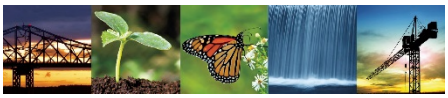

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CONSTRUCTION MANAGEMENT

GZA GeoEnvironmental of NY
300 Pearl Street
Suite 700
Buffalo, NY 14202
T: 716.685.2300
F: 716.248.1472
www.gza.com

VIA EMAIL

June 15, 2026
File No. 21.0057172.00

Ms. Megan Kuczka
New York State Department of Environmental Conservation (NYSDEC)
700 Delaware Avenue
Buffalo, New York 14209
megan.kuczka@dec.ny.gov

Re: Passive Soil-Gas Sampling and Analysis Work Plan
Former Signore, Inc.
55-57 Jefferson Street
Ellicottville, New York 14731
Brownfield Cleanup Program (BCP) Site Number C905034

Ms. Kuczka:

On behalf of our client Iskalo Ellicottville Holdings LLC (Client), GZA GeoEnvironmental of New York (GZA) provides this work plan to conduct subsurface passive soil-gas sampling and analysis at the above referenced property (Site). The resultant data will support development of a remedial workplan to enhance and accelerate natural attenuation of chlorinated volatile organic compounds (cVOCs) at the Signore Brownfield Cleanup Program (BCP) Site.

BACKGROUND

GZA performed an initial evaluation of seven proposed remedial strategies to address cVOCs at the Site. Four remedial vendors provided preliminary work plans and associated cost estimates: AST Environmental, Inc., CERES Remediation Products, Isotec, and Provectus Environmental Products. The proposed remedies varied greatly in area of proposed injection, amount and composition of injectate, and cost.

SCOPE OF SERVICES

GZA proposes a passive soil-gas study to better define the areas and concentrations of cVOCs at the Site in support of remedy development. U Dig NY will be notified at least three days prior to mobilization for clearance and public utility markouts. Passive soil gas survey work and soil probes are the only intrusive work to be done during the mobilization. Such work is minimally intrusive and is not expected to produce dust or vapor. Therefore, a Community Air Monitoring Program (CAMP) will not be implemented. If more intrusive subsurface work is required, NYSDEC/DOH will be notified to determine if CAMP should be implemented.

GZA will install approximately 68 passive soil-gas samplers at the BCP Site and provided by Beacon Environmental (Beacon) and in accordance with Site Management Plan (SMP) sampling procedures. The samplers will be installed in the area of concern in an approximate 40-foot grid as indicated on Beacon's attached proposal. Sampling methodologies, analyses,

and reporting are also detailed on Beacon's attached proposal. Samplers will be installed and allowed to passively collect VOCs at the Site for 10-14 days, as appropriate and in consultation with Beacon. They will then be collected and sent to Beacon's laboratory for analysis of VOCs via Method TO-17. Beacon will provide associated laboratory data and color isopleth maps indicating cVOC concentrations.

GZA will evaluate the soil-gas and historical soil data following receipt. As the passive soil-gas samplers cannot differentiate between potential contamination in the vadose zone or the groundwater table, traditional soil probes may be required to inform the remedial approach. If required, GZA estimates that ½ day of soil probes would be required to assess if contamination is present in the vadose zone, groundwater table, or both media. Soil probe locations would be informed by the results of the soil-gas survey and focused in areas of highest observed concentrations. Data collected during the study will be uploaded to NYSDEC's EQuIS database.

Remedy Selection

GZA will forward the results of the soil-gas survey to the four vendors to refine their remedial strategies to most cost-effectively and appropriately meet the BCP Remedial Action Objectives (RAOs). GZA will collaborate with the vendors to refine their proposed scopes and quotes. Once the refined strategies and quotes have been received, GZA will develop recommendations and work with the Client to identify a preferred remedial approach. GZA will subsequently develop a quote for the direct purchase of reagents and a contract with a local driller for injection. A work plan will be prepared for the implementation of the remedy which will be submitted to NYSDEC for review and approval.

SCHEDULE

GZA can begin work immediately upon work plan approval. Analytical results will be received approximately one month from sampler deployment. A draft workplan in accordance with the authorized work order will be completed within approximately two weeks of receipt of analytical data. The schedule will be subject to receipt of vendor bids, Client comments, and NYSDEC review.

Please contact Thomas Bohlen at (716) 570-5983 should you have questions. We look forward to working with you on this project.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

Thomas Bohlen

Thomas Bohlen, P.G.
Senior Project Manager

Bart A. Klettke

Bart A. Klettke, P.E.
Principal

Attachments: Beacon Environmental Proposal

COST ESTIMATE

May 21, 2026

Prepared for: **GZA GeoEnvironmental, Inc.**
56 Main Street, PO Box 1578
Meredith, NH 03253

Beacon Proposal No. 260424H01

The following cost estimate is for providing a BESURE Sample Collection Kit™ containing 65 field samplers and 2 trip blanks for soil-gas services at the Former Signore Facility Site in Ellicottville, NY, as described in the attached Proposal. The charges include preparation and shipment to and from GZA GeoEnvironmental, Inc. of a BESURE Kit™ with detailed instructions, analysis of samples with GC/MS instrumentation following EPA Method TO-17, an analytical report, and a summary report with color isopleth maps.

Estimate of charges:

Item	Unit	Quantity	Unit Cost	Extended Cost
Custom Preparation of a BESURE Sample Collection Kit™ with PSG Samplers and Trip Blanks	Sampler	67	$30	$ 2,010.00
Shipment to and from GZA GeoEnvironmental, Inc. via FedEx Delivery	Lump sum	1	$260	$ 260.00
Analysis of Field Samples and Trip Blanks by EPA Method TO-17	Sample	67	$185	$12,395.00
Analytical Report (searchable PDF with table of contents) and EDD (XLS), plus Summary Report with color isopleth maps (PDF)	Report	1	Included	Included
TOTAL COST				**$14,665.00**

Standard TAT for analytical data is 7 business days. Surcharges for Expedited TAT of analytical results:
1-day = 100%; 2-day = 50%; 3-day = 33%; 4-day=25%; 5 day=10%

Optional charges:

Item	Unit	Quantity	Unit Cost	Extended Cost
Reporting Data in units of concentration (ug/m^3)	Sample	67	$25	$ 1,675.00
Reporting Tentatively Identified Compounds (TICs)	Sample	67	$33	$ 2,211.00
CLP Summary Forms Data Package	Sample	67	$18	$ 1,206.00
Level IV Data Package (includes CLP Summary Forms)	Sample	67	$33	$ 2,211.00
Provide a set of hammer drill bits shipped via Ground Delivery to and from the Site. SDS Max Drill Bits: 1 ½" o.d. with 14" cutting length and ½" o.d. with at least 30" cutting length	Lump sum	1	$225	$ 225.00

All pricing is in US Dollars (USD). The Total Price will be invoiced when analytical results are issued. GZA GeoEnvironmental, Inc. will be charged $55 for each PSG Sampler not returned to Beacon and the actual replacement costs for any drill bits not returned if this option is selected. The final invoice will reflect the actual number of samples collected and analyzed. All invoices anticipate payment within 30 days of the invoice date.

PROPOSAL FOR SOIL-GAS SAMPLERS AND ANALYTICAL SERVICES
Former Signore Facility
Ellicottville, NY

Background

Beacon Environmental (BEACON), a NELAP and DoD ELAP accredited laboratory and small business concern (NAICS 541380), has been invited by GZA GeoEnvironmental, Inc. to provide a Proposal and Cost Estimate for soil-gas services at the Former Signore Facility Site in Ellicottville, NY. The Proposal and Cost Estimate are based on information provided to BEACON by GZA.

Objective

Collection of passive soil-gas (PSG) samples from the shallow subsurface will provide data on the identity and relative concentrations of targeted volatile organic compounds (VOCs) which may be present, without generating waste from soil cuttings. This data will be used to identify source areas of contamination, delineate the lateral extent of the contaminants, and/or assess vapor intrusion risks.

Survey Design

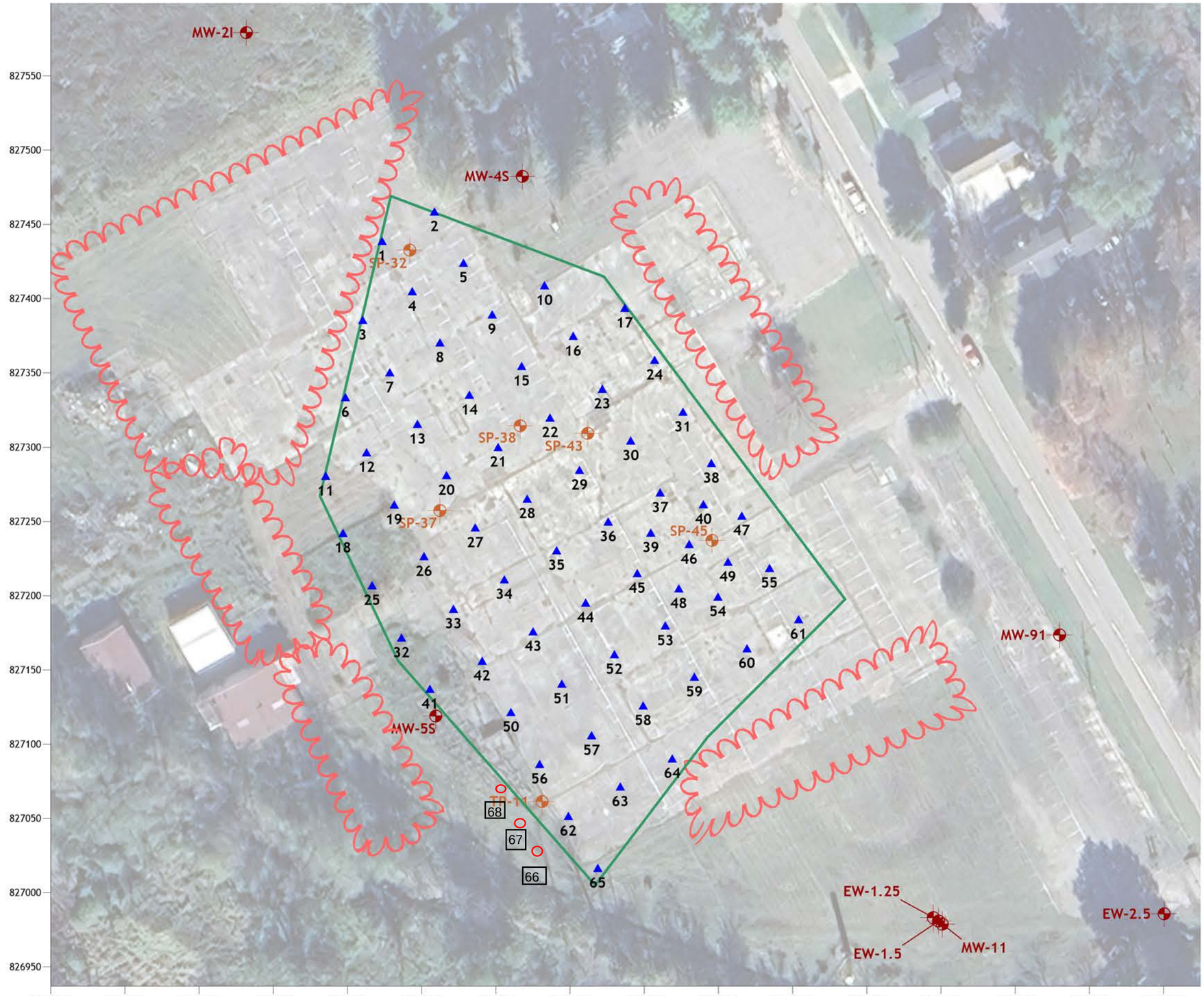
Based on the objectives of the survey and the size of the areas to investigate, BEACON recommends collecting PSG samples in a grid pattern across the area of concern with 40-feet spacing between sample locations. To provide higher resolution in the area with highest groundwater concentrations (near SP-45), Beacon recommends collecting an additional four (4) samples staggered between the grid points. This plan results in 65 sample locations (see **Figure 1**). The sampling grid design is proposed to provide high resolution coverage over the area of concern. The final number and exact placement of samples will be determined by GZA based on access to sample locations and budget. At GZA's option, BEACON will assist in the development of any sampling plan modifications.

Sampling Procedures

A small, easy-to-carry BESURE Sample Collection Kit™ containing sufficient equipment to collect at least 65 field samples will be provided to GZA personnel for collection of soil-gas samples following the protocols of BEACON's passive method. BEACON will ship the Field Kit via express delivery within two (2) business days following notice to proceed.

