

PCB-Contaminated Concrete Pads Removal and Subsurface Investigation

Prepared for:

**Sequoyah Fuels Corporation
Gore, OK**

September, 2004

Prepared by:

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**PCB-Contaminated Concrete Pads Removal
and
Subsurface Investigation**

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**PCB-Contaminated Concrete Pads Removal
and
Subsurface Investigation**

**Sequoyah Fuels Corporation
Gore, OK**

1.0 INTRODUCTION

1.1 Site Description

The subject site is Sequoyah Fuels Corporation (SFC), a uranium processing facility near Gore, Oklahoma. The facility is presently owned by General Atomics of La Jolla, California, which purchased the plant in 1988 from Kerr-McGee Corporation. The facility is no longer in operation and currently undergoing decommissioning.

The subject of this investigation (project site) is an outside area located on the east side of the Main Process Building, and consists of an area of approximately 1,600 square feet. Kerr-McGee Corporation used the area for locating certain electrical equipment on concrete pads. An Area Map is shown in Exhibit A depicting the facility location, while a Site Location Map shown in Exhibit B depicts the location of the project site within the facility.

The facility is rurally-located, being surrounded by agricultural areas with a low population density. The nearest community is Gore, Oklahoma, with a population of less than 700 and located approximately 4 miles to the northwest of the facility.

1.2 Background

Information obtained from the SFC staff and their contractors indicated the project site is contaminated with Polychlorinated Bi-phenols (PCB) resulting from historical leaks from electrical rectifiers located on the concrete pads. Records indicate the leaks of PCB-containing oils (Aroclor

1260) were discovered and investigated in 1978 and in the early 1980s, with some evidence of limited remediation and disposal of contaminated items during that period. Sometime prior to transfer of facility ownership Kerr-McGee removed all of the electrical equipment from the pads, covered them with an epoxy coating, and attached a placard indicating both were contaminated with PCBs.

The historical leaks and remediation/disposal efforts associated with the rectifiers, as well as some recent limited soil analyses indicating that PCB contamination remains, were recently described in two reports provided earlier to EPA–Region 6, one titled *RCRA Facility Investigation Report (RFI)* and the other titled *Corrective Measure's Study (CMS)*. Those reports were submitted as part of the ongoing decommissioning and facility closure process.

1.3 Scope of Work

Cinnabar Environmental Services (CES) was contracted by SFC to conduct a subsurface investigation at the above referenced site. The purpose of this investigation was to evaluate the subsurface soil and groundwater (if present) for the presence and extent of PCB contamination from known releases of transformer/rectifier oil. The approved scope of work consisted of overseeing the removal and disposal of PCB-contaminated concrete pads, the advancement of environmental borings, the collection of soil and groundwater samples, analysis of samples for PCBs, and the reporting of those information and results to SFC in a written report.

2.0 CONCRETE PADS REMOVAL

2.1 Concrete Sampling

As previously described, the two concrete pads overlying the project area were previously marked as PCB-contaminated. Both pads had been coated with gray epoxy paint and labeled as containing PCB contamination.

In an effort to determine if the PCB contamination was isolated to certain portions of the pads, and thereby possibly allow lesser quantities to be managed as a TSCA waste, pad sampling and analysis activities were initiated. A concrete *Scabblor* was utilized for pulverizing approximately 1/8 inch from the surface of each pad. Each pad was then divided into nine equal areas for sampling and testing purposes. Some of the samples were then tested for the presence of PCB with field test kits (see Section 3.3), with the results indicating PCB presence in all areas tested. Some of the samples were then sent to a commercial certified lab for verification, with results verifying the presence of PCBs well above the acceptable 50 mg/kg level allowed for disposal in a municipal waste landfill.

A decision was made to handle the entirety of both pads as PCB-contaminated waste, and arranged for their removal and subsequent disposal at an approved site.

