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August 31, 2012
Mr. Carl Hoffman
NYSDEC Central Office
625 Broadway 12th Floor
Albany, NY 12233

Re: Preliminary Remedial Action Work Plan (PRAWP)
Former Napanoch Paper Mill Wawarsing, NY
NYSDEC Site No. 727010

Dear Mr. Hoffman:

At your request, Aztech Technologies, Inc. (Aztech) has prepared the following preliminary remedial action work plan (PRAWP) for the excavation of remaining contaminated soils at the Former Napanoch Paper Mill Site (the site). Included in the PRAWP is a brief summary of the site's remedial history, recent delineation sampling results, proposed excavation, and cost estimate. Information presented in the PWRAP has been gathered from the site's Record of Decision, Closure Certification Report written by Parsons Engineering Science, Inc. (Parsons) as well as reports generated by Aztech for the New York State Department of Environmental Conservation (NYSDEC).

Site Remedial History

- The site was initially classified as a Class 2A Hazardous Waste Site on the NYSDEC Site Priority Statutory Classifications list. The administrative classification "A" as defined by the NYSED is a "non-registry site in any remedial program where work is underway and not yet complete".

- In 1986 a Phase I Investigation, conducted by E.A. Science and Technology, concluded that multiple lagoons used to process wastewater contained polychlorinated biphenyl's (PCBs), and volatile organic compounds (VOCs). This discovery resulted in a decision made in 1989 by the NYSDEC to reclassify the site from Class 2A to Class 2. A Class 2 site as defined by the NYSDEC is a site which: "the disposal of hazardous waste has been confirmed and the presence of such hazardous waste or its components or breakdown products represent a significant threat to the environment or to health…or hazardous waste disposal has not been confirmed, but the site has been listed on the Federal National Priorities List (NPL)".

- The NYSDEC commenced a site-wide investigation in January of 1990 in order to determine the degree to which PCBs were present in various media on the site. The results of this investigation led to additional site assessments. An Interim Remedial Measure (IRM), consisting of removing PCB contaminated sludge from five (5) lagoons, was developed for the site in February of 1991. Westinghouse Remediation Services Inc. commenced with the soil and sludge removal in July 1991.

- Excavation, dewatering, and disposal activities associated with the IRM were conducted from July 1991 through October 1992, during which time 7,438 tons of contaminated sludge and 900,000 gallons of contaminated water were removed from the site. Following completion of the IRM, a Remedial Investigation/Feasibility Study (RI/FS) was conducted on site between July 1992 and March 1994 by Parsons. This study concluded that PCB contamination had persisted in some surface soil and sediments along Roundout Creek. Further, surface water samples contained levels of lead upstream and downstream of the site and groundwater samples contained elevated levels of VOCs and metals in onsite wells during this time period.

- In a subsequent remedial effort at the site (September of 1993), NYSDEC Region 3 Emergency Spill Response Team excavated and stockpiled approximately 3,000 cubic yards of petroleum-contaminated soil located in the area of a former number-6 fuel oil above-ground storage tank (AST) shown on the attached site map **(Figure 1)**. During these cleanup efforts, another UST was discovered and removed. All stockpiled material was removed from the site in 1994 and thermally treated.

- In March of 1994, the NYSDEC approved Record of Decision (ROD) was issued for the site. This consisted of the removal of PCB-contaminated paper rolls from the site, excavation and removal of all PCB-contaminated soil and sediment containing levels of 1.0 part per million (ppm) or greater, as well as the treatment of any contaminated groundwater and wastewater resulting from these activities. All paper rolls, soil and sediment removal limits were determined from a sampling event conducted by Parsons. Cleanup objectives outlined in the ROD included onsite material testing to determine any need to extend the excavation limits.

- In June of 1995, Parsons, in conjunction with the NYSDEC, compiled the design drawings, specifications, and other contract documents detailing all tasks required to remediate the site in accordance with the ROD. Parsons was contracted by the NYSDEC to provide project oversight and document that remedial activities were conducted in conformance with all contract documents. In early May of 1996, the prime contractor, Allstate Power-Vac, Inc. (APV) began project operations.

- Following completion of remedial activities in June 1997, Parsons composed a Closure Certification Report containing all project activities and sampling data. This report was recently obtained by Aztech and was used to prepare an updated representative site sampling plan capable of evaluating the overall condition of the site.

- Little information is available about site activities between the summer of 1997 when the most recent site cleanup occurred, and April of 2010 when Aztech took over the site management responsibilities. It is assumed that the site may have remained dormant or potentially was monitored and or sampled by another engineering firm. No documentation was identified in the NYSDEC files to prove this assumption.

Recent Site Media Sampling Summary

In October of 2011, Aztech met with DEC central office personnel Gerard Burke, John Grathwol, Sue Edwards, and site Project Manager Carl Hoffman to discuss the site's remedial history, and develop an approach to move forward with potentially delisting the site. From that meeting it was agreed that a full site media sampling plan was necessary to assess if any contamination remained on site and, if present, the extent of that contamination and its potential impact on human health and the surrounding environment.

Following extensive research and preparation, a site-wide sampling plan was prepared that targeted locations around the site where contamination had been identified historically, as well as along the limits of previous remedial excavations. That sampling event was carried out by Aztech in December of 2011 and consisted of four (4) concrete, eight (8) surface water, thirteen (13) groundwater, four (4) subsurface-soil, and 33 surface soil samples. Concrete samples were sent for laboratory analysis for PCBs only. All other samples were analyzed for PCBs, full list VOCs, SVOCs, and Metals.

Analytical results and recommendations from that event were presented in full detail in a February 2012 report written by Aztech titled: "The Former Napanoch Paper Mill Site Sampling and Investigation Report". In summary, the sampling event identified concentrations of PCBs in soil at five (5) locations between 1.0 and 63.7 ppm. One surface water location identified PCBs at 3.13 ppm. Arsenic, chromium, lead, and mercury were all identified above their current respective soil cleanup objectives as defined by NYSDEC Part 375-6.8 (Restricted Residential) at multiple locations across the site. A complete list of the analytical results can be found in that report.

Subsequent to that report a meeting was held in April of 2012 with Aztech professional staff and NYSDEC personnel Sue Edwards and Carl Hoffman to discuss an approach to delineate the extent of the contamination recently identified on the site. An agreement was made to conduct a delineation soil sampling event at a total of nine (9) locations previously identified to contain concentrations of PCBs, arsenic, chromium, lead, and/or mercury above their respective current soil cleanup objective. A soil sampling delineation plan was subsequently drafted and approved for use at the nine (9) locations.

The delineation sampling event was carried out by Aztech in June of 2012. The plan consisted of collecting soil samples from depths of 6.0 inches and 18-inches below surface grade where shallow bedrock was not a constraint. Soil samples were collected from each of the original nine (9) locations. Additional samples were also collected at radial distances from the original location in eight (8) compass directions. Samples were collected in the directions of north, west, south, and east at distances of 10 and 35 feet from the original identified location and northeast, northwest, southeast, and southwest at a distance of 25 feet from the original identified location.

Attached is a full site map depicting the nine (9) locations targeted for delineation (Figure1). A detail of each location has been provided displaying the sample ID where each sample was collected (**see Figures 2 through 10)**. Sample ID's with the suffix of "S" for a sample collected from a shallow depth of 6.0-inches below surface grade (BGS) and the suffix of "D" for a sample collected at a depth of 18-inches BGS.