To install a PSG Sampler, an approximately 1 1/2" diameter hole is advanced to a one foot depth using a hammer drill and drill bit. The hole is then extended to a three-foot depth using a ½" diameter drill bit or comparable equipment. For those locations through asphalt/concrete surfacing, the upper 12 inches of the hole is sleeved with a pre-cleaned metal pipe provided in the Kit. Next, the PSG Sampler (which contains ***two sets of hydrophobic adsorbent cartridges***) is installed in the upper portion of the hole, which is sealed with an aluminum foil plug and covered

BEACON ENVIRONMENTAL
526 Underwood Lane, Bel Air, MD 21014 USA
www.Beacon-USA.com 1-410-838-8780
Beacon Proposal 260424H01, April 2026



LEGEND

- ROD-REQUIRED GROUNDWATER MONITORING WELL
- BCP POST-INJECTION GROUNDWATER MONITORING WELL
- PROPOSED PASSIVE SOIL-GAS SAMPLE LOCATION

System:	State Plane
Zone:	New York West
Datum:	NAD83/(EPSG:2262)
Coordinate Units:	(ftUS)

Scale in Feet

0 70 140

Figure 1
Passive Soil-Gas Survey
Proposed Sample Locations

Former Signore Facility
Ellicottville, New York

with soil or for locations through asphalt/concrete surfacing with a thin concrete patch. The samplers are exposed to subsurface gas for approximately seven to 14 days, with the exact length of time appropriate to meet the objectives of the survey.

Each sampler is shipped to the site with a length of wire that is wrapped around the vial and twisted around the shoulder of the vial to expedite retrieval from the ground. Following the exposure period, the Samplers are retrieved and shipped to BEACON's laboratory for analysis. It is not necessary to use ice or preservatives during shipment; however, the samplers are sealed and shipped under chain-of-custody procedures. Trip blanks, which will remain with the other PSG samples during preparation, shipment, and storage, will be included with the field samples.

BEACON provides in the BESURE Sample Collection Kit™ pre-cleaned metal sleeves when sampling through impermeable surfacing to protect the Samplers. These sleeves prevent any horizontal migration of vapors in the more porous subgrade from influencing the soil-gas samplers. The metal sleeves are advanced below the subgrade and tapped into the underlying soils so that the Samplers will only be adsorbing compounds in soil gas that is moving vertically through the soils beneath, and not in the vapors that may be migrating laterally through the more porous subgrade. Other soil-gas vendors simply create a hole 2 to 3 feet deep, and leave their samplers unprotected to the horizontal migration of vapors in the subgrade. This easy-to-perform but important procedure of using the metal sleeves is critical to an accurate and reliable soil gas survey (see **Attachment 1**).

Note: The adsorbent cartridges used by BEACON are hydrophobic, which allows the samplers to be effective even in water-saturated conditions. Extensive empirical evidence, which is supported by a government study, has proven that hydrophobic adsorbents work perfectly well in high moisture conditions and should not be encased by a hydrophobic membrane.[1] The use of surrogates and internal standards by BEACON during the analysis of samples verifies that moisture is not a problem during the analysis of the samples. Therefore, water does not adversely impact adsorption of compounds in the field or the analysis of the samplers at the laboratory. An analytical method that does not use internal standards or surrogates during the analysis of each sample cannot provide proof of performance that the system was functioning properly for each sample.

A two-person team can install approximately 50 to 100 samplers per day depending on the number of sample locations that are covered with asphalt, concrete, or gravel surfacing. For retrieval of the Samplers, one person can retrieve approximately 50 samplers per day and patch the holes through the surfacing.

Installation of Samplers with BESURE Sample Collection Kit™

1 The Marines Project: A Laboratory Study of Diffusive Sampling/Thermal Desorption/Mass Spectrometry Techniques for Monitoring Personal Exposure to Toxic Industrial Chemicals, April 2002, Warren Hendricks, Methods Developments Team, Industrial Hygiene Chemistry Division, OSHA Salt Lake Technical Center, Salt Lake City, UT 84115-1802.

Sample Custody Procedures

A chain-of-custody accompanies the field samples at all times, from the time the samples are collected until final analysis. Field kits are shipped with tug-tight custody seals to ensure that samplers are not tampered with during transport. Once samples are received at BEACON's laboratory, the sample custodian receives the samples and logs the samples into the laboratory's Sample Receipt Log.

BEACON's laboratory is maintained in a safe and secure manner at all times. The facility is locked when not occupied and is monitored for fire and unauthorized access. BEACON personnel escort all visitors at all times while inside the facility.

Analytical Procedures

Soil gas samples will be analyzed by BEACON using gas chromatography/mass spectrometry (GC/MS) instrumentation, following EPA Method TO-17 procedures and in accordance with the reporting requirements of ISO/IEC 17025. Samples will be analyzed for those compounds on the attached list. The laboratory will perform an ***initial calibration*** with a minimum of five-points for individual compounds. At the beginning of each 24-hour tune window, a BFB tune is performed and a method blank is run following the daily calibration. ***Internal standards and surrogates*** are included with each sample analysis. The laboratory's reported quantitation level (RQL) for each of the targeted compounds is 10 or 25 nanograms (ng); however, the demonstrated limit of quantitation (LOQ) is 10 ng for each compound. Other specific analytes may be targeted, if requested prior to analysis. Two sets of adsorbent cartridges are included in each Sampler for duplicate or confirmatory analysis. At GZA's option, BEACON will analyze ***field sample duplicates*** from selected sample locations identified on the chain-of-custody.

BEACON provides the highest level of accuracy and quality assurance and quality control (QA/QC) procedures for the analysis of soil gas samples in the industry. The table below summarizes these analytical procedures.

Description	Included
Analysis by thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) following EPA Method TO-17 - ***accredited***	√
Analytical results based on a minimum of a 5-point initial calibration	√
MDLs are based on a seven replicate study with contiguous analyses	√
Internal standards and surrogates included with each run (100 nanograms per compound)	√
BFB tunes (5 to 50 nanograms through GC, per method)	√
Continuing calibration checks (50 nanograms per compound)	√
Method blanks	√

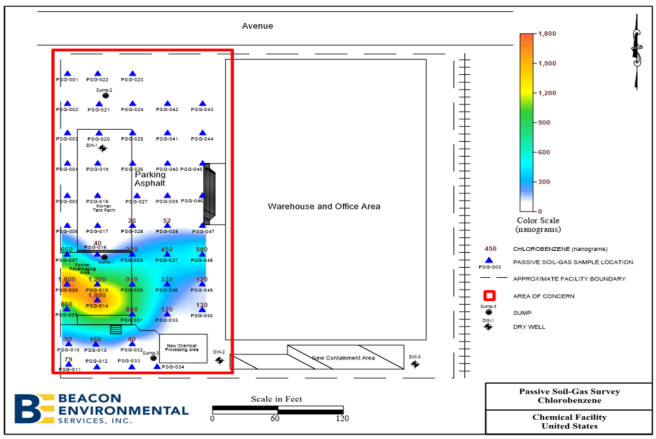
Analyses of the samples will be performed at BEACON's laboratory using state-of-the-art instruments that are listed below. The Markes thermal desorption instruments outperform older thermal desorption equipment used by other vendors, which cannot target as broad a range of compounds with as much sensitivity or accuracy.

- Markes International thermal desorption (TD) system with auto recollection and mass flow controller module,
- Agilent 7890 Gas Chromatograph (GC), and
- Agilent 5977B Mass Spectrometer (MS).

Report

An analytical report (searchable PDF with table of contents) and EDD will be provided to GZA within seven (7) business days following the laboratory's receipt of samples. Following GZA's review of the data and selection of compounds, BEACON will provide a summary report with color isopleth maps. The reports will contain:

narrative with the QA/QC program and findings,
laboratory data (in nanograms and ug/m^3, if requested),
a base map,
up to three color isopleth maps, and
Chain-of-Custody documentation.



Example Color Isopleth Map

To meet the reporting schedule, BEACON requests that an electronic file of the site is provided by the date samples are received at the laboratory. A Google Earth KML/KMZ file is preferred. If not available, other mapping files may be submitted, such as AutoCad and/or Shapefiles with final sample locations plotted and labeled, along with GPS coordinate data (SPCS or UTM with sub-meter accuracy), if available. If requested, BEACON will provide the color isopleth maps as layers for use with CAD software or provide data files of the contours for use with GIS software. BEACON will provide post survey support to assist in interpreting the data.

Additional reporting options are available upon request, including BEACON reporting the data in units of concentration (ug/m^3) for each target compound. This option must be selected prior to sample analyses. The mass measured (ng) is converted to a concentration by dividing the mass (ng) by the sampler uptake rate (ml/min) and the sampling period (min), which is then multiplied by a value of 1,000 to convert ng/ml to ug/m^3.

$$C = 1000 \times M/(U \times t)$$

where:	C	=	concentration ($\mu g/m^3$)
	M	=	mass (ng)
	U	=	uptake rate (ml/min),
	t	=	sampling time (minutes)

The Beacon sampler has verified uptake rates when sampling in air for a suite of chlorinated compounds and BTEX compounds. Uptake rates will be estimated using Graham's Law for the remaining target compounds. For soil gas sampling, the concentrations reported represent the concentration of the identified compounds under steady state (natural) conditions by passive sampling, as opposed to active sampling with a pump or evacuated canister that may create a momentary vacuum in the soil during the time of sampling.

If the soils at the site have low porosity, the formation itself could limit transport of soil gas to the samplers resulting in the reported concentration being biased low. However, the Beacon sampler has a low and controlled uptake rate to limit this bias from occurring. The reporting limit in concentration for each target compound is based on the exposure period.

If requested, BEACON can also report for each sample up to 10 tentatively identified compounds (TICs) for the largest non-targeted compounds present with an estimated mass greater than 25 ng and a match factor greater than 80.

As an additional option, a summary CLP data package will be included in the report that provides:

Form 2A (system monitoring compound recovery),
Form 3B (LCS/LCSD),
Form 3C (Field Sample Duplicates),
Form 4A (method blanks),
Form 5A (BFB performance check),
Form 6A (initial calibration data),
Form 7A (continuing calibration check), and
Form 8A (internal standard area and RT summary).

For data validation, BEACON can provide a Level IV data package that includes the CLP summary forms plus sequence summaries and raw data (chromatograms and mass spectra data).

Key Personnel and Relevant Experience

The principals of BEACON have many years of experience in characterizing sites for organic contaminants using innovative soil-gas sampling technologies. BEACON was founded in 1999 by Mr. Harry O'Neill, who is the company president and has managed and reviewed data from 1,000s of soil gas surveys. Prior to forming BEACON, Mr. O'Neill managed the soil-gas sampling program for Quadrel Services, Inc., an innovative company that lead the acceptance of passive soil-gas sampling at the national and international level. Mr. O'Neill was also the lead author of ASTM Standard D7758-2011, *Passive Soil Gas Sampling in the Vadose Zone for Source Identification, Spatial Variability Assessment, Monitoring, and Vapor Intrusion Evaluations*. Mr. Steve Thornley is the company's Laboratory Director, who is responsible for sample analyses and

ensures that all project samples are analyzed and reported following the highest level of quality assurance procedures in the industry. Mr. Thornley has analyzed and reported data from more than 50,000 soil-gas samples and follows established analytical procedures that allow BEACON to provide accurate, reliable, and defensible data.

Following are a few references from clients who have applied BEACON's passive soil-gas services.

Hanford Reservation, WA

CH2M Hill Plateau Remediation Company (CHPRC)
Mark Byrnes (currently with Hanford Site Central Plateau Cleanup Company)
Richland, WA
Phone: 509-373-3996
Number of PSG samples: 400+

Passive soil-gas surveys were performed at the Hanford Reservation to delineate the extent of chlorinated and petroleum-related contaminants, primarily carbon tetrachloride (CTC). BEACON identified carbon tetrachloride contamination in soils at a 60-foot depth, with the passive soil gas samplers installed to a four-inch depth and the samplers remaining in the field for only three days. Data from the PSG surveys were used to efficiently optimize the placement of large scale soil vapor extraction remediation systems.