2.2 Pad Removal

On August 23 and 24, 2004, Mr. Chris Thompson of Cinnabar and Mr. Bill Reid of Omega Project Services (contractor to SFC) oversaw Gary's Concrete Sawing reduce the pads into more manageable size pieces. Cooling water from the sawing process was vacuumed into 55-gallon drums, resulted in the accumulation of five (5) drums of wastewater that are currently being stored on-site pending analysis and subsequent disposal.

After sawing was complete the concrete, along with some of the sand from beneath the pad, was placed into six (6) 20-yard roll-offs by a SFC contractor. The roll-offs were then covered with a tarp to prevent storm water contact and losses during storage and transport to the disposal site.

2.3 Pad Disposal

The roll-offs were transported by a commercial waste trucking company under hazardous waste manifests to the Clean Harbors waste collection facility in Coffeyville, Kansas. Clean Harbors then loaded the concrete and sand into railcars for transport to the company's TSCA waste disposal facility (Grassy Mountain Facility - UTD #991301748). Copies of the manifests can be found in Exhibit H.

3.0 SUBSURFACE INVESTIGATION

3.1 Environmental Borings

On August 25 and 26, 2004, CES oversaw Giles Environmental in the installation of soil borings at the project area. A grid was constructed across the site on 4 foot centers to identify boring locations. Twenty-eight (28) soil borings were advanced at the project site.

Initial soil-boring locations were selected based on knowledge of past operations and historical analytical data (see Exhibit C), with the goal of determining the lateral and vertical extent of PCB contamination during the first day of drilling. This effort was aided with the use of real-time analysis utilizing field test kits (see Section 3.3). Borings during the second day were to provide further refinement of the contamination locations. A soil boring map indicating the locations of the soil borings on the grid is shown in Exhibit D.

Soil borings were advanced using a truck-mounted direct-push drilling rig under the supervision of an Oklahoma-licensed monitoring well driller. Borings were advanced to equipment refusal, which occurred anywhere between 10 and 16 feet below ground surface (bgs), with the exception of borings along the east site boundary. Borings along the eastern perimeter experienced refusal at approximately 2 feet bgs, due to some unknown obstruction believed to be utility-related. Because of the obstruction, three (3) borings were advanced at an angle to obtain soil samples from beneath the obstruction (shown with arrows on the soil boring map).

Soil samples were collected continuously from the soil borings using a macro-sampler equipped with 5-foot plastic liners. Sampling equipment was decontaminated prior to commencement of the project and following the probing of each soil boring, or more frequently when conditions warranted, using a non-phosphate detergent and a potable water rinse. Rinse water was collected and placed in drums for subsequent disposal.

The lithology of the subsurface soils varied greatly at the site. However, the general lithology of the soil encountered consisted of the following:

- Fine grained sand to a depth of 2 to 7 feet bgs.
- Brown silty clay from 2 to 10 feet bgs.

- Orange and brown highly plastic clay from 4 to 8 feet bgs
- Dark brown weathered shale from 9 to 10 feet to the terminus of the borings.
- Saturation was encountered in only one boring (I5) at approximately 5 feet bgs.

All borings were found to be dry, with the exception of one location (I5) in the middle of the site. However, because saturation was not encountered in other soil borings, coupled with the different lithology of the boring, CES concluded the water encountered was a perched water and not representative of groundwater for the site. No saturation was encountered in borings that were located four feet from I5 in all compass directions.

The I5 lithology was shown to contain sand to a depth of approximately 7 feet bgs, while other borings generally contained sand only to the 1-2 feet bgs. It is unknown why the lithology of boring I5 was different, but CES speculates it may have resulted from sands located beneath the pads having washed into an earlier remediation excavation, or perhaps being purposely placed into an excavation following remediation.

Soil cuttings and other investigation-related materials (gloves, paper towels, etc) generated during the field activities were placed in a 55-gallon drum or placed directly in the previously mentioned roll-off containers. One (1) 55-gallon drum remains on-site for subsequent disposal with remediation materials.