Excavation and Disposal Plan

As summarized in the attached Summary of Delineation Soil Sample Results table, the concentrations of PCBs, arsenic, chromium, lead, and mercury were identified above restricted-residential soil cleanup objectives. Aztech proposes the excavation and disposal of soils identified with multiple cleanup exceedances.

Excavation of each area will be based on exceedances identified at the outermost radial distance from the center of the delineation layout. Depth of each excavation will be based on contamination concentrations identified at each of the two depths sampled. Proposed excavation volumes for each location have been estimated and are displayed in the table below. These estimated volumes are based on the complete excavation of contaminated soil at the greatest depth and largest radius identified above cleanup objectives at each location. As shown in each detailed drawing, all locations have physical constraints such as concrete foundations and exposed bedrock which prevent a total excavation from being conducted. Actual excavation at each location will be reduced due to these constraints and result in a less quantity of soil disposal.

Estimated Excavation Volume			
	Radius (ft)	**Depth (ft)**	**Volume (cy)**
S-1	25	1.5	109.0
S-6	25	2.0	145.4
S-8	10	1.0	11.6
S-9	35	1.5	213.7
S-24	25	1.5	109.0
S-28	35	1.5	213.7
S-29	0	0	0
S-30	35	1.5	213.7
S-33	35	1.5	213.7
Total (20% Fluff)			**1475.8**

Once excavation at each location has been completed, soil will be stockpiled at each location and composite samples will be collected from each stockpile for disposal parameters. Post-excavation samples will also be collected from each excavation along each of four sidewalls and the bottom of the excavation area. One sample will be collected from each sidewall every 20-linear feet and one bottom sample will be collected every 400 square feet of excavation. Location-specific analysis will be conducted at 72-hour turnaround time to determine the need for additional excavation. The need for additional excavation will be determined at the time the analysis is received. If no further excavation is deemed necessary, each location will be backfilled following the approval of the NYSDEC.

Disposal of the soil will be coordinated after laboratory analysis is sent to the disposal facility. Loading of excavated material will take place and be coordinated based on the classification of each stockpile. Cost for transportation and disposal of hazardous and non-hazardous concentrations has been provided in the cost estimate section of this report.

Cost Estimate:

The following cost estimate breakdown is based on excavating each area containing concentrations of either PCBs or metals that exceed cleanup objectives to the full limits of the delineation radius to a depth of 1.5 feet BGS. As described above, physical constraints will dictate a much smaller excavation footprint at each location, reducing the amount of soil excavated for offsite disposal.

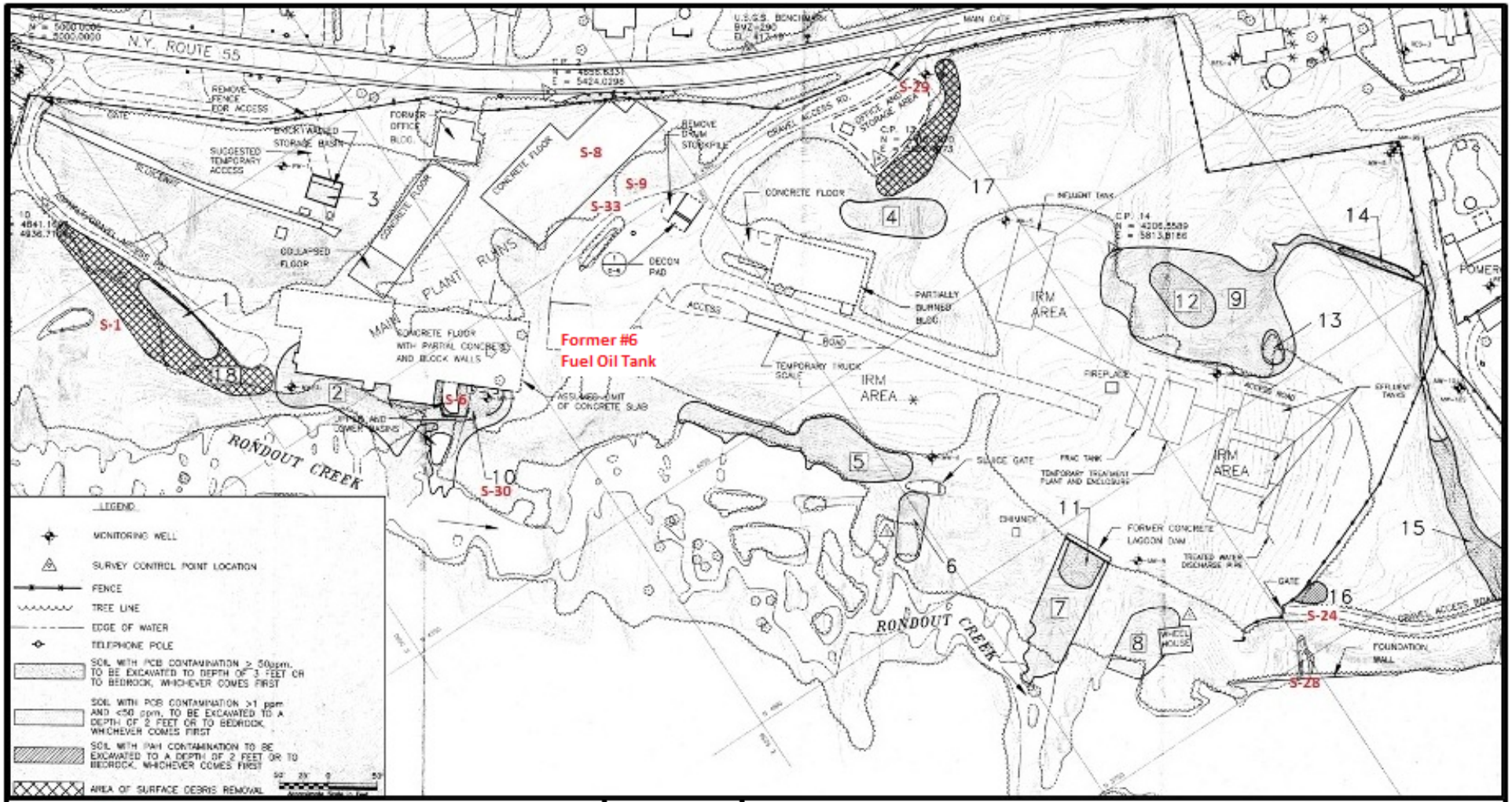
This work plan is based on a three week schedule and includes all project management coordination, geologist sampling and laboratory analysis.

Napanoch Papermill Soil Excavation					
Item	**Description**	**Unit**	**Qty**	**Unit Rate**	**Total**
1	Mob/Demob/Per-Diem/Project Coordination	LS	1	$ 7,389.80	$ 7,389.80
2	Excavation/Stockpile/Loading	LS	1	$ 12,737.46	$ 12,737.46
3	Lab Analysis	LS	1	$ 3,123.06	$ 3,123.06
4	Equipment	LS	1	$ 22,447.50	$ 22,447.50
5	Backfill and Materials	ton	1700	$ 12.00	$ 20,400.00
6	Hazardous PCB Soil Disposal	Ton	250	$ 205.70	$ 51,425.00
7	Hazardous Metals Soil Disposal	Ton	250	$ 305.80	$ 76,450.00
8	Non-Hazardous Material Disposal	Ton	1200	$ 95.70	$ 114,840.00
Total					**$ 193,972.82**

Please feel free to contact me with any questions.