DoD Facility – Broad Area Site Investigation and Groundwater Plume Delineation

Tetra Tech
San Diego, CA
Phone: 310-488-8745
Number of PSG Samplers: 750+

A broad area investigation targeting over 30 VOCs and SVOCs using Beacon Passive Soil Gas Samplers was used to delineate the lateral extent of chlorinated and petroleum related compounds at a DoD facility on the west coast of the United States. Over 750 PSG Samplers plus QC samples were collected in one sampling event to conduct a high resolution site characterize (HSRC) to effectively determine where legacy contamination currently was present in order to determine optimal remediation strategies. Concentration data (ug/m^3) were reported for assessing risks for vapor intrusion or for site workers during remediation activities.

US EPA Superfund Site

US EPA
Office of Land and Emergency Management
Mr. Tom Kady
Edison, NJ
Phone: 732-735-5822
Number of PSG samples: 242

As part of a high resolution site characterization (HRSC) plan, Beacon PSG Samplers were installed over a four (4) day period and, following an approximately 14 day exposure

period, the samplers were retrieved over a three (3) day period. Following sample receipt at Beacon's laboratory, an analytical data package was provided in seven (7) business days. More than 30 VOCs and SVOCs were targeted, with Trichloroethene (TCE) being of primary concern. The sensitivity of the PSG investigation allowed the project managers to guide with confidence where membrane interface probe (MIP) samples were collected. The use of both PSG and MIP provided high confidence to the US EPA PM of the nature and extent of contamination and minimized where any additional sampling or remediation, resulting in significant cost savings.

Groundwater Plume Delineation, NM

New Mexico Environment Department
Santa Fe, NM
Phone: 1-505-670-1295

Groundwater at the site is 70 to 80 feet below ground surface and is contaminated with chlorinated hydrocarbons. NMED installed several transects of BEACON's PSG Samplers to fill in data gaps between existing monitoring wells, track the groundwater plume, and guide the placement of additional monitoring wells. The geology consists of sands/gravels and large cobbles with hard packed soil at the near surface. Results from the survey clearly reflected the plume of PCE, TCE, and cis-1,2-Dichloroethene contamination in groundwater and had excellent correlation with the monitoring well data that was previously collected.

Multiple Chlorinated and Petroleum Contaminated Sites

Ramboll
Mr. Matteo Capelli
Roma, Italy
Phone: +39 06 4521440
Number of samples: 1000+

Passive soil gas samples are routinely used by Ramboll to characterize sites in Europe to identify source areas, track groundwater plumes, and assess vapor intrusion pathways. The ability to cost effectively collect high quality data provides confidence in decision making and project direction while reducing clients' budgets. Shipments of sorbent samplers, which have a holding time of 30 days following sample collection, are sent to and from Europe without the need for ice or preservatives, with delivery typically requiring only one or two days.

Former manufactured gas plants (MGP) and active manufacturing facility

Jacobs
Mr. Gary Hirst
Melbourne, Victoria, Australia
Phone: 61 0 420 958 537
Number of PSG samples: 150 +

PSG samplers were deployed as a preliminary screening tool as part of a wider investigation program on several projects. The surveys successfully confirmed the location

and extent of several suspected VOC and SVOC sources in both soil and groundwater. Target contaminants encompassed a broad range of those typical to gasworks (PAHs, Phenols, TPH, BTEX) and industrial sites (chlorinated hydrocarbons). PSG surveys were found to be a fast and inexpensive method of identifying source areas and providing a relative level of "significance" in terms of subsurface vapor sources. This resulted in increasing the effectiveness of intrusive investigations, and in some cases refined the methodologies. PSG surveys were also particularly useful in confirming the presence of shallow DNAPLs in the subsurface. Once sources were identified, follow up phases of PSG investigations were completed along suspected migration pathways to assist in the positioning of groundwater sample locations.

Beacon Proposal No. 260424H01
Target Compound List
Analysis by EPA Method TO-17

Vinyl Chloride	Tetrachloroethene (PCE)
1,1-Dichloroethene	1,1,1,2-Tetrachloroethane
Methylene Chloride	Chlorobenzene
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ethylbenzene
trans-1,2-Dichloroethene	p & m-Xylene
Methyl-t-butyl ether (MTBE)	o-Xylene
1,1-Dichloroethane	1,2,3-Trichloropropane
cis-1,2-Dichloroethene	Isopropylbenzene
Chloroform	1,3,5-Trimethylbenzene
1,2-Dichloroethane	1,2,4-Trimethylbenzene
1,1,1-Trichloroethane	1,3-Dichlorobenzene
Cyclohexane	1,4-Dichlorobenzene
Carbon Tetrachloride	1,2-Dichlorobenzene
Benzene	1,2,4-Trichlorobenzene
Trichloroethene (TCE)	Naphthalene
1,4-Dioxane	1,2,3-Trichlorobenzene
1,1,2-Trichloroethane	1- Methylnaphthalene
Toluene	2-Methylnaphthalene
1,2-Dibromoethane (EDB)	

Note: All compounds are included in Beacon's accreditation for ISO/IEC 17025:2017, NELAP, and DoD ELAP. Additional compounds may be added to meet project specific requirements.

The reporting quantitation level (RQL) for each compound is 10 or 25 nanograms (ng); however, the demonstrated limit of quantitation (LOQ) for each compound is 10 ng.

PASSIVE SOIL GAS SAMPLER REPORTING LIMITS

Limits of Quantitation (LOQs) based on Exposure Periods and Third-Party Validated Uptake Rates. When required, lower detection limits can be reported.

COMPOUND	CAS	Uptake Rate (ml/min)	1 Day LOQ (ug/m^3)	3 Days LOQ (ug/m^3)	7 Days LOQ (ug/m^3)	14 Days LOQ (ug/m^3)
Vinyl Chloride	75-01-4	0.81	8.57	2.86	1.22	0.61
1,1-Dichloroethene	75-35-4	0.33	21.04	7.01	3.01	1.50
Methylene Chloride	75-09-2	0.35	19.84	6.61	2.83	1.42
1,1,2-Trichlorotrifluoroethane (Fr.113)	76-13-1	0.89	7.80	2.60	1.11	0.56
trans-1,2-Dichloroethene	156-60-5	0.44	15.78	5.26	2.25	1.13
Methyl-t-butyl ether	1634-04-4	0.50	34.72	11.57	4.96	2.48
1,1-Dichloroethane	75-34-3	0.85	8.17	2.72	1.17	0.58
cis-1,2-Dichloroethene	156-59-2	0.53	13.10	4.37	1.87	0.94
Chloroform	67-66-3	0.35	19.84	6.61	2.83	1.42
1,2-Dichloroethane	107-06-2	0.56	12.40	4.13	1.77	0.89
1,1,1-Trichloroethane	71-55-6	1.05	6.61	2.20	0.94	0.47
Cyclohexane	110-2-7	0.51	13.62	4.54	1.95	0.97
Carbon Tetrachloride	56-23-5	0.43	16.32	5.44	2.33	1.17
Benzene	71-43-2	0.53	32.76	10.92	4.68	2.34
Trichloroethene	79-01-6	0.33	21.04	7.01	3.01	1.50
1,4-Dioxane	123-91-1	0.41	16.94	5.65	2.42	1.21
1,1,2-Trichloroethane	79-00-5	0.33	21.04	7.01	3.01	1.50
Toluene	108-88-3	0.40	43.40	14.47	6.20	3.10
1,2-Dibromoethane (EDB)	106-93-4	0.39	18.03	6.01	2.58	1.29
Tetrachloroethene	127-18-4	0.41	16.94	5.65	2.42	1.21
1,1,1,2-Tetrachloroethane	630-20-6	0.41	17.04	5.68	2.43	1.22
Chlorobenzene	108-90-7	0.85	8.17	2.72	1.17	0.58
Ethylbenzene	100-41-4	0.85	20.42	6.81	2.92	1.46
p & m-Xylene	108-38-3	0.88	19.73	6.58	2.82	1.41
o-Xylene	95-47-6	0.88	19.73	6.58	2.82	1.41
1,2,3-Trichloropropane	96-18-4	0.75	9.26	3.09	1.32	0.66
Isopropylbenzene	98-82-8	0.83	20.92	6.97	2.99	1.49
1,3,5-Trimethylbenzene	108-67-8	0.83	20.92	6.97	2.99	1.49
1,2,4-Trimethylbenzene	95-63-6	0.83	20.92	6.97	2.99	1.49
1,3-Dichlorobenzene	541-73-1	0.75	9.26	3.09	1.32	0.66
1,4-Dichlorobenzene	106-46-7	0.75	9.26	3.09	1.32	0.66
1,2-Dichlorobenzene	95-50-1	0.75	9.26	3.09	1.32	0.66
1,2,4-Trichlorobenzene	120-82-1	0.39	17.72	5.91	2.53	1.27
Naphthalene	91-20-3	0.80	8.68	2.89	1.24	0.62
1,2,3-Trichlorobenzene	87-61-6	0.39	17.72	5.91	2.53	1.27
1-Methylnaphthalene	90-12-0	0.76	9.14	3.05	1.31	0.65
2-Methylnaphthalene	91-57-6	0.76	9.14	3.05	1.31	0.65

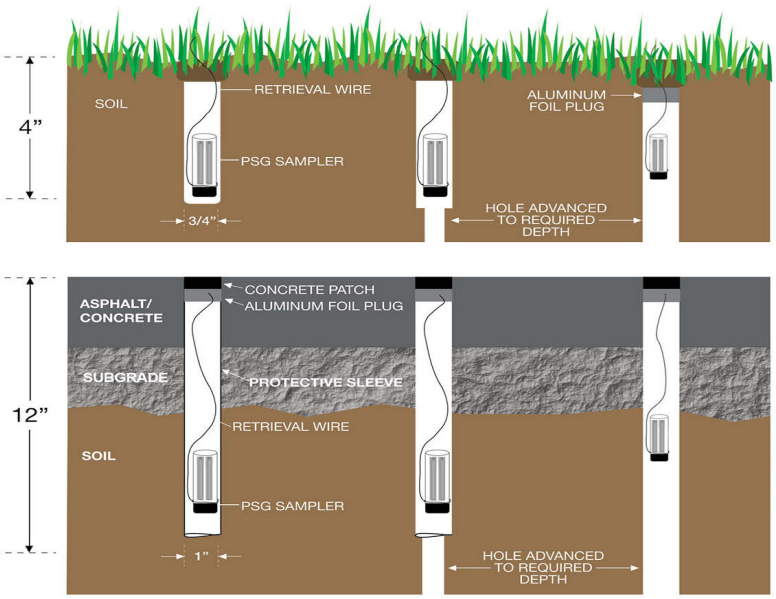
Attachment 1

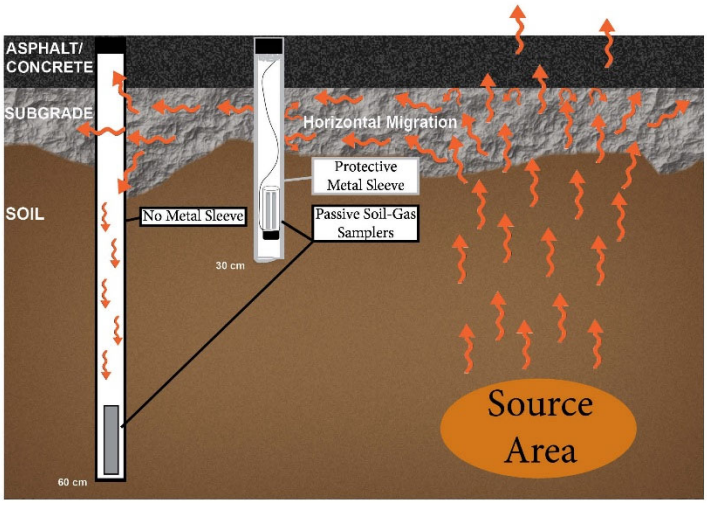
EFFECTIVE PASSIVE SOIL-GAS SAMPLING PROCEDURES

PSG Samplers need only be installed to a shallow depth in some applications because of the sensitivity of the method. However, the method is extremely versatile and installation procedures can be adapted to meet project objectives or client requirements.

When a PSG Sampler is installed in the ground, the top of the hole is completely sealed by collapsing the soils above the Sampler or patching the drilled hole through the surfacing. Other vendors use a permeable cork to plug their installation hole, which allows subsurface gases to escape before the adsorbent captures the organic compounds (reducing sensitivity) *and* permits vapors from above the surface, as well as surface water, to enter the hole (false positives). BEACON's PSG Samplers are not susceptible to these influences because they are effectively sealed in the subsurface.