3.2 Soil and Groundwater Sampling

Soil sampling involved collecting approximately 6 inches of soil every 2-3 feet from each boring. Soil samples were placed into plastic baggies, sealed, and marked to indicate the sample grid location and depth of sample. Collected samples were immediately delivered to the field lab located inside the SFC administration building where select samples from field tested for the presence of PCBs. Samples chosen for initial field analysis were generally from each of four zones based on depth covering 0-3 ft, 3-6 ft, 6-9 ft, and 9 ft to auger refusal. Following field testing, the samples were placed in a cooler on ice for transport to a commercial lab.

A mild odor of chlorinated hydrocarbon was detected in a limited number of the borings, and was especially strong in one (I5) located near the center of the site. Those soils with odors were generally always included for field analysis, and some for follow-up commercial lab analysis. Soil samples for laboratory analysis were placed in sealed and packed (no head space) glass containers and placed on ice.

The saturation within boring I5 was only found at the 7 ft bgs level. Because of the strong odor coupled with the saturation, a sample of the groundwater was collected for analysis. Subsequent to advancement of the drilling probe, a 1" well screen was placed in boring I5 to allow for a water sample to be collected. A groundwater sample was collected with a disposable bailer and placed into laboratory prepared glassware and placed on ice.

3.3 Sample Analysis

As previously mentioned, select soil samples were analyzed on-site during the investigation with PCB field test kits. The field test kits were obtained from Dexsil, a manufacturer of environmental field analysis kits. The PCB test kits convert covalently bonded chlorine on the PCB molecules to its ionic chloride form. An ion-specific electrode coupled with the *L2000DX Analyzer* then detects the total chloride levels and converts the results into total PCBs in parts per million (ppm).

Field testing of soil sample required acquisition of a 10 gram sample size. Composite laboratory samples were developed from the soil samples by using a clean spoon to scrap and/or dig small samples to manufacture a "representative" composite of the entire sample. It was reported by the commercial laboratory that a similar methods was used to acquire a laboratory sample also.

Select soil samples analyzed in the field were submitted to Outreach Laboratory in Broken Arrow, Oklahoma for analysis of PCBs (EPA Method 3550B/8082). The purpose of the laboratory analysis was to determine a correlation with the field sample analysis. In addition, some boring location samples were analyzed twice by both field analysis and the commercial laboratory to determine the repeatability of results. Most of the "second" analyses were performed at later dates than the first analysis to help resolve differences between field and laboratory results. All sample results from both the field analyses and the commercial laboratory are shown on the Boring Location Map attached as Exhibit D, as well as within the individual plume maps shown in Exhibit E.

As previously stated, a solvent-type odor was observed in some of the borings. Analysis for volatile organic compounds (VOCs) were requested on two (2) of the samples Exhibiting odor (I5-5 & K2-2).

Similarly to the previously discussed soil samples, the water sample collected from boring I5 was analyzed for PCBs, VOCs, and semi-volatile organic compounds (SVOCs) at the laboratory.

The executed chain-of-custody forms and laboratory reports for samples submitted to Outreach

Laboratories are provided as Exhibit G.

3.4 Analytical Results

Soil - PCBs

As previously stated, the Boring Location Map attached as Exhibit D shows all field test and laboratory results for PCB analysis on soils. The concentrations are reported as parts per million (ppm) and have been rounded to the nearest hole number. With some exceptions, the correlation between the field test and laboratory results are fairly consistent. Some of the inconsistency is attributed to the analysis range of the field test kits being limited 2-2,000 ppm PCBs. This would explain why the higher laboratory test results have less correlation with the field test results. It should be noted that the cleanup goal for PCBs will be 50 ppm, and therefore any inaccuracy of the field test kits at the higher concentrations will be insignificant during the subsequent remediation phases. Variations between field and lab sample results at lower concentrations were apparently somewhat attributable to variation within a single sample, as was identified from multiple analyses of a single sample (See Exhibit D).

As previously stated, the regulatory limit set by the EPA for PCBs is 50 ppm. According to the sample results, the areas where soil concentrations exceed 50 ppm are located in the area between the former pads and have migrated towards the east site boundary. Exhibit E provides four (4) PCB Plume Location Maps for soils containing PCB concentrations of >50 ppm. A plume map is provided for each 3 foot interval bgs (i.e. 0-3 feet bgs, 3-6 feet bgs, 6-9 feet bgs, and 9 feet-auger refusal bgs).