Sincerely,

Joseph J. Sabanos,
Project Manager
Aztech Technologies, Inc.
Attachments: Site Map, Detailed Sample Location Maps, and Analytical Summary Table



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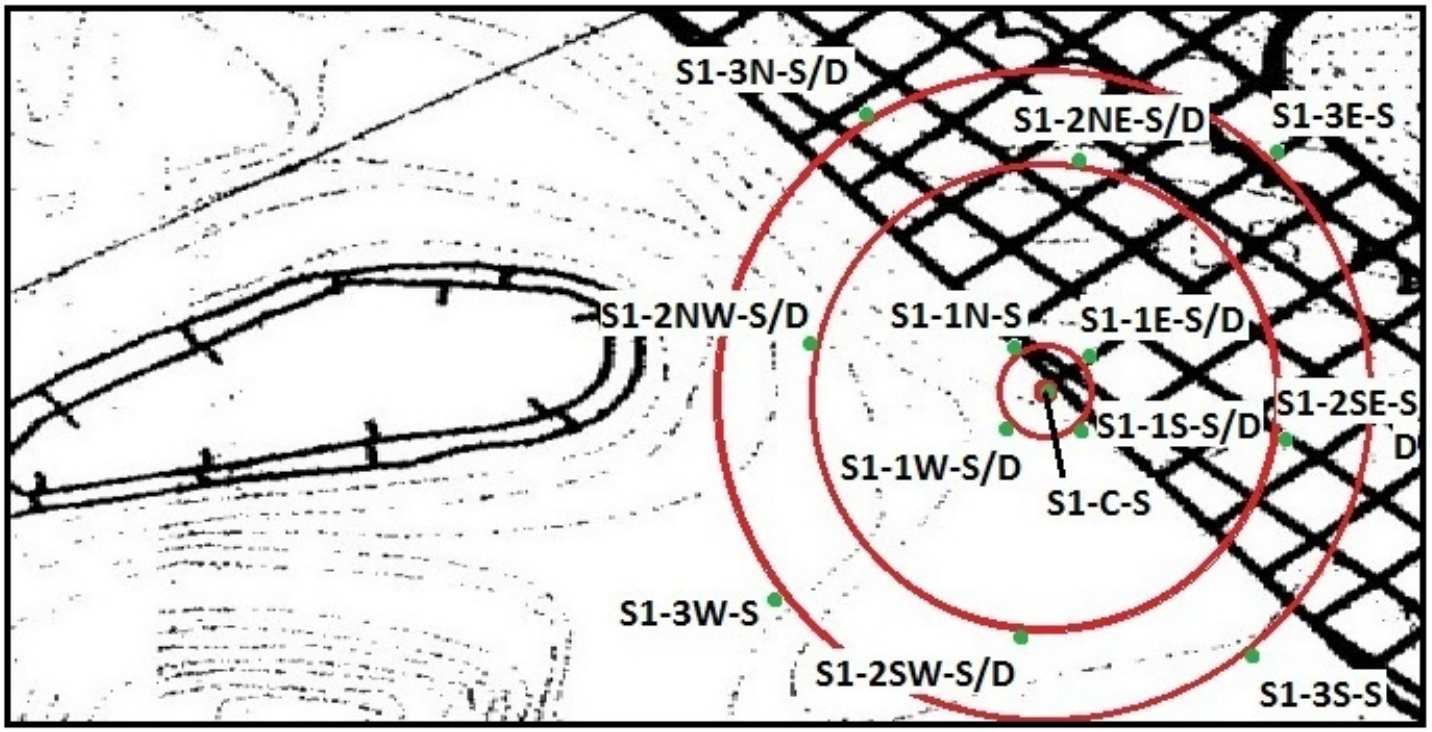
Map Source: Parsons Engineering, Inc. – February 1998 Final Closure Report

Figure 1: Soil Sample Site Map



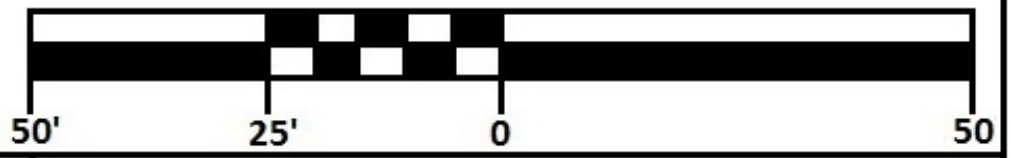


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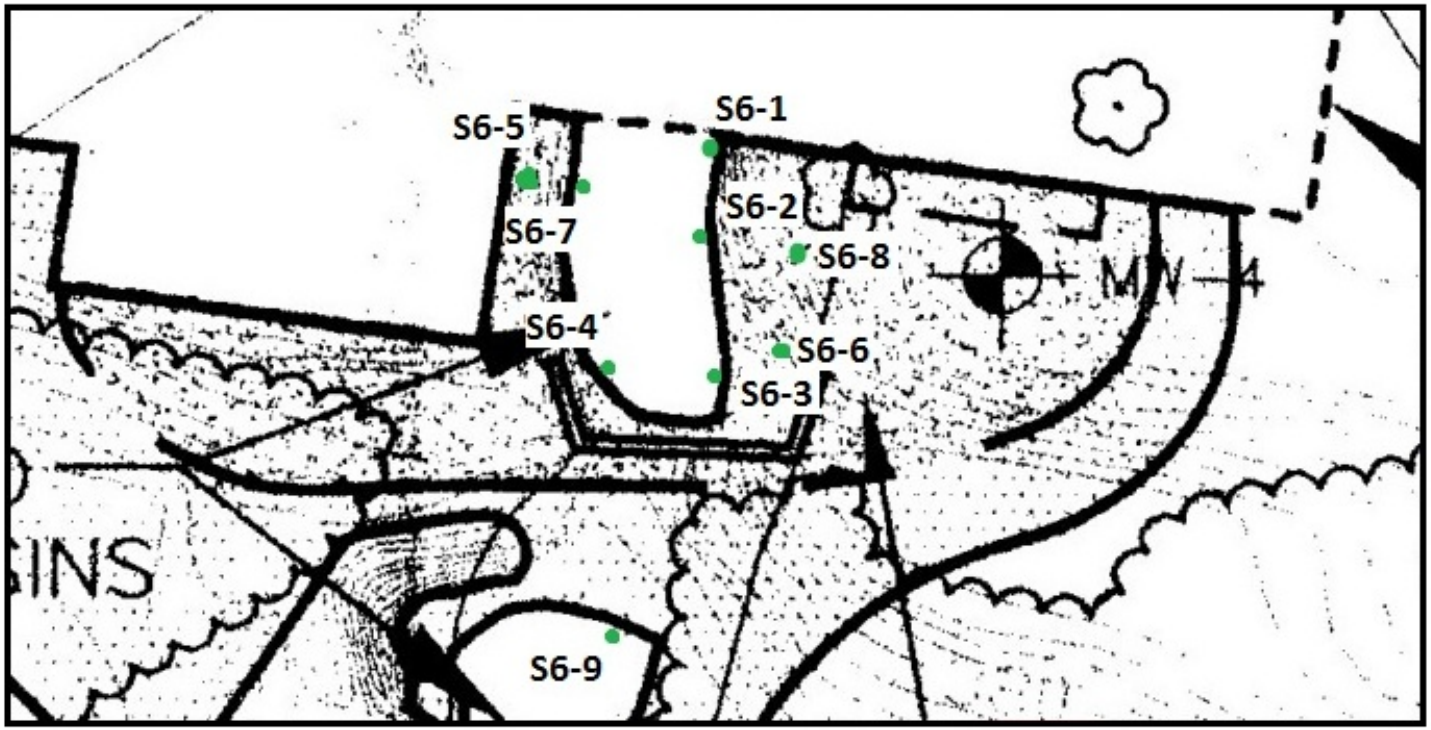
Figure 2: Soil Sample S-1 **Analyses:** PCBs