As mentioned above, BEACON's Samplers are versatile and for some projects a higher sensitivity is required because contaminants are present at low concentrations or soils are fairly impermeable. In these situations, the sampling hole is advanced to a greater depth using a hammer drill, slide hammer, or direct push equipment. *Because the soil vapors that enter the hole will migrate upwards in this newly created preferential pathway, it is not necessary to push the Sampler to the bottom of the hole.* Therefore, the Sampler can still be installed in the upper portion of the hole





Samplers installed through an impermeable surface are sleeved in pre-cleaned protective metal sleeves (provided by BEACON). These sleeves prevent any horizontal migration of vapors in the more porous subgrade from influencing the soil-gas Samplers. As the accompanying diagram shows, the metal sleeves are advanced below the subgrade and tapped into the underlying soils so that the Samplers will only be adsorbing compounds in soil gas that are moving vertically through the soils beneath, and not in the vapors that may be migrating laterally through the more porous subgrade. Other soil-gas vendors simply create a hole 2 to 3 feet deep, and leave their samplers unprotected to the horizontal migration of vapors in the subgrade. This easy-to-perform but important procedure is yet another reason why BEACON's method has achieved the reputation as being the most accurate and reliable soil gas technology available.

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc.
has assessed the Organization of:

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014

(Hereinafter called the Organization) and hereby declares that Organization has met the requirements of
ISO/IEC 17025:2017 General Requirements for the competence of Testing and Calibration Laboratories and the United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP) requirements identified within the DoD/DOE Quality Systems Manual (DoD/DOE QSM) Version 6.0 December 2023 and is accredited in accordance with the:

United States Department of Defense
Environmental Laboratory Accreditation Program

(DoD-ELAP)

Environmental Testing
(As detailed in the supplement)

Accreditation claims for such activities shall only be made from the addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation Body's duty to observe and comply with the said rules.

For PJLA

Tracy Szerszen
President

Initial Accreditation Date:	*Issue Date:*	*Expiration Date*
September 07, 2012	November 02, 2024	December 31, 2026

Revision Date:
December 16, 2025

Accreditation No:	*Certificate No:*
72690	L24-851-R1

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: **www.pjlabs.com**

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014
Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA 325B by Gas Chromatography Mass Spectrometry (GC/MS)	10277437
Air	
1,3-Butadiene	9318
Benzene	4375
Carbon Tetrachloride	4455
Chloroprene (2-Chloro-1,3-Butadiene)	4525
Ethylbenzene	4765
m,p-Xylene	5240
o-Xylene (1,2-Xylene)	5250
Toluene	5140
EPA 8260C by Gas Chromatography Mass Spectrometry (GC/MS)	10307003
Air	
1,1,1,2-Tetrachloroethane	5105
1,1,1-Trichloroethane	5160
1,1,2,2-Tetrachloroethane	5110
1,1,2-Trichloro-1,2,2-Trifluoroethane (Trichlorotrifluoroethane, Freon 113)	5185
1,1,2-Trichloroethane	5165
1,1´-Biphenyl (BZ-0, Biphenyl)	6703
1,1-Dichloroethane	4630
1,1-Dichloroethylene	4640
1,1-Dichloropropene	4670
1,2,3-Trichlorobenzene	5150
1,2,3-Trichloropropane (TCP)	5180
1,2,4-Trichlorobenzene	5155
1,2,4-Trimethylbenzene	5210
1,2-Dibromo-3-Chloropropane (DBCP)	4570
1,2-Dibromoethane (EDB, Ethylene Dibromide)	4585
1,2-Dichloro-1,1,2,2-Tetrafluoroethane (Freon 114, 1,2-Dichlorotetrafluoroethane)	4695
1,2-Dichlorobenzene	4610
1,2-Dichloroethane (Ethylene Dichloride, EDC)	4635
1,2-Dichloropropane	4655
1,3,5-Trimethylbenzene	5215
1,3-Butadiene	9318
1,3-Dichlorobenzene (1,3-DCB)	4615
1,3-Dichloropropane	4660
1,4-Dichlorobenzene	4620
1,4-Dioxane (1,4-Diethyleneoxide, p-Dioxane)	4735
1-Methylnaphthalene	6380

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
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Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA 8260C by Gas Chromatography Mass Spectrometry (GC/MS)	10307003
Air	
2,2-Dichloropropane	4665
2-Butanone (Methyl Ethyl Ketone, MEK)	4410
2-Chlorotoluene	4535
2-Methylnaphthalene	6385
4-Chlorotoluene (p-Chlorotoluene)	4540
4-Ethyltoluene (p-Ethyltoluene, 1-Ethyl-4-Methylbenzene)	4542
4-Isopropyltoluene (p-Isopropyltoluene, p-Cymene)	4910
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone (MIBK), Hexone)	4995
Acenaphthene	5500
Acenaphthylene	5505
Acetone	4315
Anthracene	5555
Benzene	4375
Benzo(a)Anthracene	5575
Benzyl Chloride	5635
Bromobenzene	4385
Bromochloromethane	4390
Bromodichloromethane	4395
Bromoform	4400
Carbazole	5680
Carbon Disulfide	4450
Carbon Tetrachloride	4455
Chlorobenzene	4475
Chlorodibromomethane (Dibromochloromethane)	4575
Chloroethane (Ethyl chloride)	4485
Chloroform	4505
Chloroprene (2-Chloro-1,3-Butadiene)	4525
cis-1,2-Dichloroethylene	4645
cis-1,3-Dichloropropene	4680
Cyclohexane	4555
Dibenzofuran	5905
Dibromomethane (Methylene Bromide)	4595
Dichlorodifluoromethane (Freon 12)	4625
Ethanol	4750
Ethyl Acetate	4755
Ethylbenzene	4765

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	Code
Organic	
EPA 8260C by Gas Chromatography Mass Spectrometry (GC/MS)	10307003
Air	
Fluorene	6270
Hexachlorobutadiene	4835
Hexachloroethane	4840
Isopropyl Alcohol (IPA, 2-Propanol, Isopropanol)	4895
Isopropylbenzene (Cumene)	4900
m,p-Xylene	5240
Methyl Bromide (Bromomethane)	4950
Methyl Chloride (Chloromethane)	4960
Methyl tert Butyl Ether (MTBE)	5000
Methylene Chloride (Dichloromethane)	4975
Naphthalene	5005
n-Butylbenzene	4435
n-Heptane (1-Heptane, Heptane)	4825
n-Hexane	4855
n-Propylbenzene (1-phenylpropane)	5090
o-Xylene (1,2-Xylene)	5250
PCB-1 (2-Chlorobiphenyl (BZ-1), 2-Monochlorobiphenyl)	8915
Phenanthrene	6615
Pyrene	6665
sec-Butylbenzene	4440
Styrene	5100
tert-Butylbenzene	4445
Tetrachloroethene (Perchloroethene, PCE)	5115
Tetrahydrofuran (THF)	5120
Toluene	5140
Total Petroleum Hydrocarbons (TPH) (C5-C8)	9461
Total Petroleum Hydrocarbons (TPH) (C9-C15)	9467
trans-1,2-Dichloroethylene	4700
trans-1,3-Dichloropropylene	4685
Trichloroethene (TCE, Trichloroethylene)	5170
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	5175
Vinyl Chloride (Chloroethene)	5235
Xylenes (Total)	5260
EPA 8260D by Gas Chromatography Mass Spectrometry (GC/MS)	10307127
Air	
1,1,1,2-Tetrachloroethane	5105

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
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Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA 8260D by Gas Chromatography Mass Spectrometry (GC/MS)	10307127
Air	
1,1,1-Trichloroethane	5160
1,1,2,2-Tetrachloroethane	5110
1,1,2-Trichloro-1,2,2-Trifluoroethane (Trichlorotrifluoroethane, Freon 113)	5185
1,1,2-Trichloroethane	5165
1,1′-Biphenyl (BZ-0, Biphenyl)	6703
1,1-Dichloroethane	4630
1,1-Dichloroethylene	4640
1,1-Dichloropropene	4670
1,2,3-Trichlorobenzene	5150
1,2,3-Trichloropropane (TCP)	5180
1,2,4-Trichlorobenzene	5155
1,2,4-Trimethylbenzene	5210
1,2-Dibromo-3-Chloropropane (DBCP)	4570
1,2-Dibromoethane (EDB, Ethylene Dibromide)	4585
1,2-Dichloro-1,1,2,2-Tetrafluoroethane (Freon 114, 1,2-Dichlorotetrafluoroethane)	4695
1,2-Dichlorobenzene	4610
1,2-Dichloroethane (Ethylene Dichloride, EDC)	4635
1,2-Dichloropropane	4655
1,3,5-Trimethylbenzene	5215
1,3-Butadiene	9318
1,3-Dichlorobenzene (1,3-DCB)	4615
1,3-Dichloropropane	4660
1,4-Dichlorobenzene	4620
1,4-Dioxane (1,4-Diethyleneoxide, p-Dioxane)	4735
1-Methylnaphthalene	6380
2,2-Dichloropropane	4665
2-Butanone (Methyl Ethyl Ketone, MEK)	4410
2-Chlorotoluene	4535
2-Methylnaphthalene	6385
4-Chlorotoluene (p-Chlorotoluene)	4540
4-Ethyltoluene (p-Ethyltoluene, 1-Ethyl-4-Methylbenzene)	4542
4-Isopropyltoluene (p-Isopropyltoluene, p-Cymene)	4910
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone (MIBK), Hexone)	4995
Acenaphthene	5500
Acenaphthylene	5505
Acetone	4315

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Beacon Environmental Services, Inc.
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Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA 8260D by Gas Chromatography Mass Spectrometry (GC/MS)	10307127
Air	
Anthracene	5555
Benzene	4375
Benzo(a)Anthracene	5575
Benzyl Chloride	5635
Bromobenzene	4385
Bromochloromethane	4390
Bromodichloromethane	4395
Bromoform	4400
Carbazole	5680
Carbon Disulfide	4450
Carbon Tetrachloride	4455
Chlorobenzene	4475
Chlorodibromomethane (Dibromochloromethane)	4575
Chloroethane (Ethyl chloride)	4485
Chloroform	4505
Chloroprene (2-Chloro-1,3-Butadiene)	4525
cis-1,2-Dichloroethylene	4645
cis-1,3-Dichloropropene	4680
Cyclohexane	4555
Dibenzofuran	5905
Dibromomethane (Methylene Bromide)	4595
Dichlorodifluoromethane (Freon 12)	4625
Ethanol	4750
Ethyl Acetate	4755
Ethylbenzene	4765
Fluorene	6270
Hexachlorobutadiene	4835
Hexachloroethane	4840
Isopropyl Alcohol (IPA, 2-Propanol, Isopropanol)	4895
Isopropylbenzene (Cumene)	4900
m,p-Xylene	5240
Methyl Bromide (Bromomethane)	4950
Methyl Chloride (Chloromethane)	4960
Methyl tert Butyl Ether (MTBE)	5000
Methylene Chloride (Dichloromethane)	4975
Naphthalene	5005

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Beacon Environmental Services, Inc.
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	Code
Organic	
EPA 8260D by Gas Chromatography Mass Spectrometry (GC/MS)	10307127
Air	
n-Butylbenzene	4435
n-Heptane (1-Heptane, Heptane)	4825
n-Hexane	4855
n-Propylbenzene (1-phenylpropane)	5090
o-Xylene (1,2-Xylene)	5250
PCB-1 (2-Chlorobiphenyl (BZ-1), 2-Monochlorobiphenyl)	8915
Phenanthrene	6615
Pyrene	6665
sec-Butylbenzene	4440
Styrene	5100
tert-Butylbenzene	4445
Tetrachloroethene (Perchloroethene, PCE)	5115
Tetrahydrofuran (THF)	5120
Toluene	5140
Total Petroleum Hydrocarbons (TPH) (C5-C8)	9461
Total Petroleum Hydrocarbons (TPH) (C9-C15)	9467
trans-1,2-Dichloroethylene	4700
trans-1,3-Dichloropropylene	4685
Trichloroethene (TCE, Trichloroethylene)	5170
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	5175
Vinyl Chloride (Chloroethene)	5235
Xylenes (Total)	5260
EPA TO-15 by Gas Chromatography Mass Spectrometry (GC/MS)	10248803
Air	
1,1,1,2-Tetrachloroethane	5105
1,1,1-Trichloroethane	5160
1,1,2,2-Tetrachloroethane	5110
1,1,2-Trichloro-1,2,2-Trifluoroethane (Trichlorotrifluoroethane, Freon 113)	5185
1,1,2-Trichloroethane	5165
1,1′-Biphenyl (BZ-0, Biphenyl)	6703
1,1-Dichloroethane	4630
1,1-Dichloroethylene	4640
1,1-Dichloropropene	4670
1,2,3-Trichlorobenzene	5150
1,2,3-Trichloropropane (TCP)	5180
1,2,4-Trichlorobenzene	5155