Soil – Other Organics

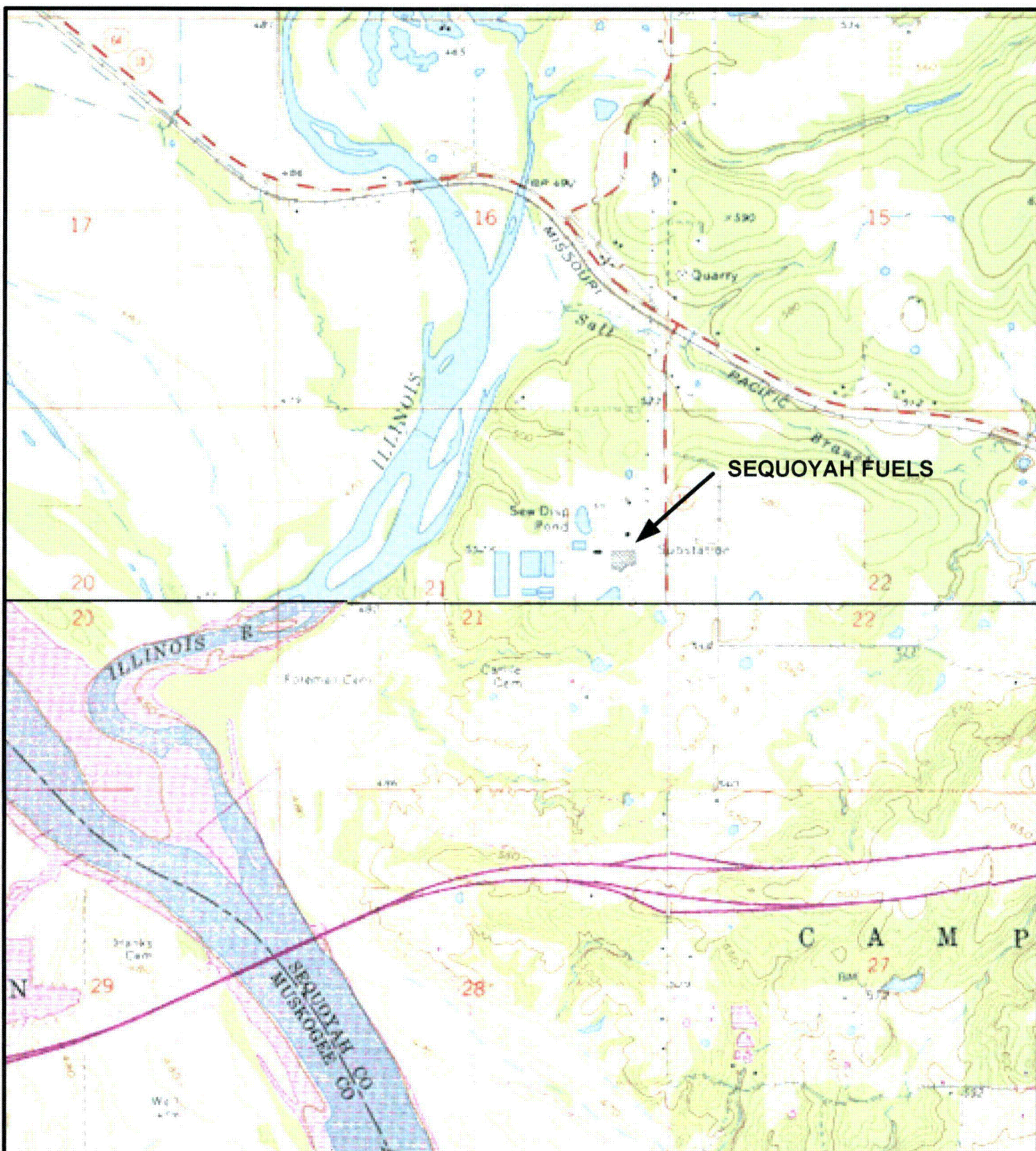
A scan for volatile and semi-volatile constituents was performed on two soil samples. Results indicated the presence of significant levels of 1,2,3- and 1,2,4-Trichlorobenzene. Soil sample I5-5 was found to contain 2,120 mg/kg of 1,2,4-Trichlorobenzene and 1,550 mg/kg of 1,2,3-Trichlorobenzene, while sample K2-2 was found to contain 67.4 mg/kg of 1,2,4-Trichlorobenzene and 65.6 mg/kg of 1,2,3-Trichlorobenzene. Trichlorobenzenes would be expected to be found at the site, as aroclors (PCBs) are normally blended with trichlorobenzenes to make the askarel that goes into transformers and rectifiers.

