction Photo Taken:
North

Description:

HAC cap area along the northern perimeter fence identified for replacement.

Photo No.	Date:
28	6/5/15

Direction Photo Taken:

North

Description:

Crack required to be sealed within the HAC cap along the northern perimeter fence.

AECOM

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Aerovox	New Bedford, Massachusetts	60422003

Photo No.	Date:
29	6/5/2015

Direction Photo Taken:
Southeast

Description:

Penetration/hole within the asphalt cap along the southern perimeter fence.

Photo No.	Date:
30	6/5/15

Direction Photo Taken:

NA

Description:

Typical fence hole required to be repaired/sealed.