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014
Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA TO-15 by Gas Chromatography Mass Spectrometry (GC/MS)	10248803
Air	
1,2,4-Trimethylbenzene	5210
1,2-Dibromo-3-Chloropropane (DBCP)	4570
1,2-Dibromoethane (EDB, Ethylene Dibromide)	4585
1,2-Dichloro-1,1,2,2-Tetrafluoroethane (Freon 114, 1,2-Dichlorotetrafluoroethane)	4695
1,2-Dichlorobenzene	4610
1,2-Dichloroethane (Ethylene Dichloride, EDC)	4635
1,2-Dichloropropane	4655
1,3,5-Trimethylbenzene	5215
1,3-Butadiene	9318
1,3-Dichlorobenzene (1,3-DCB)	4615
1,3-Dichloropropane	4660
1,4-Dichlorobenzene	4620
1,4-Dioxane (1,4-Diethyleneoxide, p-Dioxane)	4735
1-Methylnaphthalene	6380
2,2-Dichloropropane	4665
2-Butanone (Methyl Ethyl Ketone, MEK)	4410
2-Chlorotoluene	4535
2-Methylnaphthalene	6385
4-Chlorotoluene (p-Chlorotoluene)	4540
4-Ethyltoluene (p-Ethyltoluene, 1-Ethyl-4-Methylbenzene)	4542
4-Isopropyltoluene (p-Isopropyltoluene, p-Cymene)	4910
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone (MIBK), Hexone)	4995
Acenaphthene	5500
Acenaphthylene	5505
Acetone	4315
Anthracene	5555
Benzene	4375
Benzo(a)Anthracene	5575
Benzyl Chloride	5635
Bromobenzene	4385
Bromochloromethane	4390
Bromodichloromethane	4395
Bromoform	4400
Carbazole	5680
Carbon Disulfide	4450
Carbon Tetrachloride	4455

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014
Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA TO-15 by Gas Chromatography Mass Spectrometry (GC/MS)	10248803
Air	
Chlorobenzene	4475
Chlorodibromomethane (Dibromochloromethane)	4575
Chloroethane (Ethyl chloride)	4485
Chloroform	4505
Chloroprene (2-Chloro-1,3-Butadiene)	4525
cis-1,2-Dichloroethylene	4645
cis-1,3-Dichloropropene	4680
Cyclohexane	4555
Dibenzofuran	5905
Dibromomethane (Methylene Bromide)	4595
Dichlorodifluoromethane (Freon 12)	4625
Ethanol	4750
Ethyl Acetate	4755
Ethylbenzene	4765
Fluorene	6270
Hexachlorobutadiene	4835
Hexachloroethane	4840
Isopropyl Alcohol (IPA, 2-Propanol, Isopropanol)	4895
Isopropylbenzene (Cumene)	4900
m,p-Xylene	5240
Methyl Bromide (Bromomethane)	4950
Methyl Chloride (Chloromethane)	4960
Methyl tert Butyl Ether (MTBE)	5000
Methylene Chloride (Dichloromethane)	4975
Naphthalene	5005
n-Butylbenzene	4435
n-Heptane (1-Heptane, Heptane)	4825
n-Hexane	4855
n-Propylbenzene (1-phenylpropane)	5090
o-Xylene (1,2-Xylene)	5250
PCB-1 (2-Chlorobiphenyl (BZ-1), 2-Monochlorobiphenyl)	8915
Phenanthrene	6615
Pyrene	6665
sec-Butylbenzene	4440
Styrene	5100
tert-Butylbenzene	4445

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014
Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA TO-15 by Gas Chromatography Mass Spectrometry (GC/MS)	10248803
Air	
Tetrachloroethene (Perchloroethene, PCE)	5115
Tetrahydrofuran (THF)	5120
Toluene	5140
Total Petroleum Hydrocarbons (TPH) (C5-C8)	9461
Total Petroleum Hydrocarbons (TPH) (C9-C15)	9467
trans-1,2-Dichloroethylene	4700
trans-1,3-Dichloropropylene	4685
Trichloroethene (TCE, Trichloroethylene)	5170
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	5175
Vinyl Chloride (Chloroethene)	5235
Xylenes (Total)	5260
EPA TO-17 by Gas Chromatography Mass Spectrometry (GC/MS)	10312206
Air	
1,1,1,2-Tetrachloroethane	5105
1,1,1-Trichloroethane	5160
1,1,2,2-Tetrachloroethane	5110
1,1,2-Trichloro-1,2,2-Trifluoroethane (Trichlorotrifluoroethane, Freon 113)	5185
1,1,2-Trichloroethane	5165
1,1′-Biphenyl (BZ-0, Biphenyl)	6703
1,1-Dichloroethane	4630
1,1-Dichloroethylene	4640
1,1-Dichloropropene	4670
1,2,3-Trichlorobenzene	5150
1,2,3-Trichloropropane (TCP)	5180
1,2,4-Trichlorobenzene	5155
1,2,4-Trimethylbenzene	5210
1,2-Dibromo-3-Chloropropane (DBCP)	4570
1,2-Dibromoethane (EDB, Ethylene Dibromide)	4585
1,2-Dichloro-1,1,2,2-Tetrafluoroethane (Freon 114, 1,2-Dichlorotetrafluoroethane)	4695
1,2-Dichlorobenzene	4610
1,2-Dichloroethane (Ethylene Dichloride, EDC)	4635
1,2-Dichloropropane	4655
1,3,5-Trimethylbenzene	5215
1,3-Butadiene	9318
1,3-Dichlorobenzene (1,3-DCB)	4615
1,3-Dichloropropane	4660

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014
Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA TO-17 by Gas Chromatography Mass Spectrometry (GC/MS)	10312206
Air	
1,4-Dichlorobenzene	4620
1,4-Dioxane (1,4-Diethyleneoxide, p-Dioxane)	4735
1-Methylnaphthalene	6380
2,2-Dichloropropane	4665
2-Butanone (Methyl Ethyl Ketone, MEK)	4410
2-Chlorotoluene	4535
2-Methylnaphthalene	6385
4-Chlorotoluene (p-Chlorotoluene)	4540
4-Ethyltoluene (p-Ethyltoluene, 1-Ethyl-4-Methylbenzene)	4542
4-Isopropyltoluene (p-Isopropyltoluene, p-Cymene)	4910
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone (MIBK), Hexone)	4995
Acenaphthene	5500
Acenaphthylene	5505
Acetone	4315
Anthracene	5555
Benzene	4375
Benzo(a)Anthracene	5575
Benzyl Chloride	5635
Bromobenzene	4385
Bromochloromethane	4390
Bromodichloromethane	4395
Bromoform	4400
Carbazole	5680
Carbon Disulfide	4450
Carbon Tetrachloride	4455
Chlorobenzene	4475
Chlorodibromomethane (Dibromochloromethane)	4575
Chloroethane (Ethyl chloride)	4485
Chloroform	4505
Chloroprene (2-Chloro-1,3-Butadiene)	4525
cis-1,2-Dichloroethylene	4645
cis-1,3-Dichloropropene	4680
Cyclohexane	4555
Dibenzofuran	5905
Dibromomethane (Methylene Bromide)	4595
Dichlorodifluoromethane (Freon 12)	4625

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014
Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
Organic	
EPA TO-17 by Gas Chromatography Mass Spectrometry (GC/MS)	10312206
Air	
Ethanol	4750
Ethyl Acetate	4755
Ethylbenzene	4765
Fluorene	6270
Hexachlorobutadiene	4835
Hexachloroethane	4840
Isopropyl Alcohol (IPA, 2-Propanol, Isopropanol)	4895
Isopropylbenzene (Cumene)	4900
m,p-Xylene	5240
Methyl Bromide (Bromomethane)	4950
Methyl Chloride (Chloromethane)	4960
Methyl tert Butyl Ether (MTBE)	5000
Methylene Chloride (Dichloromethane)	4975
Naphthalene	5005
n-Butylbenzene	4435
n-Heptane (1-Heptane, Heptane)	4825
n-Hexane	4855
n-Propylbenzene (1-phenylpropane)	5090
o-Xylene (1,2-Xylene)	5250
PCB-1 (2-Chlorobiphenyl (BZ-1), 2-Monochlorobiphenyl)	8915
Phenanthrene	6615
Pyrene	6665
sec-Butylbenzene	4440
Styrene	5100
tert-Butylbenzene	4445
Tetrachloroethene (Perchloroethene, PCE)	5115
Tetrahydrofuran (THF)	5120
Toluene	5140
Total Petroleum Hydrocarbons (TPH) (C5-C8)	9461
Total Petroleum Hydrocarbons (TPH) (C9-C15)	9467
trans-1,2-Dichloroethylene	4700
trans-1,3-Dichloropropylene	4685
Trichloroethene (TCE, Trichloroethylene)	5170
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	5175
Vinyl Chloride (Chloroethene)	5235
Xylenes (Total)	5260

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.
526 Underwood Lane, Bel Air, MD 21014
Contact Name: Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following testing:

	Code
No Preparation methods on scope	

Footnotes:

> Method codes are typically based on The NELAC Institute (TNI) Laboratory Accreditation Management System (LAMS) and are used to compare to the laboratory reported Performance Test (PT) results. Although the method code may not represent the specific method version, it is the method code used to represent the method/technology used to report PTs. (NC = No Code)

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Organization of:

Beacon Environmental Services, Inc.

526 Underwood Lane, Bel Air, MD 21014

(Hereinafter called the Organization) and hereby declares that Organization has met the requirements of ISO/IEC 17025:2017 "General requirements for the competence of testing and calibration laboratories" and the Field Sampling and Measurement Organization Sector Volume 1 "General Requirements for Field Sampling and Measurement Organizations" (FSMO-V1-2014) and is accredited in accordance with the:

TNI National Environmental Field Activities Program (NEFAP)

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system
(as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

This accreditation demonstrates the technical competence for the defined scope:

Environmental Field Sampling (Air and Emissions)

(As detailed in the supplement)

Accreditation claims for such activities shall only be made from the addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation Body's duty to observe and comply with the said rules.

For PJLA:

draft
Tracy Szerszen
President

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

Initial Accreditation Date:	*Issue Date:*	*Expiration Date:*
September 07, 2012	November 01, 2024	December 31, 2026

Accreditation No.:	*Certificate No.:*
72690	L24-846

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlabs.com

Certificate of Accreditation: Supplement

Beacon Environmental Services, Inc.

526 Underwood Lane, Bel Air, MD 21014
Contact Name: Mr. Pete Kelly Phone: 410-838-8780

Accreditation is granted to the facility to perform the following sampling/field measurement:

FIELD OF SAMPLING/TEST	ITEMS, MATERIALS, OR PRODUCTS SAMPLED/TESTED	COMPONENT, CHARACTERISTIC, PARAMETER SAMPLED/TESTED	SPECIFICATION OR STANDARD METHOD	TECHNOLOGY OR TECHNIQUE USED
Passive Soil Gas Sampling[O]	Air	Volatile Organic Compounds	Beacon SOP 10 – Collection and Return Shipment of Passive Soil Gas Samplers SOP 1 PSG Sampler Manufacturing SOP 4 PSG Sampler Shipment	Field Sampling for GC/MS Analysis
Passive Indoor/Ambient Air Sampling[O]			Beacon SOP 11 - Passive Diffusion Samplers with Sorbent Tubes SOP 6 Sorbent Tube Shipment SOP 16 Sorbent Tube Preparation	
Fugitive and Area Sources Sampler[O]			Method 325A- Deployment and VOC Sample Collection	
Soil Gas and Indoor/Ambient Air Sampling with Pumps or Syringes[O]		Volatile and Semi-Volatile Organics	Thermal Desorption GC/MSD, EPA Method TO-17	

1. The presence of a superscript O means that the laboratory performs testing of the indicated parameter onsite at customer locations.

State of Utah

Department of Health and Human Services

Environmental Laboratory Certification Program

Accreditation is hereby granted to

Beacon Environmental Services

526 Underwood Lane
Bel Air, MD 21014

Has conformed with the
2016 TNI Standard
Scope of accreditation is limited to the
State of Utah accredited fields that accompany
this Certificate

EPA Number: MD01091
Expiration Date: 12/31/2026
Certificate Number: MD010912025-17

Kristin Brown
Program Manager

NELAP RECOGNIZED TNI ACCREDITATION BODY

Continued accredited status depends on successful ongoing participation in the program.