Low levels of methylene chloride were also found in the above described samples as well, with sample I5-5 containing 11.6 mg/kg, and sample K2-2 containing 29.2 mg/kg. Methylene chloride was identified in the facility as a historical industrial solvent used at the facility, and may have been

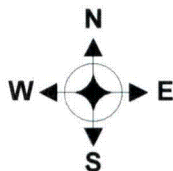
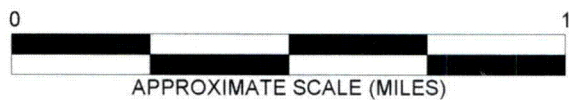
used to clean up equipment and/or concrete pads during any previous PCB remediation efforts by the previous facility owner. However, no records indicating use of methylene chloride for such cleanup have been identified.

Perched Water – PCB and Other Organics

The saturation encountered in boring I5 was found to contain 6.9 and 9.4 mg/l of 1,2,3- and 1,2,4-Trichlorobenzene, respectively. In addition, the PCB levels were found to be 8.13 mg/l, not to be unexpected since it was in the area of highest PCB levels found in soil during the investigation.



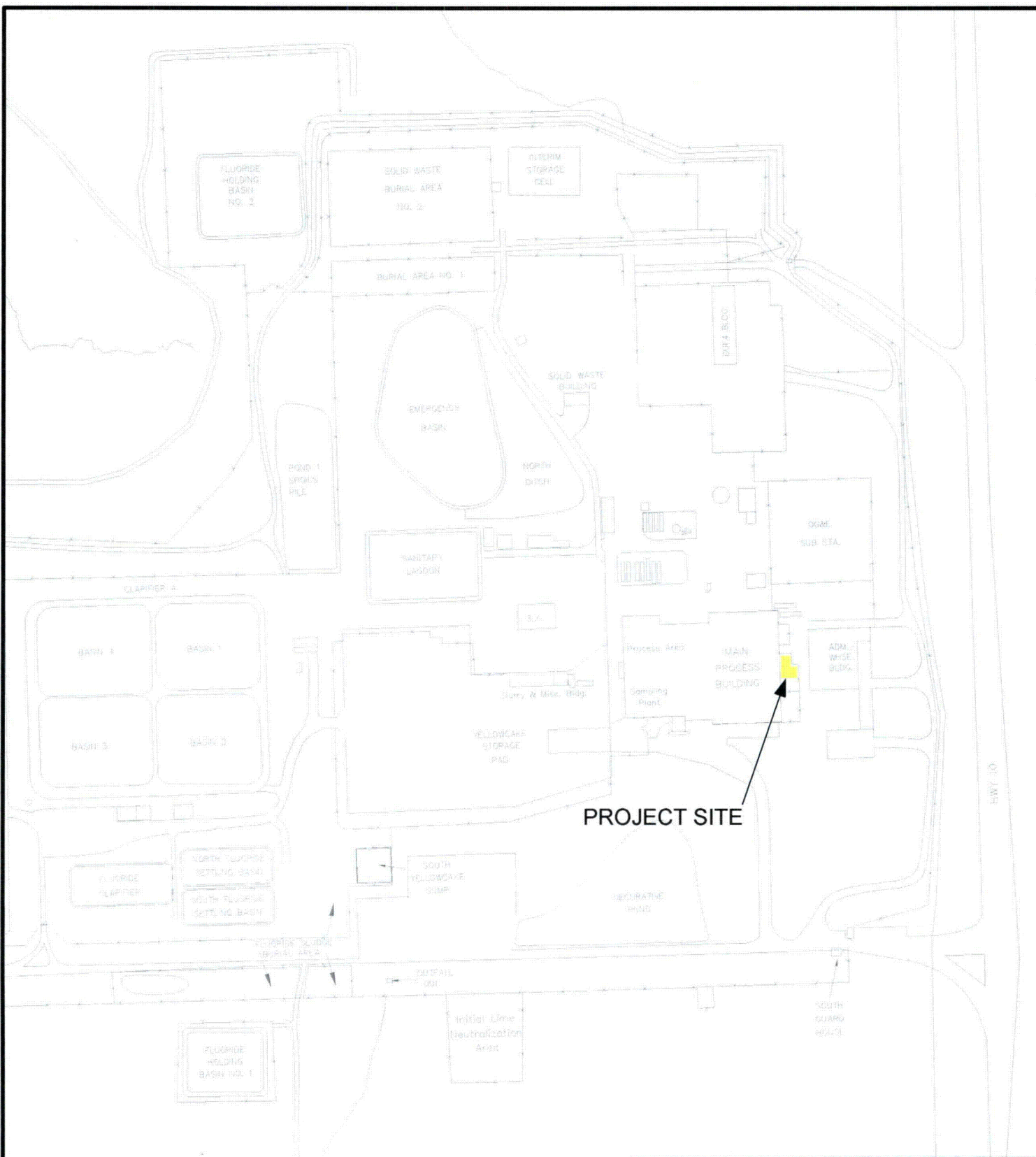
U.S.G.S. TOPOGRAPHIC MAP
STIGLER NE & GORE QUARDANGLES
SEQUOYAH COUNTY, OKLAHOMA