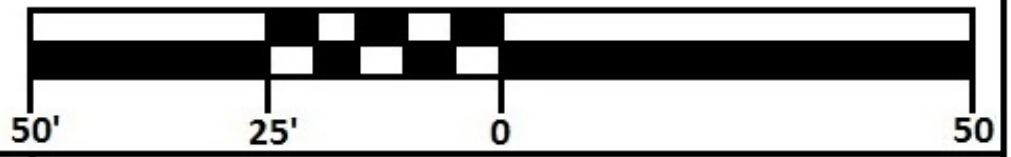


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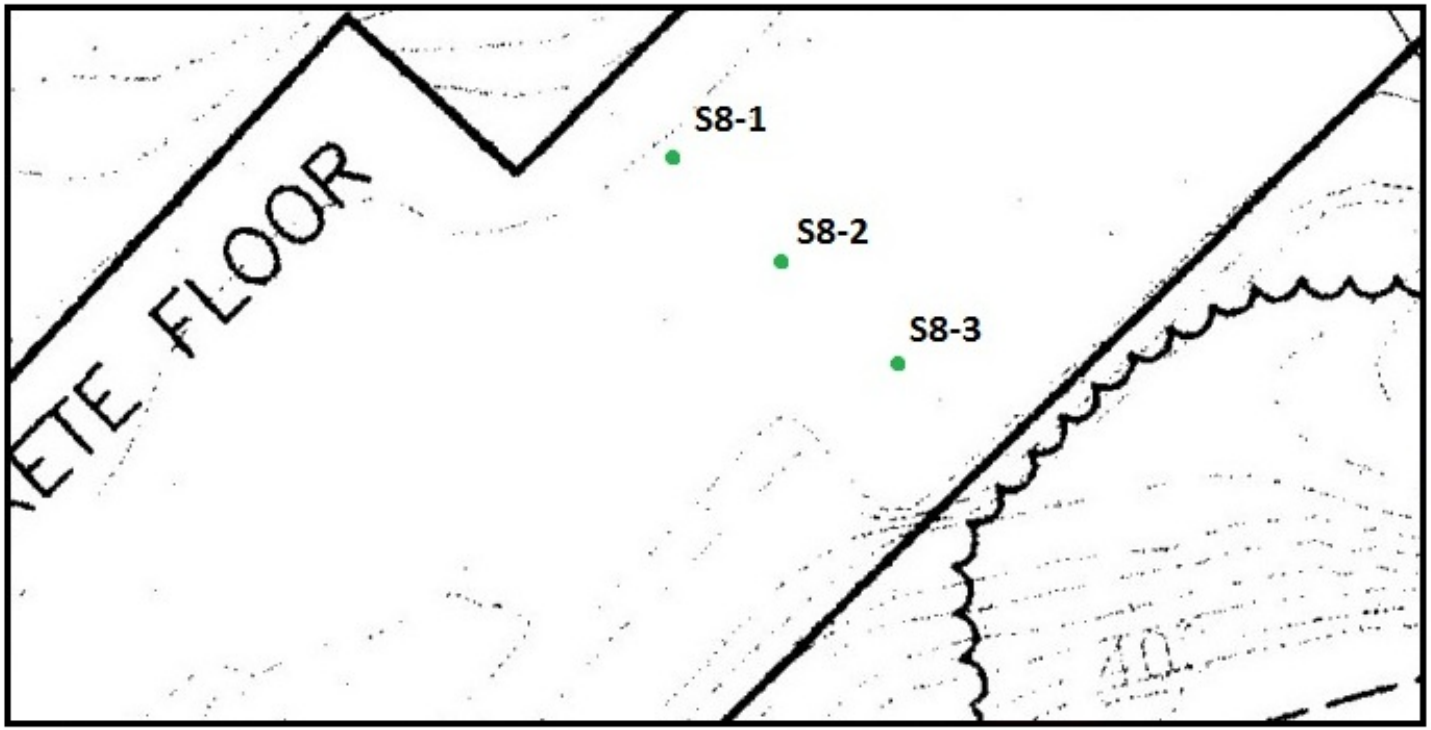
Figure 3: Soil Sample S-6 **Analyses:** PCBs, Chromium



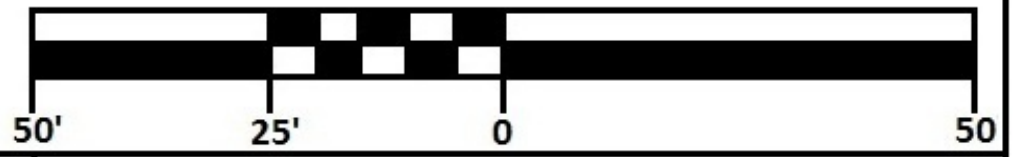


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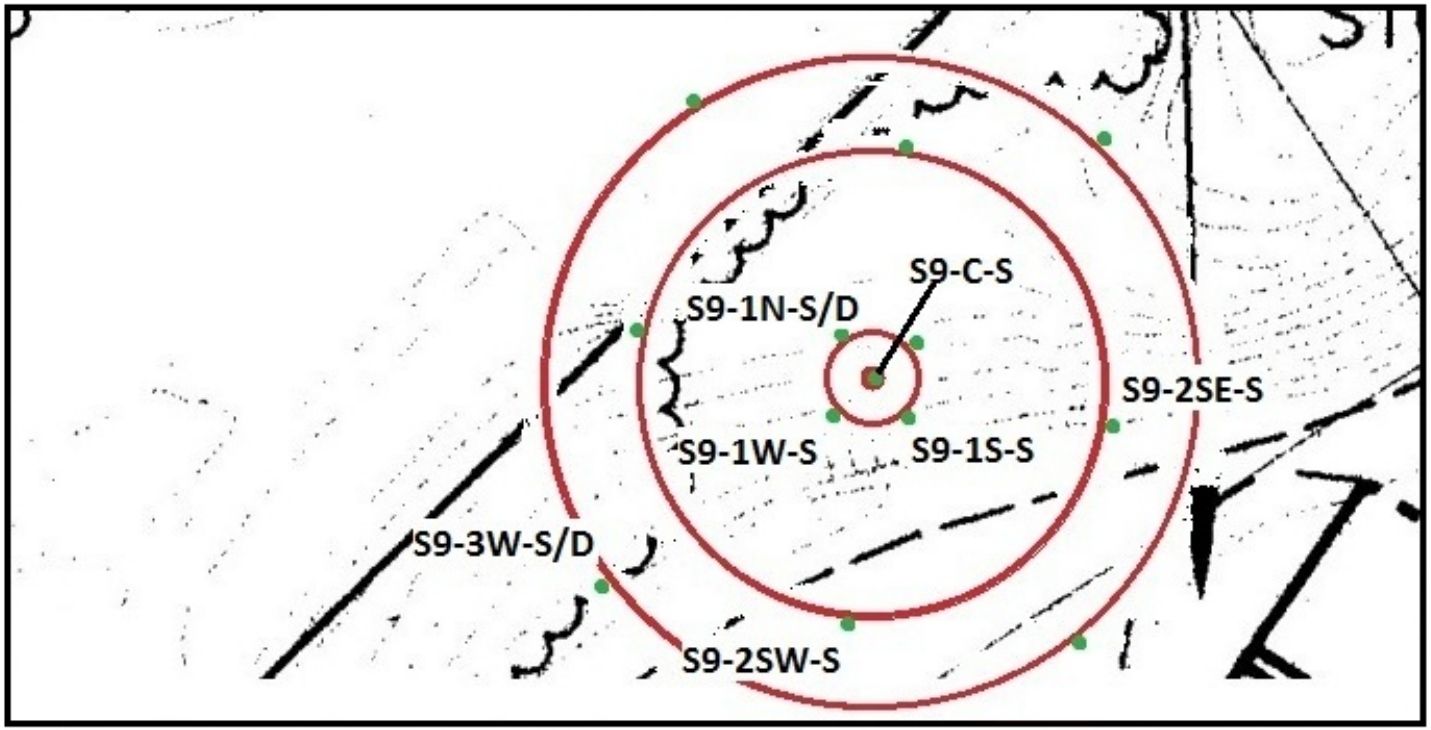
Figure 4: Soil Sample S-8 **Analyses:** Arsenic