Utah Department of Health & Human Services

State of Utah
SPENCER J. COX
Governor
DEIDRE HENDERSON
Lieutenant Governor

Department of Health Human Services
TRACY S. GRUBER
Executive Director
NATE CHECKETTS
Deputy Director
DR. MICHELLE HOFMANN
Executive Medical Director
DAVID LITVAK
Deputy Director
NATE WINTERS
Deputy Director

EPA Number: *MD01091* **Attachment to Certificate Number: MD010912025-17**

Beacon Environmental Services

Program/Matrix: ***Air & Emissions (Air & Emissions)***

	Start Date	Expires	AB
Method EPA 325B	**Year: 2013**	**Method Code: 10277437**	
1,1,1-Trichloroethane	12/18/23	12/31/26	UT
1,1,2-Trichloroethane	12/18/23	12/31/26	UT
1,1-Dichloroethylene	12/18/23	12/31/26	UT
1,2-Dichloroethane (Ethylene dichloride)	12/18/23	12/31/26	UT
1,2-Dichloropropane	12/18/23	12/31/26	UT
1,3-Butadiene	01/01/23	12/31/26	UT
Benzene	01/01/23	12/31/26	UT
Carbon tetrachloride	12/18/23	12/31/26	UT
Chlorobenzene	12/18/23	12/31/26	UT
Chloroprene (2-Chloro-1,3-butadiene)	01/01/23	12/31/26	UT
Ethylbenzene	01/01/23	12/31/26	UT
m+p-xylene	01/01/23	12/31/26	UT
o-Xylene	01/01/23	12/31/26	UT
Styrene	12/18/23	12/31/26	UT
Tetrachloroethylene (Perchloroethylene)	12/18/23	12/31/26	UT
Toluene	01/01/23	12/31/26	UT
Trichloroethene (Trichloroethylene)	12/18/23	12/31/26	UT
Method EPA 8260C	**Year: 2006**	**Method Code: 10307003**	
Total Petroleum Hydrocarbons C5 - C8	09/01/25		UT
1,1,1,2-Tetrachloroethane	01/01/23	12/31/26	UT
1,1,1-Trichloroethane	01/01/23	12/31/26	UT
1,1,2,2-Tetrachloroethane	01/01/23	12/31/26	UT
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	01/01/23	12/31/26	UT
1,1,2-Trichloroethane	01/01/23	12/31/26	UT
1,1-Dichloroethane	01/01/23	12/31/26	UT
1,1-Dichloroethylene	01/01/23	12/31/26	UT
1,1-Dichloropropene	01/01/23	12/31/26	UT
1,2,3-Trichlorobenzene	01/01/23	12/31/26	UT
1,2,3-Trichloropropane	01/01/23	12/31/26	UT
1,2,4-Trichlorobenzene	01/01/23	12/31/26	UT
1,2,4-Trimethylbenzene	01/01/23	12/31/26	UT
1,2-Dibromo-3-chloropropane (DBCP)	12/18/23	12/31/26	UT
1,2-Dibromoethane (EDB, Ethylene dibromide)	01/01/23	12/31/26	UT
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)	01/01/23	12/31/26	UT
1,2-Dichlorobenzene (o-Dichlorobenzene)	01/01/23	12/31/26	UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
1,2-Dichloroethane (Ethylene dichloride)	01/01/23	12/31/26	UT
1,2-Dichloropropane	01/01/23	12/31/26	UT
1,3,5-Trimethylbenzene	01/01/23	12/31/26	UT
1,3-Butadiene	01/01/23	12/31/26	UT
1,3-Dichlorobenzene	01/01/23	12/31/26	UT
1,3-Dichloropropane	01/01/23	12/31/26	UT
1,4-Dichlorobenzene	01/01/23	12/31/26	UT
1,4-Dioxane (1,4- Diethyleneoxide)	01/01/23	12/31/26	UT
1-Methylnaphthalene	01/01/23	12/31/26	UT
2,2-Dichloropropane	01/01/23	12/31/26	UT
2-Butanone (Methyl ethyl ketone, MEK)	01/01/23	12/31/26	UT
2-Chlorobiphenyl (BZ-1)	01/01/23	12/31/26	UT
2-Chlorotoluene	01/01/23	12/31/26	UT
2-Methylnaphthalene	01/01/23	12/31/26	UT
4-Chlorotoluene	01/01/23	12/31/26	UT
4-Ethyltoluene	01/01/23	12/31/26	UT
4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	01/01/23	12/31/26	UT
4-Methyl-2-pentanone (MIBK)	01/01/23	12/31/26	UT
Acenaphthene	01/01/23	12/31/26	UT
Acenaphthylene	01/01/23	12/31/26	UT
Acetone	01/01/23	12/31/26	UT
Anthracene	01/01/23	12/31/26	UT
Benzene	01/01/23	12/31/26	UT
Benzo(a)anthracene	01/01/23	12/31/26	UT
Benzyl chloride	01/01/23	12/31/26	UT
Biphenyl	01/01/23	12/31/26	UT
Bromobenzene	01/01/23	12/31/26	UT
Bromochloromethane	01/01/23	12/31/26	UT
Bromodichloromethane	01/01/23	12/31/26	UT
Bromoform	01/01/23	12/31/26	UT
Carbazole	01/01/23	12/31/26	UT
Carbon disulfide	01/01/23	12/31/26	UT
Carbon tetrachloride	01/01/23	12/31/26	UT
Chlorobenzene	01/01/23	12/31/26	UT
Chlorodibromomethane	01/01/23	12/31/26	UT
Chloroethane (Ethyl chloride)	01/01/23	12/31/26	UT
Chloroform	01/01/23	12/31/26	UT
Chloroprene (2-Chloro-1,3-butadiene)	01/01/23	12/31/26	UT
cis-1,2-Dichloroethylene	01/01/23	12/31/26	UT
cis-1,3-Dichloropropene	01/01/23	12/31/26	UT
Cyclohexane	01/01/23	12/31/26	UT
Dibenzofuran	01/01/23	12/31/26	UT
Dibromomethane (Methylene bromide)	01/01/23	12/31/26	UT
Dichlorodifluoromethane (Freon-12)	01/01/23	12/31/26	UT
Ethanol	01/01/23	12/31/26	UT
Ethyl acetate	01/01/23	12/31/26	UT
Ethylbenzene	01/01/23	12/31/26	UT
Fluorene	01/01/23	12/31/26	UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
Hexachlorobutadiene	01/01/23	12/31/26	UT
Hexachloroethane	01/01/23	12/31/26	UT
Isopropyl alcohol (2-Propanol, Isopropanol)	01/01/23	12/31/26	UT
Isopropylbenzene	01/01/23	12/31/26	UT
m+p-xylene	01/01/23	12/31/26	UT
Methyl bromide (Bromomethane)	01/01/23	12/31/26	UT
Methyl chloride (Chloromethane)	01/01/23	12/31/26	UT
Methyl tert-butyl ether (MTBE)	01/01/23	12/31/26	UT
Methylene chloride (Dichloromethane)	01/01/23	12/31/26	UT
Naphthalene	01/01/23	12/31/26	UT
n-Butylbenzene	01/01/23	12/31/26	UT
n-Heptane	01/01/23	12/31/26	UT
n-Hexane	01/01/23	12/31/26	UT
n-Propylbenzene	01/01/23	12/31/26	UT
o-Xylene	01/01/23	12/31/26	UT
Phenanthrene	01/01/23	12/31/26	UT
Pyrene	01/01/23	12/31/26	UT
sec-Butylbenzene	01/01/23	12/31/26	UT
Styrene	01/01/23	12/31/26	UT
tert-Butylbenzene	01/01/23	12/31/26	UT
Tetrachloroethylene (Perchloroethylene)	01/01/23	12/31/26	UT
Tetrahydrofuran (THF)	01/01/23	12/31/26	UT
Toluene	01/01/23	12/31/26	UT
Total Petroleum Hydrocarbons C9 - C15	09/01/25		UT
trans-1,2-Dichloroethylene	01/01/23	12/31/26	UT
trans-1,3-Dichloropropylene	01/01/23	12/31/26	UT
Trichloroethene (Trichloroethylene)	01/01/23	12/31/26	UT
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	01/01/23	12/31/26	UT
Vinyl chloride (chloroethene)	01/01/23	12/31/26	UT
Xylene (total)	12/18/23	12/31/26	UT
Method EPA 8260D	**Year: 2018**	**Method Code: 10307127**	
Total Petroleum Hydrocarbons C5 - C8	09/01/25		UT
1,1,1,2-Tetrachloroethane	12/18/23	12/31/26	UT
1,1,1-Trichloroethane	12/18/23	12/31/26	UT
1,1,2,2-Tetrachloroethane	12/18/23	12/31/26	UT
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12/18/23	12/31/26	UT
1,1,2-Trichloroethane	12/18/23	12/31/26	UT
1,1-Dichloroethane	12/18/23	12/31/26	UT
1,1-Dichloroethylene	12/18/23	12/31/26	UT
1,1-Dichloropropene	12/18/23	12/31/26	UT
1,2,3-Trichlorobenzene	12/18/23	12/31/26	UT
1,2,3-Trichloropropane	12/18/23	12/31/26	UT
1,2,4-Trichlorobenzene	12/18/23	12/31/26	UT
1,2,4-Trimethylbenzene	12/18/23	12/31/26	UT
1,2-Dibromo-3-chloropropane (DBCP)	12/18/23	12/31/26	UT
1,2-Dibromoethane (EDB, Ethylene dibromide)	12/18/23	12/31/26	UT
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)	12/18/23	12/31/26	UT
1,2-Dichlorobenzene (o-Dichlorobenzene)	12/18/23	12/31/26	UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
1,2-Dichloroethane (Ethylene dichloride)	12/18/23	12/31/26	UT
1,2-Dichloropropane	12/18/23	12/31/26	UT
1,3,5-Trimethylbenzene	12/18/23	12/31/26	UT
1,3-Butadiene	12/18/23	12/31/26	UT
1,3-Dichlorobenzene	12/18/23	12/31/26	UT
1,3-Dichloropropane	12/18/23	12/31/26	UT
1,4-Dichlorobenzene	12/18/23	12/31/26	UT
1,4-Dioxane (1,4- Diethyleneoxide)	12/18/23	12/31/26	UT
1-Methylnaphthalene	12/18/23	12/31/26	UT
2,2-Dichloropropane	12/18/23	12/31/26	UT
2-Butanone (Methyl ethyl ketone, MEK)	12/18/23	12/31/26	UT
2-Chlorobiphenyl (BZ-1)	12/18/23	12/31/26	UT
2-Chlorotoluene	12/18/23	12/31/26	UT
2-Methylnaphthalene	12/18/23	12/31/26	UT
4-Chlorotoluene	12/18/23	12/31/26	UT
4-Ethyltoluene	12/18/23	12/31/26	UT
4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	12/18/23	12/31/26	UT
4-Methyl-2-pentanone (MIBK)	12/18/23	12/31/26	UT
Acenaphthene	12/18/23	12/31/26	UT
Acenaphthylene	12/18/23	12/31/26	UT
Acetone	12/18/23	12/31/26	UT
Anthracene	12/18/23	12/31/26	UT
Benzene	12/18/23	12/31/26	UT
Benzo(a)anthracene	12/18/23	12/31/26	UT
Benzyl chloride	12/18/23	12/31/26	UT
Biphenyl	12/18/23	12/31/26	UT
Bromobenzene	12/18/23	12/31/26	UT
Bromochloromethane	12/18/23	12/31/26	UT
Bromodichloromethane	12/18/23	12/31/26	UT
Bromoform	12/18/23	12/31/26	UT
Carbazole	12/18/23	12/31/26	UT
Carbon disulfide	12/18/23	12/31/26	UT
Carbon tetrachloride	12/18/23	12/31/26	UT
Chlorobenzene	12/18/23	12/31/26	UT
Chlorodibromomethane	12/18/23	12/31/26	UT
Chloroethane (Ethyl chloride)	12/18/23	12/31/26	UT
Chloroform	12/18/23	12/31/26	UT
Chloroprene (2-Chloro-1,3-butadiene)	12/18/23	12/31/26	UT
cis-1,2-Dichloroethylene	12/18/23	12/31/26	UT
cis-1,3-Dichloropropene	12/18/23	12/31/26	UT
Cyclohexane	12/18/23	12/31/26	UT
Dibenzofuran	12/18/23	12/31/26	UT
Dibromomethane (Methylene bromide)	12/18/23	12/31/26	UT
Dichlorodifluoromethane (Freon-12)	12/18/23	12/31/26	UT
Ethanol	12/18/23	12/31/26	UT
Ethyl acetate	12/18/23	12/31/26	UT
Ethylbenzene	12/18/23	12/31/26	UT
Fluorene	12/18/23	12/31/26	UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
Hexachlorobutadiene	12/18/23	12/31/26	UT
Hexachloroethane	12/18/23	12/31/26	UT
Isopropyl alcohol (2-Propanol, Isopropanol)	12/18/23	12/31/26	UT
Isopropylbenzene	12/18/23	12/31/26	UT
m+p-xylene	12/18/23	12/31/26	UT
Methyl bromide (Bromomethane)	12/18/23	12/31/26	UT
Methyl chloride (Chloromethane)	12/18/23	12/31/26	UT
Methyl tert-butyl ether (MTBE)	12/18/23	12/31/26	UT