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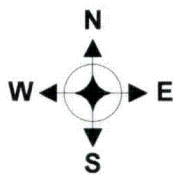
AREA MAP
Sequoyah Fuels Corporation
Gore, Oklahoma

PROJECT NO.: 494-05 DATE: 09/28/04 BY: JLP



PROJECT SITE

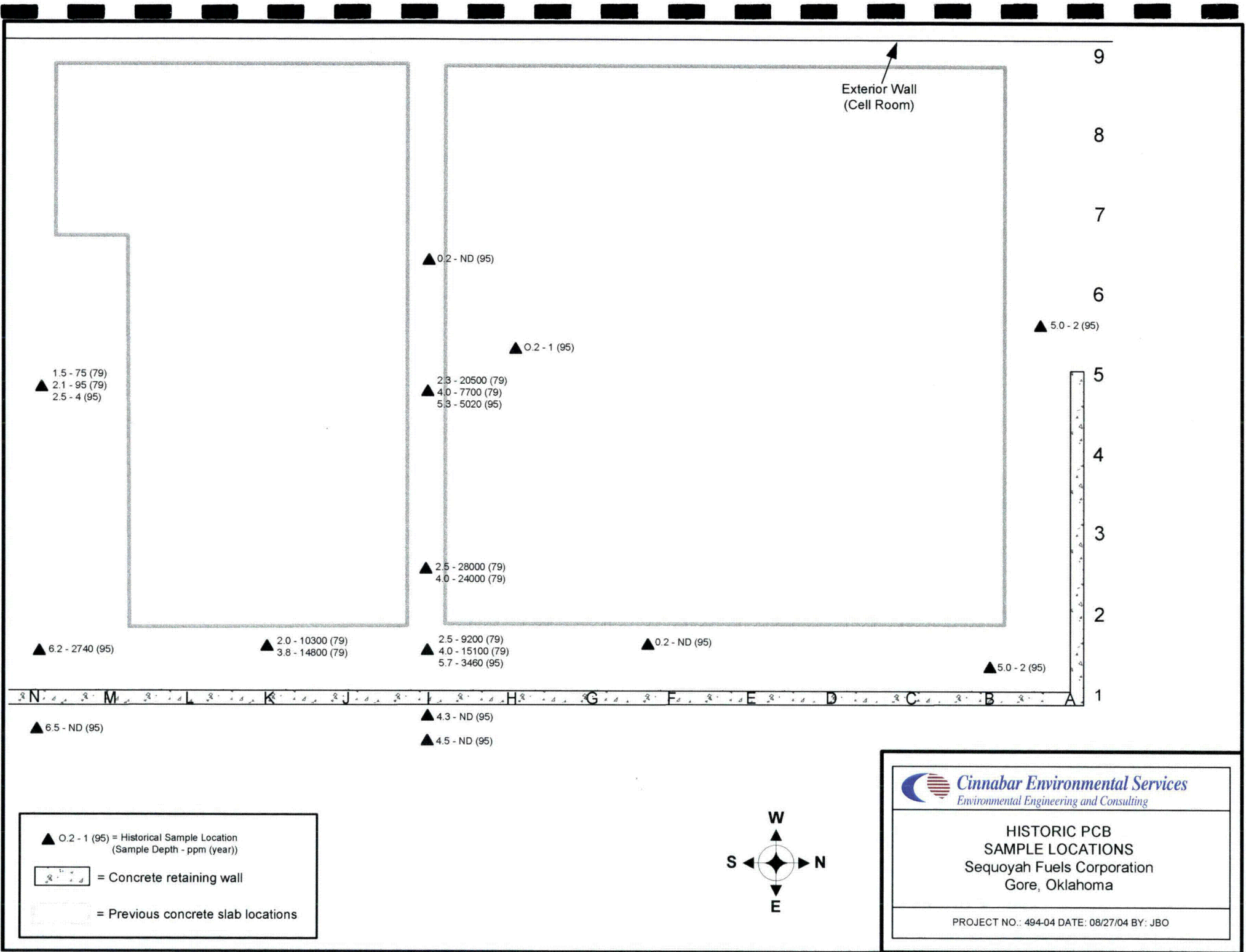
NOT TO SCALE



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SITE LOCATION MAP
Sequoyah Fuels Corporation
Gore, Oklahoma

PROJECT NO.: 494-04 DATE: 09/29/04 BY: JLP



▲ 1.5 - 75 (79)
▲ 2.1 - 95 (79)
▲ 2.5 - 4 (95)

▲ 0.2 - ND (95)

▲ 0.2 - 1 (95)

▲ 2.3 - 20500 (79)
▲ 4.0 - 7700 (79)
▲ 5.3 - 5020 (95)

▲ 5.0 - 2 (95)

▲ 2.5 - 28000 (79)
▲ 4.0 - 24000 (79)

▲ 6.2 - 2740 (95)

▲ 2.0 - 10300 (79)
▲ 3.8 - 14800 (79)

▲ 2.5 - 9200 (79)
▲ 4.0 - 15100 (79)
▲ 5.7 - 3460 (95)

▲ 0.2 - ND (95)

▲ 5.0 - 2 (95)

▲ 6.5 - ND (95)

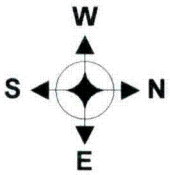
▲ 4.3 - ND (95)

▲ 4.5 - ND (95)

▲ 0.2 - 1 (95) = Historical Sample Location
(Sample Depth - ppm (year))