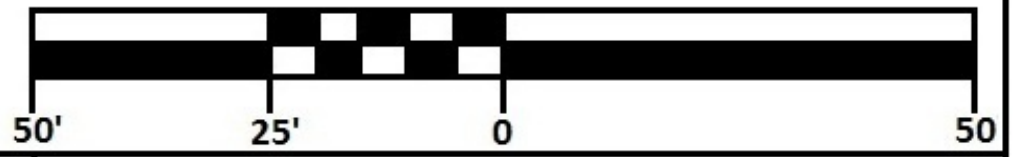


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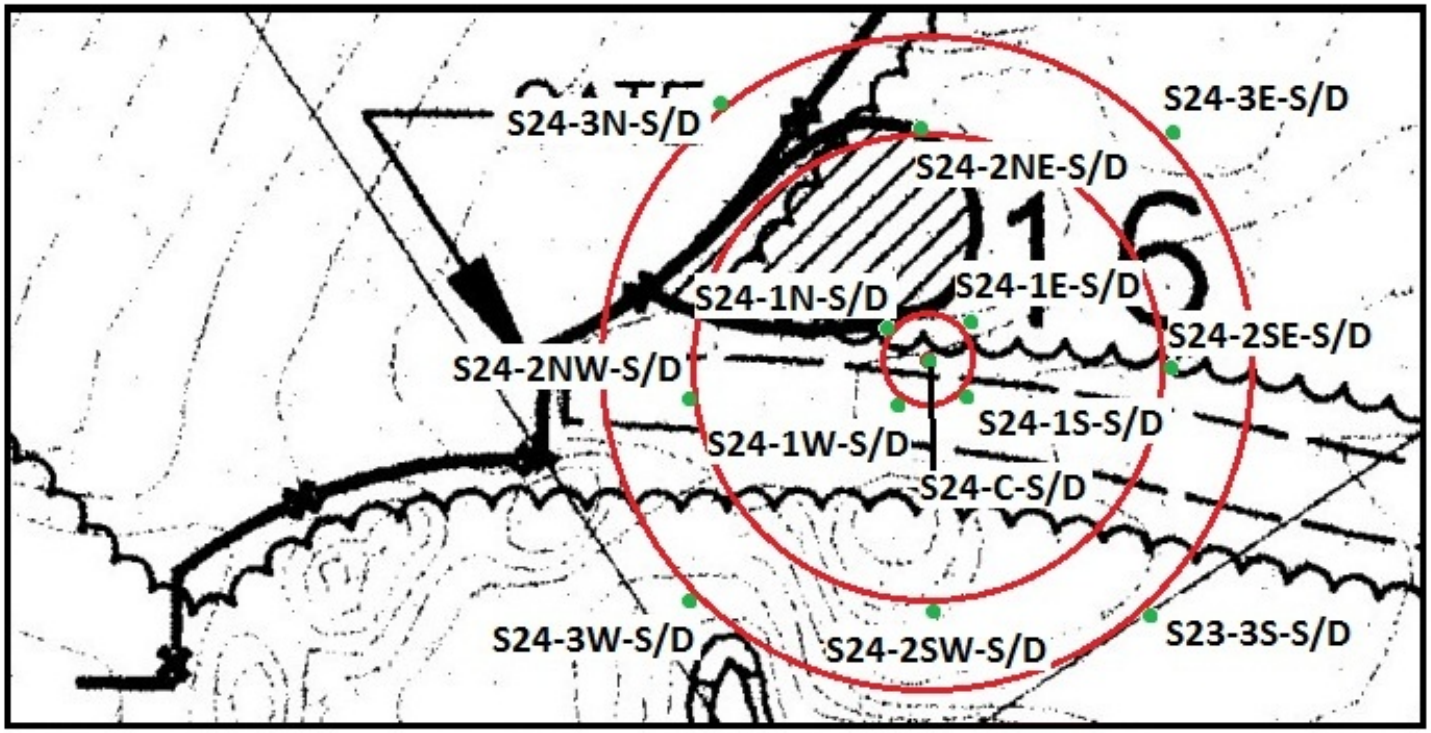
Figure 5: Soil Sample S-9 **Analyses:** PCBs, Arsenic, Lead