Methylene chloride (Dichloromethane)	12/18/23	12/31/26	UT
Naphthalene	12/18/23	12/31/26	UT
n-Butylbenzene	12/18/23	12/31/26	UT
n-Heptane	12/18/23	12/31/26	UT
n-Hexane	12/18/23	12/31/26	UT
n-Propylbenzene	12/18/23	12/31/26	UT
o-Xylene	12/18/23	12/31/26	UT
Phenanthrene	12/18/23	12/31/26	UT
Pyrene	12/18/23	12/31/26	UT
sec-Butylbenzene	12/18/23	12/31/26	UT
Styrene	12/18/23	12/31/26	UT
tert-Butylbenzene	12/18/23	12/31/26	UT
Tetrachloroethylene (Perchloroethylene)	12/18/23	12/31/26	UT
Tetrahydrofuran (THF)	12/18/23	12/31/26	UT
Toluene	12/18/23	12/31/26	UT
Total Petroleum Hydrocarbons C9 - C15	09/01/25		UT
trans-1,2-Dichloroethylene	12/18/23	12/31/26	UT
trans-1,3-Dichloropropylene	12/18/23	12/31/26	UT
Trichloroethene (Trichloroethylene)	12/18/23	12/31/26	UT
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	12/18/23	12/31/26	UT
Vinyl chloride (chloroethene)	12/18/23	12/31/26	UT
Xylene (total)	12/18/23	12/31/26	UT
Method EPA TO-15		**Method Code: 10248803**	
Total Petroleum Hydrocarbons C5 - C8	09/01/25		UT
1,1,1,2-Tetrachloroethane	08/01/25		UT
1,1,1-Trichloroethane	08/01/25		UT
1,1,2,2-Tetrachloroethane	08/01/25		UT
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	08/01/25		UT
1,1,2-Trichloroethane	08/01/25		UT
1,1-Dichloroethane	08/01/25		UT
1,1-Dichloroethylene	08/01/25		UT
1,1-Dichloropropene	08/01/25		UT
1,2,3-Trichlorobenzene	08/01/25		UT
1,2,3-Trichloropropane	08/01/25		UT
1,2,4-Trichlorobenzene	08/01/25		UT
1,2,4-Trimethylbenzene	08/01/25		UT
1,2-Dibromo-3-chloropropane (DBCP)	08/01/25		UT
1,2-Dibromoethane (EDB, Ethylene dibromide)	08/01/25		UT
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)	08/01/25		UT
1,2-Dichlorobenzene (o-Dichlorobenzene)	08/01/25		UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
1,2-Dichloroethane (Ethylene dichloride)	08/01/25		UT
1,2-Dichloropropane	08/01/25		UT
1,3,5-Trimethylbenzene	08/01/25		UT
1,3-Butadiene	08/01/25		UT
1,3-Dichlorobenzene	08/01/25		UT
1,3-Dichloropropane	08/01/25		UT
1,4-Dichlorobenzene	08/01/25		UT
1,4-Dioxane (1,4- Diethyleneoxide)	08/01/25		UT
1-Methylnaphthalene	08/01/25		UT
2,2-Dichloropropane	08/01/25		UT
2-Butanone (Methyl ethyl ketone, MEK)	08/01/25		UT
2-Chlorobiphenyl (BZ-1)	08/01/25		UT
2-Chlorotoluene	08/01/25		UT
2-Methylnaphthalene	08/01/25		UT
4-Chlorotoluene	08/01/25		UT
4-Ethyltoluene	08/01/25		UT
4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	08/01/25		UT
4-Methyl-2-pentanone (MIBK)	08/01/25		UT
Acenaphthene	08/01/25		UT
Acenaphthylene	08/01/25		UT
Acetone	08/01/25		UT
Anthracene	08/01/25		UT
Benzene	08/01/25		UT
Benzo(a)anthracene	08/01/25		UT
Benzyl chloride	08/01/25		UT
Biphenyl	08/01/25		UT
Bromobenzene	08/01/25		UT
Bromochloromethane	08/01/25		UT
Bromodichloromethane	08/01/25		UT
Bromoform	08/01/25		UT
Carbazole	08/01/25		UT
Carbon disulfide	08/01/25		UT
Carbon tetrachloride	08/01/25		UT
Chlorobenzene	08/01/25		UT
Chlorodibromomethane	08/01/25		UT
Chloroethane (Ethyl chloride)	08/01/25		UT
Chloroform	08/01/25		UT
Chloroprene (2-Chloro-1,3-butadiene)	09/01/25		UT
cis-1,2-Dichloroethylene	08/01/25		UT
cis-1,3-Dichloropropene	08/01/25		UT
Cyclohexane	08/01/25		UT
Dibenzofuran	08/01/25		UT
Dibromomethane (Methylene bromide)	08/01/25		UT
Dichlorodifluoromethane (Freon-12)	08/01/25		UT
Ethanol	08/01/25		UT
Ethyl acetate	08/01/25		UT
Ethylbenzene	08/01/25		UT
Fluorene	08/01/25		UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
Hexachlorobutadiene	08/01/25		UT
Hexachloroethane	08/01/25		UT
Isopropyl alcohol (2-Propanol, Isopropanol)	08/01/25		UT
Isopropylbenzene	08/01/25		UT
m+p-xylene	08/01/25		UT
Methyl bromide (Bromomethane)	08/01/25		UT
Methyl chloride (Chloromethane)	08/01/25		UT
Methyl tert-butyl ether (MTBE)	08/01/25		UT
Methylene chloride (Dichloromethane)	08/01/25		UT
Naphthalene	08/01/25		UT
n-Butylbenzene	08/01/25		UT
n-Heptane	08/01/25		UT
n-Hexane	08/01/25		UT
n-Propylbenzene	08/01/25		UT
o-Xylene	09/01/25		UT
Phenanthrene	08/01/25		UT
Pyrene	08/01/25		UT
sec-Butylbenzene	08/01/25		UT
Styrene	08/01/25		UT
tert-Butylbenzene	08/01/25		UT
Tetrachloroethylene (Perchloroethylene)	08/01/25		UT
Tetrahydrofuran (THF)	08/01/25		UT
Toluene	08/01/25		UT
Total Petroleum Hydrocarbons C9 - C15	09/01/25		UT
trans-1,2-Dichloroethylene	08/01/25		UT
trans-1,3-Dichloropropylene	08/01/25		UT
Trichloroethene (Trichloroethylene)	08/01/25		UT
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	08/01/25		UT
Vinyl chloride (chloroethene)	08/01/25		UT
Xylene (total)	08/01/25		UT
Method EPA TO-17	**Revision: 2**		**Method Code: 10312206**
Total Petroleum Hydrocarbons C5 - C8	09/01/25		UT
1,1,1,2-Tetrachloroethane	01/01/23	12/31/26	UT
1,1,1-Trichloroethane	01/01/23	12/31/26	UT
1,1,2,2-Tetrachloroethane	01/01/23	12/31/26	UT
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	01/01/23	12/31/26	UT
1,1,2-Trichloroethane	01/01/23	12/31/26	UT
1,1-Dichloroethane	01/01/23	12/31/26	UT
1,1-Dichloroethylene	01/01/23	12/31/26	UT
1,1-Dichloropropene	01/01/23	12/31/26	UT
1,2,3-Trichlorobenzene	01/01/23	12/31/26	UT
1,2,3-Trichloropropane	01/01/23	12/31/26	UT
1,2,4-Trichlorobenzene	01/01/23	12/31/26	UT
1,2,4-Trimethylbenzene	01/01/23	12/31/26	UT
1,2-Dibromo-3-chloropropane (DBCP)	12/18/23	12/31/26	UT
1,2-Dibromoethane (EDB, Ethylene dibromide)	01/01/23	12/31/26	UT
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon-114)	01/01/23	12/31/26	UT
1,2-Dichlorobenzene (o-Dichlorobenzene)	01/01/23	12/31/26	UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
1,2-Dichloroethane (Ethylene dichloride)	01/01/23	12/31/26	UT
1,2-Dichloropropane	01/01/23	12/31/26	UT
1,3,5-Trimethylbenzene	01/01/23	12/31/26	UT
1,3-Butadiene	01/01/23	12/31/26	UT
1,3-Dichlorobenzene	01/01/23	12/31/26	UT
1,3-Dichloropropane	01/01/23	12/31/26	UT
1,4-Dichlorobenzene	01/01/23	12/31/26	UT
1,4-Dioxane (1,4- Diethyleneoxide)	01/01/23	12/31/26	UT
1-Methylnaphthalene	01/01/23	12/31/26	UT
2,2-Dichloropropane	01/01/23	12/31/26	UT
2-Butanone (Methyl ethyl ketone, MEK)	01/01/23	12/31/26	UT
2-Chlorobiphenyl (BZ-1)	01/01/23	12/31/26	UT
2-Chlorotoluene	01/01/23	12/31/26	UT
2-Methylnaphthalene	01/01/23	12/31/26	UT
4-Chlorotoluene	01/01/23	12/31/26	UT
4-Ethyltoluene	01/01/23	12/31/26	UT
4-Isopropyltoluene (p-Cymene,p-Isopropyltoluene)	01/01/23	12/31/26	UT
4-Methyl-2-pentanone (MIBK)	01/01/23	12/31/26	UT
Acenaphthene	01/01/23	12/31/26	UT
Acenaphthylene	01/01/23	12/31/26	UT
Acetone	01/01/23	12/31/26	UT
Anthracene	01/01/23	12/31/26	UT
Benzene	01/01/23	12/31/26	UT
Benzo(a)anthracene	01/01/23	12/31/26	UT
Benzyl chloride	01/01/23	12/31/26	UT
Biphenyl	01/01/23	12/31/26	UT
Bromobenzene	01/01/23	12/31/26	UT
Bromochloromethane	01/01/23	12/31/26	UT
Bromodichloromethane	01/01/23	12/31/26	UT
Bromoform	01/01/23	12/31/26	UT
Carbazole	01/01/23	12/31/26	UT
Carbon disulfide	01/01/23	12/31/26	UT
Carbon tetrachloride	01/01/23	12/31/26	UT
Chlorobenzene	01/01/23	12/31/26	UT
Chlorodibromomethane	01/01/23	12/31/26	UT
Chloroethane (Ethyl chloride)	01/01/23	12/31/26	UT
Chloroform	01/01/23	12/31/26	UT
Chloroprene (2-Chloro-1,3-butadiene)	01/01/23	12/31/26	UT
cis-1,2-Dichloroethylene	01/01/23	12/31/26	UT
cis-1,3-Dichloropropene	01/01/23	12/31/26	UT
Cyclohexane	01/01/23	12/31/26	UT
Dibenzofuran	01/01/23	12/31/26	UT
Dibromomethane (Methylene bromide)	01/01/23	12/31/26	UT
Dichlorodifluoromethane (Freon-12)	01/01/23	12/31/26	UT
Ethanol	01/01/23	12/31/26	UT
Ethyl acetate	01/01/23	12/31/26	UT
Ethylbenzene	01/01/23	12/31/26	UT
Fluorene	01/01/23	12/31/26	UT

Beacon Environmental Services

	Start Date	Expires	AB
Program/Matrix: ***Air & Emissions (Air & Emissions)***			
Hexachlorobutadiene	01/01/23	12/31/26	UT
Hexachloroethane	01/01/23	12/31/26	UT
Isopropyl alcohol (2-Propanol, Isopropanol)	01/01/23	12/31/26	UT
Isopropylbenzene	01/01/23	12/31/26	UT
m+p-xylene	01/01/23	12/31/26	UT
Methyl bromide (Bromomethane)	01/01/23	12/31/26	UT
Methyl chloride (Chloromethane)	01/01/23	12/31/26	UT
Methyl tert-butyl ether (MTBE)	01/01/23	12/31/26	UT
Methylene chloride (Dichloromethane)	01/01/23	12/31/26	UT
Naphthalene	01/01/23	12/31/26	UT
n-Butylbenzene	01/01/23	12/31/26	UT
n-Heptane	01/01/23	12/31/26	UT
n-Hexane	01/01/23	12/31/26	UT
n-Propylbenzene	01/01/23	12/31/26	UT
o-Xylene	01/01/23	12/31/26	UT
Phenanthrene	01/01/23	12/31/26	UT
Pyrene	01/01/23	12/31/26	UT
sec-Butylbenzene	01/01/23	12/31/26	UT
Styrene	01/01/23	12/31/26	UT
tert-Butylbenzene	01/01/23	12/31/26	UT
Tetrachloroethylene (Perchloroethylene)	01/01/23	12/31/26	UT
Tetrahydrofuran (THF)	01/01/23	12/31/26	UT
Toluene	01/01/23	12/31/26	UT
Total Petroleum Hydrocarbons C9 - C15	09/01/25		UT
trans-1,2-Dichloroethylene	01/01/23	12/31/26	UT
trans-1,3-Dichloropropylene	01/01/23	12/31/26	UT
Trichloroethene (Trichloroethylene)	01/01/23	12/31/26	UT
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	01/01/23	12/31/26	UT
Vinyl chloride (chloroethene)	01/01/23	12/31/26	UT
Xylene (total)	12/18/23	12/31/26	UT

The Utah Environmental Laboratory Certification Program (ELCP) encourages clients and data users to verify the most current certification letter for the authorized method.

The analytes by method which a laboratory is authorized to perform at any given time will be those indicated in the most recent certificate letter. The most recent certification letter supersedes all previous certification or authorization letters. It is the certified laboratory's responsibility to review this letter for discrepancies. The certified laboratory must document any discrepancies in this letter and send notice to this bureau within 15 days of receipt. This certificate letter will be recalled in the event your laboratory's certification is revoked.

The State of Washington
Department of Ecology

Beacon Environmental

Bel Air, MD

has complied with provisions set forth in Chapter 173-50 WAC and is hereby recognized by the Department of Ecology as an ACCREDITED LABORATORY for the analytical parameters listed on the accompanying Scope of Accreditation.

This certificate is effective 5/24/2026 and shall expire 5/23/2027.

Witnessed under my hand on 4/22/2026.

Laboratory ID
C1085

Rebecca Wood
Lab Accreditation Unit Supervisor

WASHINGTON STATE DEPARTMENT OF ECOLOGY

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

SCOPE OF ACCREDITATION

Beacon Environmental

Bel Air, MD

is accredited for the analytes listed below using the methods indicated. Full accreditation is granted unless stated otherwise in a note. EPA is the U.S. Environmental Protection Agency. SM is "Standard Methods for the Examination of Water and Wastewater." SM refers to EPA approved method versions. ASTM is the American Society for Testing and Materials. USGS is the U.S. Geological Survey. AOAC is the Association of Official Analytical Chemists. Other references are described in notes.

Matrix/ Analyte	Method	Note
Air		
1,1,1,2-Tetrachloroethane	EPA TO-17 Rev. 2 (1999)	1
1,1,1-Trichloroethane	EPA TO-17 Rev. 2 (1999)	1
1,1,2,2-Tetrachloroethane	EPA TO-17 Rev. 2 (1999)	1
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA TO-17 Rev. 2 (1999)	1
1,1,2-Trichloroethane	EPA TO-17 Rev. 2 (1999)	1
1,1'-Biphenyl (BZ-0)	EPA TO-17 Rev. 2 (1999)	1
1,1-Dichloroethane	EPA TO-17 Rev. 2 (1999)	1
1,1-Dichloroethylene	EPA TO-17 Rev. 2 (1999)	1
1,1-Dichloropropene	EPA TO-17 Rev. 2 (1999)	1
1,2,3-Trichlorobenzene	EPA TO-17 Rev. 2 (1999)	1
1,2,3-Trichloropropane	EPA TO-17 Rev. 2 (1999)	1
1,2,4-Trichlorobenzene	EPA TO-17 Rev. 2 (1999)	1
1,2,4-Trimethylbenzene	EPA TO-17 Rev. 2 (1999)	1
1,2-Dibromo-3-chloropropane (DBCP)	EPA TO-17 Rev. 2 (1999)	1
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA TO-17 Rev. 2 (1999)	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	EPA TO-17 Rev. 2 (1999)	1
1,2-Dichlorobenzene	EPA TO-17 Rev. 2 (1999)	1
1,2-Dichloroethane	EPA TO-17 Rev. 2 (1999)	1
1,2-Dichloropropane	EPA TO-17 Rev. 2 (1999)	1
1,3,5-Trimethylbenzene	EPA TO-17 Rev. 2 (1999)	1
1,3-Butadiene	EPA TO-17 Rev. 2 (1999)	1
1,3-Dichlorobenzene	EPA TO-17 Rev. 2 (1999)	1
1,3-Dichloropropane	EPA TO-17 Rev. 2 (1999)	1
1,4-Dichlorobenzene	EPA TO-17 Rev. 2 (1999)	1
1,4-Dioxane (1,4- Diethyleneoxide)	EPA TO-17 Rev. 2 (1999)	1
1-Methylnaphthalene	EPA TO-17 Rev. 2 (1999)	1
2,2-Dichloropropane	EPA TO-17 Rev. 2 (1999)	1
2-Butanone (Methyl ethyl ketone, MEK)	EPA TO-17 Rev. 2 (1999)	1
2-Chlorobiphenyl	EPA TO-17 Rev. 2 (1999)	1
2-Chlorotoluene	EPA TO-17 Rev. 2 (1999)	1
2-Methylnaphthalene	EPA TO-17 Rev. 2 (1999)	1
4-Chlorotoluene	EPA TO-17 Rev. 2 (1999)	1
4-Ethyltoluene	EPA TO-17 Rev. 2 (1999)	1
4-Isopropyltoluene (p-Cymene)	EPA TO-17 Rev. 2 (1999)	1
4-Methyl-2-pentanone (MIBK)	EPA TO-17 Rev. 2 (1999)	1

Matrix/ Analyte	Method	Note
Air		
Acenaphthene	EPA TO-17 Rev. 2 (1999)	1
Acenaphthylene	EPA TO-17 Rev. 2 (1999)	1
Acetone	EPA TO-17 Rev. 2 (1999)	1
Anthracene	EPA TO-17 Rev. 2 (1999)	1
Benzene	EPA TO-17 Rev. 2 (1999)	1
Benzo(a)anthracene	EPA TO-17 Rev. 2 (1999)	1
Benzyl chloride	EPA TO-17 Rev. 2 (1999)	1
Bromobenzene	EPA TO-17 Rev. 2 (1999)	1
Bromochloromethane	EPA TO-17 Rev. 2 (1999)	1
Bromodichloromethane	EPA TO-17 Rev. 2 (1999)	1
Bromoform	EPA TO-17 Rev. 2 (1999)	1
Carbazole	EPA TO-17 Rev. 2 (1999)	1
Carbon disulfide	EPA TO-17 Rev. 2 (1999)	1
Carbon tetrachloride	EPA TO-17 Rev. 2 (1999)	1
Chlorobenzene	EPA TO-17 Rev. 2 (1999)	1
Chlorodibromomethane	EPA TO-17 Rev. 2 (1999)	1
Chloroethane	EPA TO-17 Rev. 2 (1999)	1
Chloroform	EPA TO-17 Rev. 2 (1999)	1
cis & trans-1,2-Dichloroethene	EPA TO-17 Rev. 2 (1999)	1
cis-1,2-Dichloroethylene	EPA TO-17 Rev. 2 (1999)	1
cis-1,3-Dichloropropene	EPA TO-17 Rev. 2 (1999)	1
Cyclohexane	EPA TO-17 Rev. 2 (1999)	1
Dibenzofuran	EPA TO-17 Rev. 2 (1999)	1
Dibromomethane	EPA TO-17 Rev. 2 (1999)	1
Dichlorodifluoromethane (Freon-12)	EPA TO-17 Rev. 2 (1999)	1
Ethanol	EPA TO-17 Rev. 2 (1999)	1
Ethyl acetate	EPA TO-17 Rev. 2 (1999)	1
Ethylbenzene	EPA TO-17 Rev. 2 (1999)	1
Fluorene	EPA TO-17 Rev. 2 (1999)	1
Hexachlorobutadiene	EPA TO-17 Rev. 2 (1999)	1
Hexachloroethane	EPA TO-17 Rev. 2 (1999)	1
Isopropyl alcohol (2-Propanol)	EPA TO-17 Rev. 2 (1999)	1
Isopropylbenzene	EPA TO-17 Rev. 2 (1999)	1
m+p-xylene	EPA TO-17 Rev. 2 (1999)	1
Methyl bromide (Bromomethane)	EPA TO-17 Rev. 2 (1999)	1
Methyl chloride (Chloromethane)	EPA TO-17 Rev. 2 (1999)	1
Methyl tert-butyl ether (MTBE)	EPA TO-17 Rev. 2 (1999)	1
Methylene chloride	EPA TO-17 Rev. 2 (1999)	1
Naphthalene	EPA TO-17 Rev. 2 (1999)	1
n-Butylbenzene	EPA TO-17 Rev. 2 (1999)	1
n-Heptane	EPA TO-17 Rev. 2 (1999)	1
n-Hexane	EPA TO-17 Rev. 2 (1999)	1
n-Propylbenzene	EPA TO-17 Rev. 2 (1999)	1
o-Xylene	EPA TO-17 Rev. 2 (1999)	1
Phenanthrene	EPA TO-17 Rev. 2 (1999)	1
Pyrene	EPA TO-17 Rev. 2 (1999)	1
sec-Butylbenzene	EPA TO-17 Rev. 2 (1999)	1
Styrene	EPA TO-17 Rev. 2 (1999)	1
tert-Butylbenzene	EPA TO-17 Rev. 2 (1999)	1
Tetrachloroethylene (Perchloroethylene)	EPA TO-17 Rev. 2 (1999)	1

Matrix/ Analyte	Method	Note
Air		
Tetrahydrofuran (THF)	EPA TO-17 Rev. 2 (1999)	1
Toluene	EPA TO-17 Rev. 2 (1999)	1
trans-1,2 Dichloroethylene	EPA TO-17 Rev. 2 (1999)	1
trans-1,3-Dichloropropylene	EPA TO-17 Rev. 2 (1999)	1
Trichloroethene (Trichloroethylene)	EPA TO-17 Rev. 2 (1999)	1
Trichlorofluoromethane (Freon 11)	EPA TO-17 Rev. 2 (1999)	1
Vinyl chloride	EPA TO-17 Rev. 2 (1999)	1
Xylene (total)	EPA TO-17 Rev. 2 (1999)	1

Accredited Parameter Note Detail

(1) Accreditation based in part on recognition of Utah NELAP accreditation.

Authentication Signature
Rebecca Wood, Lab Accreditation Unit Supervisor

04/22/2026

Date

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2027
Issued April 01, 2026

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. STEVEN THORNLEY
BEACON ENVIRONMENTAL SERVICES
526 UNDERWOOD LANE
BEL AIR, MD 21014

NY Lab Id No: 12097

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2016) for the category ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved analytes are listed below:

Polynuclear Aromatics	
Naphthalene	EPA TO-17
Purgeable Aromatics	
Benzene	EPA TO-17
Ethyl benzene	EPA TO-17
m/p-Xylenes	EPA TO-17
o-Xylene	EPA TO-17
Toluene	EPA TO-17
Purgeable Halocarbons	
1,1,1-Trichloroethane	EPA TO-17
1,1-Dichloroethane	EPA TO-17
1,1-Dichloroethene	EPA TO-17
1,2-Dichloroethane	EPA TO-17
Carbon tetrachloride	EPA TO-17
Chloroform	EPA TO-17
cis-1,2-Dichloroethene	EPA TO-17
Methylene chloride	EPA TO-17
Tetrachloroethene	EPA TO-17
trans-1,2-Dichloroethene	EPA TO-17
Trichloroethene	EPA TO-17
Vinyl chloride	EPA TO-17

Serial No.: 72467