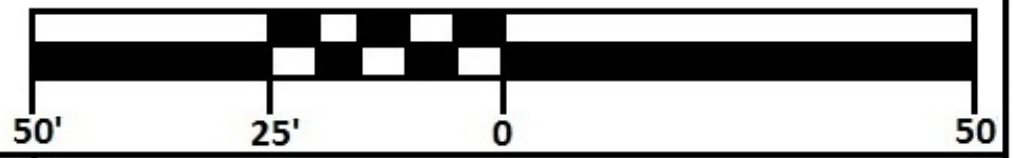


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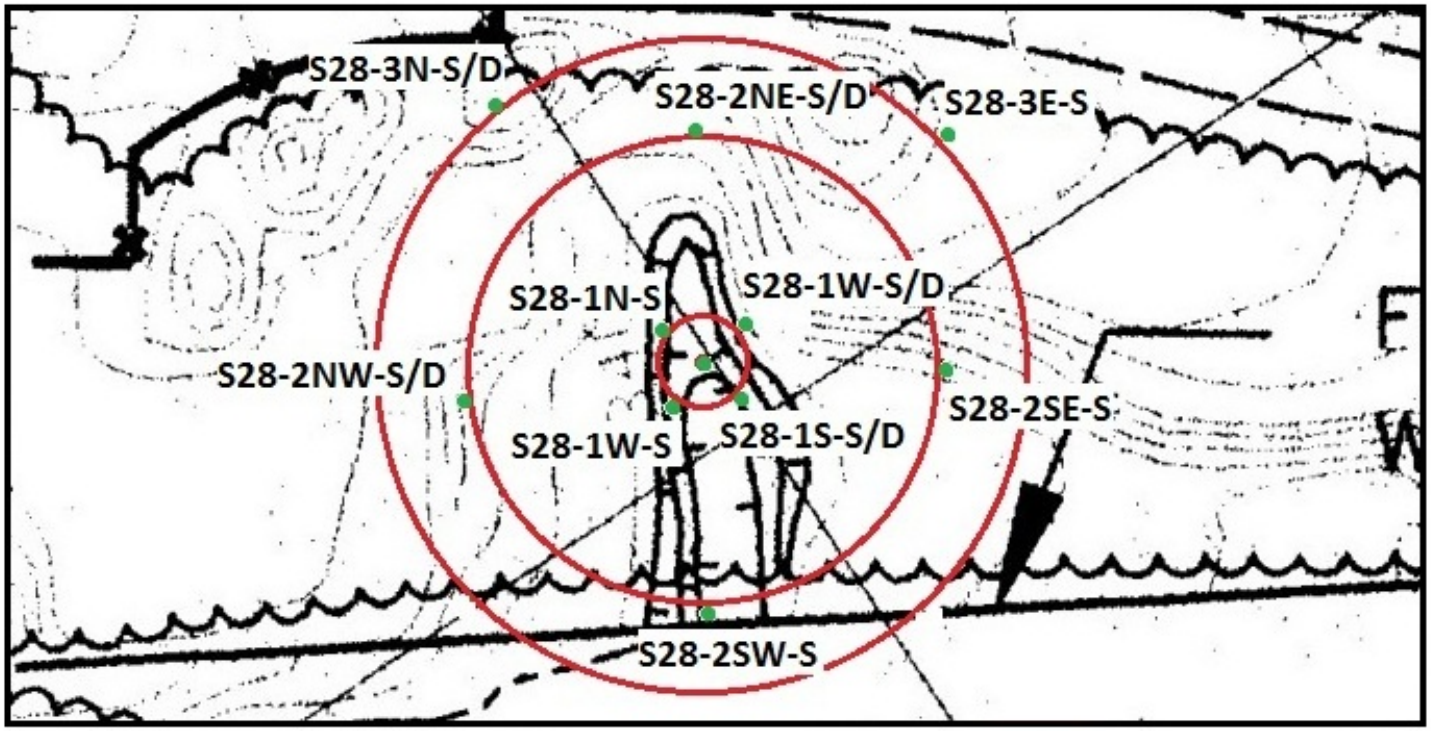
Figure 6: Soil Sample S-24 **Analyses:** Arsenic



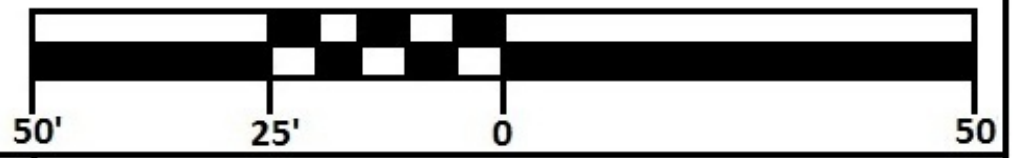


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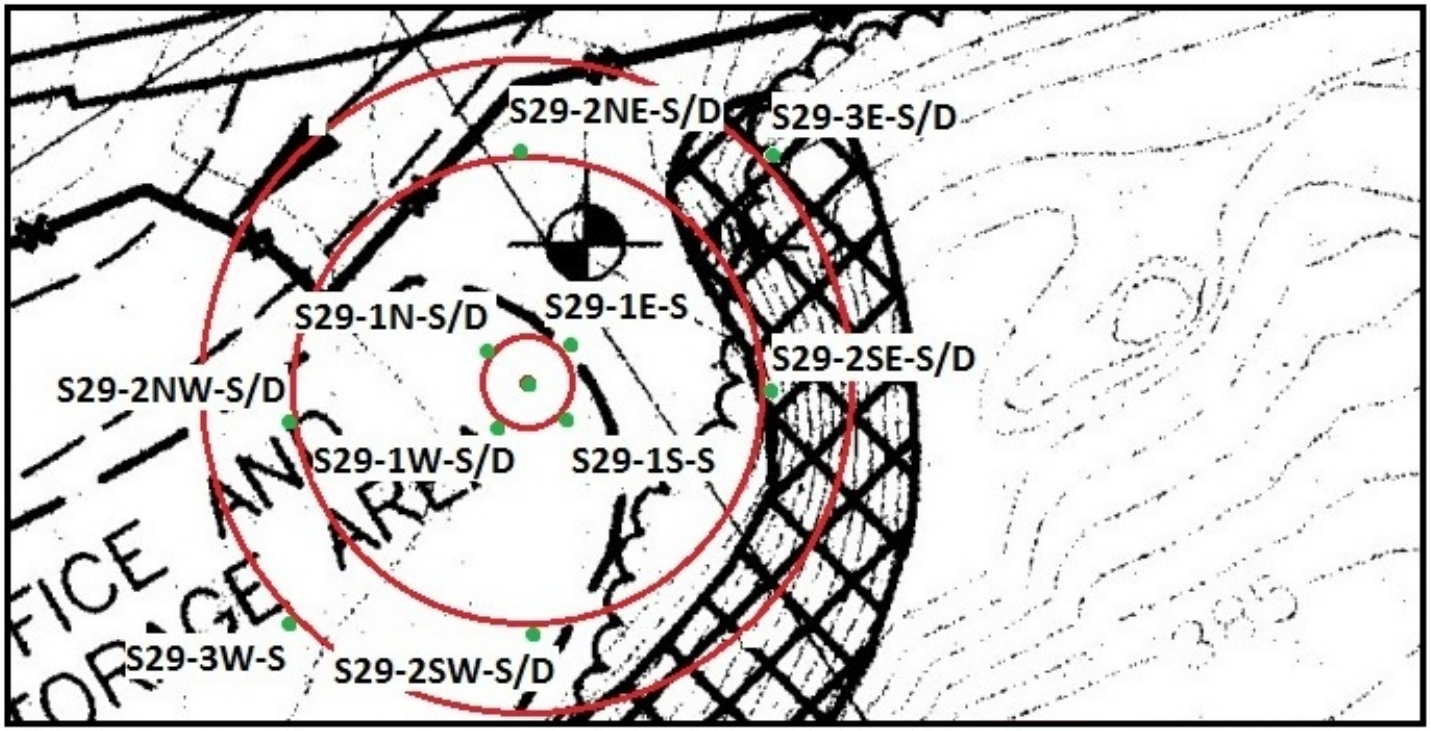
Figure 7: Soil Sample S-28 **Analyses:** Arsenic, Chromium, Lead, Mercury



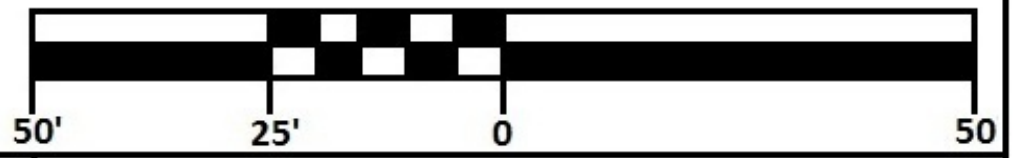


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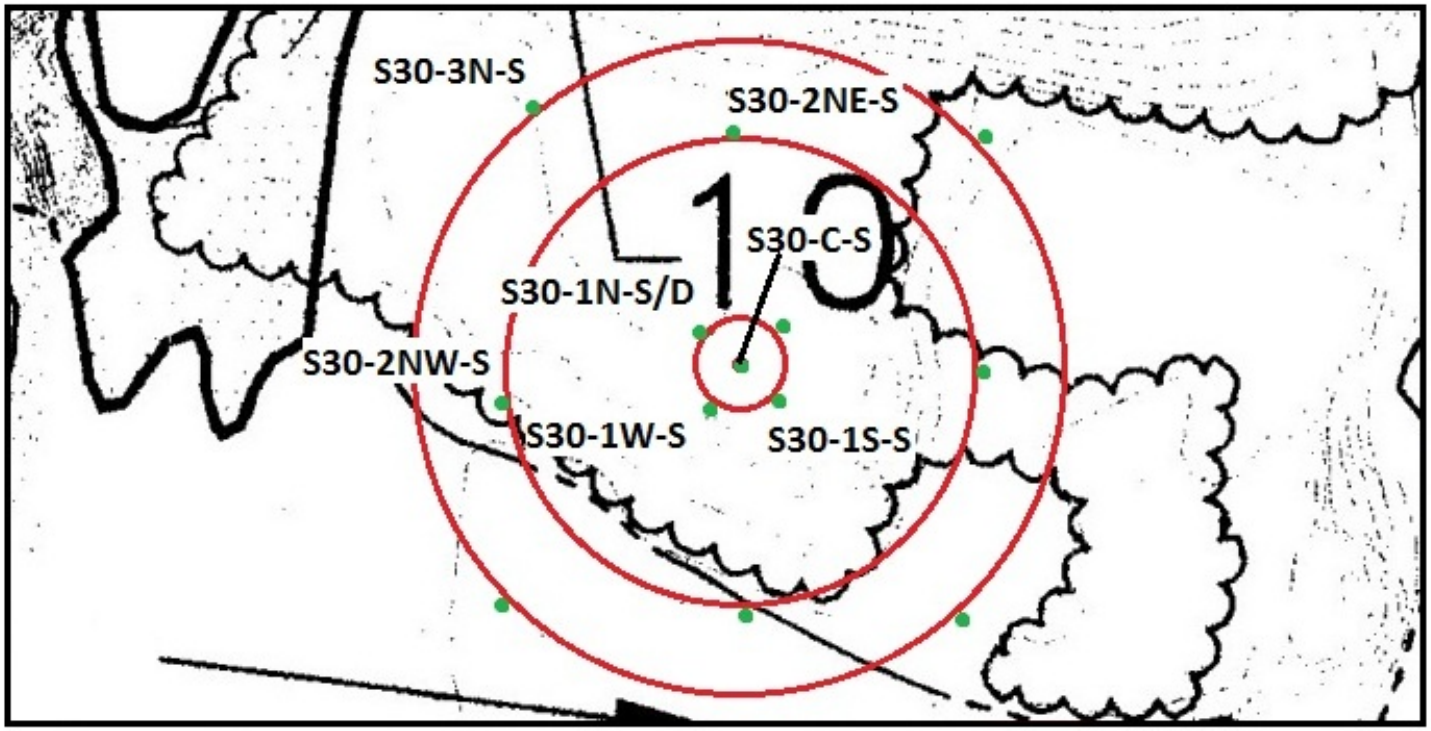
Figure 8: Soil Sample S-29 **Analyses:** Arsenic



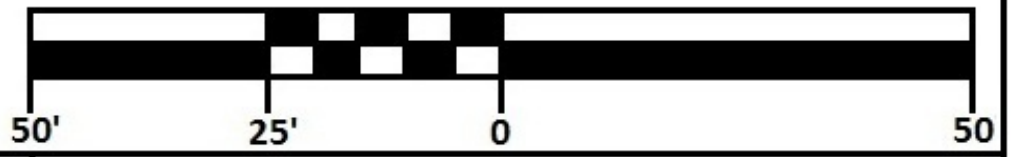


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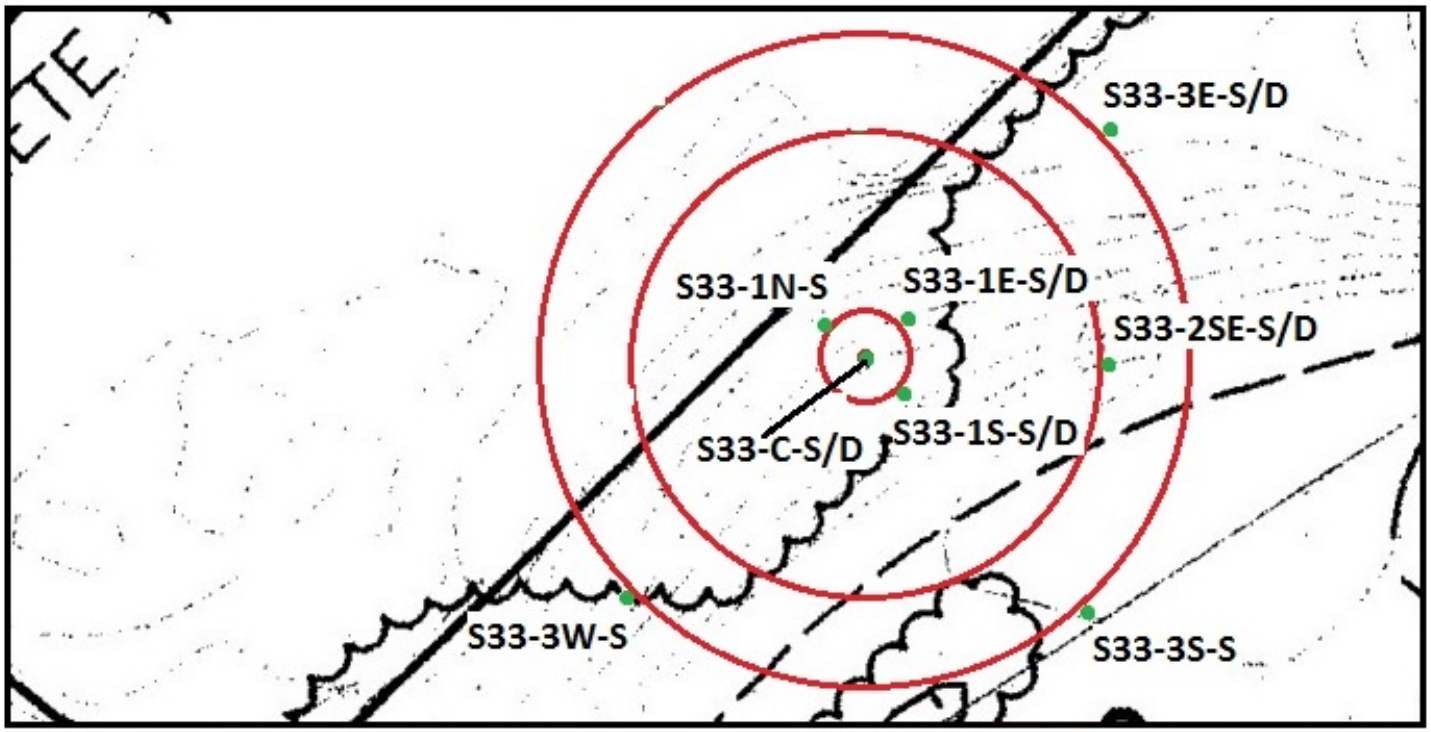
Figure 9: Soil Sample S-30 **Analyses:** Arsenic



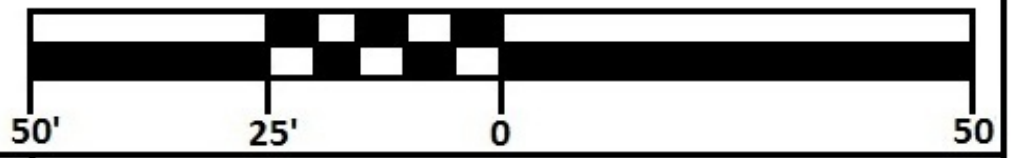


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Figure 10: Soil Sample S-33 **Analyses:** Arsenic

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Summary of Delineation Soil Sample Results

	Analyte				
Location	**Total PCBs**	**Arsenic**	**Chromium**	**Lead**	**Mercury**
Cleanup Goal	**1000 (PPB)**	**16 (PPM)**	**36 (PPM)**	**400 (PPM)**	**0.81 (PPM)**
S-1					
S1-C-S	920				
S1-1N-S	700				
S1-1W-S					
S1-1W-D					
S1-1S-S					
S1-1S-D					
S1-1E-S	**4000**				
S1-1E-D	**1800**				
S1-2NE-S	62				
FD-2					
S1-2NW-S					
S1-2NW-D	370				
S1-2SW-S					
S1-2SE-S	**2990**				
S1-3E-S					
S1-2SE-D	**2100**				
S1-2NE-D					
S1-3S-S	140				
S1-3W-S					
S1-3N-S	57				
S1-3N-D					
S-6					
S6-1	**1020000**		33.3		
S6-2	**4900**		12.4		
S6-4	**17900**		13		
S6-3	**2330**		11.8		
S6-5	290		**36.2**		
S6-6			9.5		
S6-7	**19900**		**40.4**		
S6-8	90		8.2		
S6-9	**14900**		**169**		
S-9					
S9-C-S		13.2		41.8	
S9-1N-S	260	**23.1**		335	
FD-5		**36.9**			
S9-2N-D	160	15.2		90.6	
S9-1W-S		13		44	
S9-1S-S		13.2		42.3	
S9-1S-D		14		48.7	
S9-2SW-S		12.7		51.1	
S9-2SE-S		13.1		29.9	
S9-3W-S		**32.6**		228	
S9-3W-D		**34.3**		118	

*All PCB analysis presented in PPB and Metals presented in PPM
**Blank cells represent analyses not conducted or results below detectable limits

Summary of Delineation Soil Sample Results

	Analyte				
Location	**Total PCBs**	**Arsenic**	**Chromium**	**Lead**	**Mercury**
Cleanup Goal	**1000 (PPB)**	**16 (PPM)**	**36 (PPM)**	**400 (PPM)**	**0.81 (PPM)**
S-24					
S24-C-S		4.8			
S24-C-D		4.5			
S24-1N-S		5.5			
S24-1N-D		3.9			
S24-1E-S		4.8			
S24-1E-D		3.3			
S24-1S-S		5.4			
S24-1S-D		6.2			
S24-1W-S		4.6			
FD-1		5.5	10.7	17.2	0.02
S24-1W-D		3.8			
S24-2NW-S		5.5			
S24-2NW-D		6.5			
S24-2NE-S		4.7			
S24-2NE-D		8			
S24-2SE-S		9.1			
S24-2SE-D		**25.7**			
S24-2SW-S		5.1			
S24-2SW-D		5.6			
S24-3S-S		5.4			
S24-3S-D		6.3			
S24-3W-S		7.3			
S24-3W-D		8.1			
S24-3N-S		5.3			
S24-3N-D		5.7			
S24-3E-S		5.4			
S24-3E-D		6.7			
S-28					
S28-C-S		12.7	**41.5**	**1040**	**1.70**
S28-C-D		9.8	28	**1540**	0.50
S28-1W-S		8.1	**149**	**690**	**0.88**
S28-1N-S		**43.9**	22.3	**2320**	0.63
S28-1E-S		10.1	10	271	0.48
S28-1E-D		12.1	20.7	**1430**	**5.00**
S28-1S-S		6.6	7.5	326	0.25
FD-3		15.4	35.1	**2160**	**0.98**
S28-IS-D		**34.7**	12.5	**1190**	0.59
S28-2SW-S		**26.1**	11.7	**586**	0.60
S28-2SE-S		11.7	11.9	112	0.40
S28-2NE-S		5.8	7.3	33.2	0.11
S28-2NE-D		5.7	10.4	172	0.28
S28-3E-S		8.3	7.8	123	0.16
S28-3N-S		**17.6**	9.6	96.6	0.39
S28-2NW-S		**39.1**	29.1	188	0.28
S28-3N-D		**31.4**	11.8	127	0.56
S28-2NW-D		**39**	7.2	52.8	0.16

*All PCB analysis presented in PPB and Metals presented in PPM
**Blank cells represent analyses not conducted or results below detectable limits

Summary of Delineation Soil Sample Results

	Analyte				
Location	**Total PCBs**	**Arsenic**	**Chromium**	**Lead**	**Mercury**
Cleanup Goal	**1000 (PPB)**	**16 (PPM)**	**36 (PPM)**	**400 (PPM)**	**0.81 (PPM)**
S-29					
S29-C-S		4.9			
S29-C-D		5.5			
S29-IN-S		6.6			
S29-IN-D		3.3			
S29-IE-S		6.6			
S29-IE-D		3.6			
S29-IS-S		5.2			
S29-IW-S		7.8			
S29-IW-D		5.7			
S29-2NW-S		7.7			
S29-2SW-S		8			
S29-2SW-D		7.2			
S29-2NE-S		7			
FD-4		4.8			
S29-2NE-D		5			
S29-2SE-S		7.4			
S29-2SE-D		4.2			
S29-3W-S		9.4			
S29-3E-S		3.2			
S29-3E-D		2.8 J			
S29-3S-S		3.9			
S29-3S-D		2.6			
S-30					
S30-C-S		5.1			
S30-IN-S		**18.7**			
S30-IN-D		**75.4**			
S30-IS-S		4.6			
S30-IW-S		6.7			
S30-2NW-S		4.5			
S30-2NE-S		**33.7**			
S30-3N-S		**31.7**			
S-33					
S33-C-S		5.4			
S33-C-D		12.7			
S33-1N-S		10.9			
S33-1E-S		2.7			
S33-1E-D		2.3			
S33-1S-S		**44**			
FD-6		**33.9**			
S33-IS-D		**41.1**			
S33-2SE-S		**27.2**			
S33-2SE-D		**42.5**			
S33-3E-S		3.2			
S33-3E-D		4.1			
S33-3S-S		**44.3**			
S33-3W-S		**35.3**			

*All PCB analysis presented in PPB and Metals presented in PPM
**Blank cells represent analyses not conducted or results below detectable limits