= Concrete retaining wall

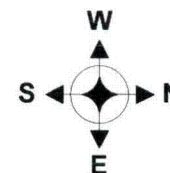
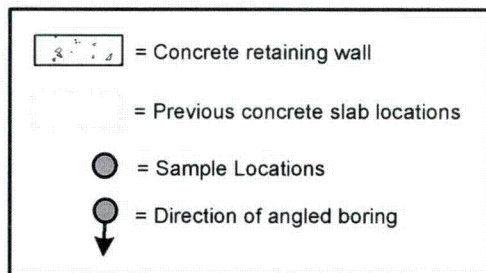
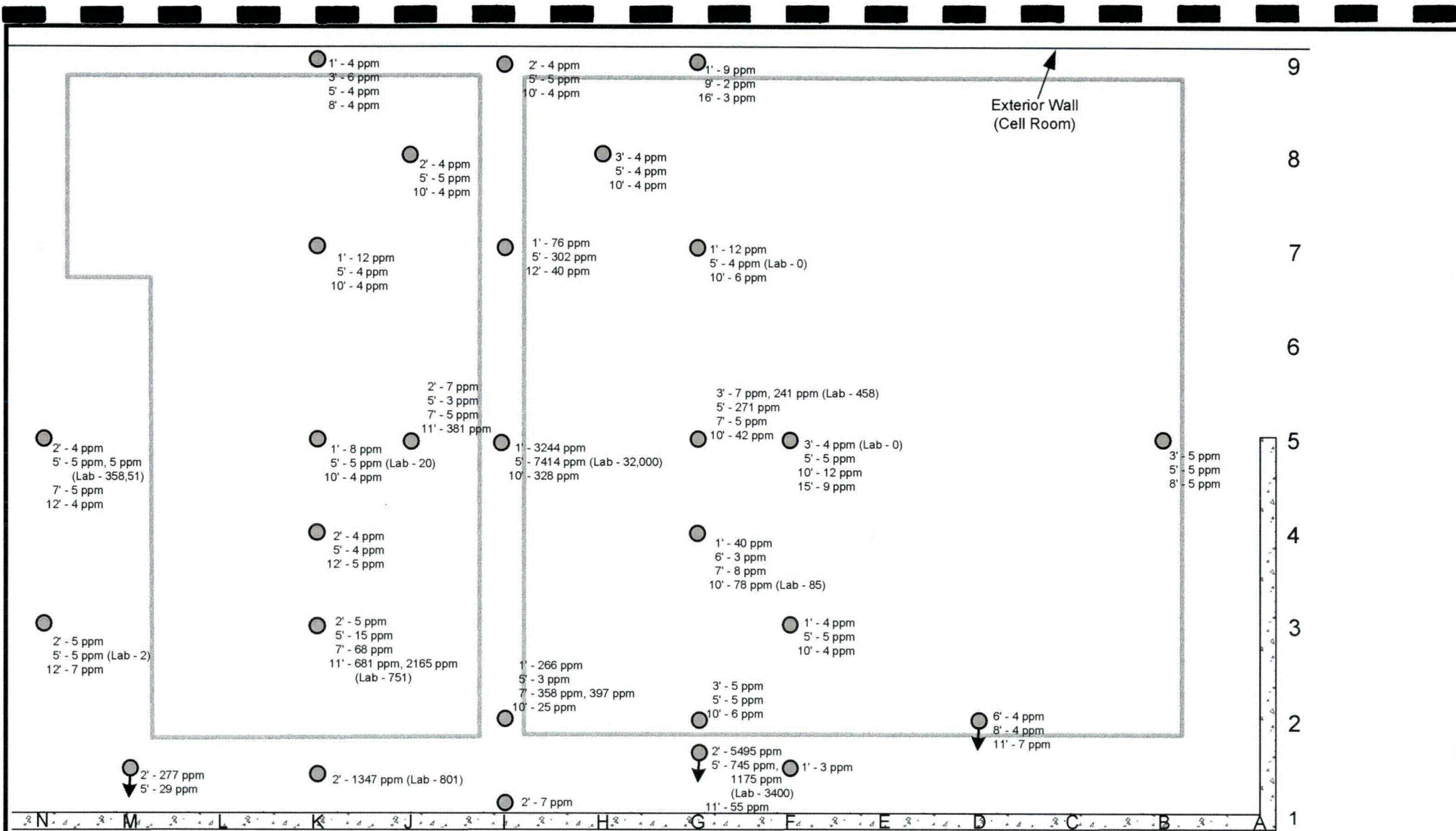
= Previous concrete slab locations



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**HISTORIC PCB
SAMPLE LOCATIONS**
Sequoyah Fuels Corporation
Gore, Oklahoma

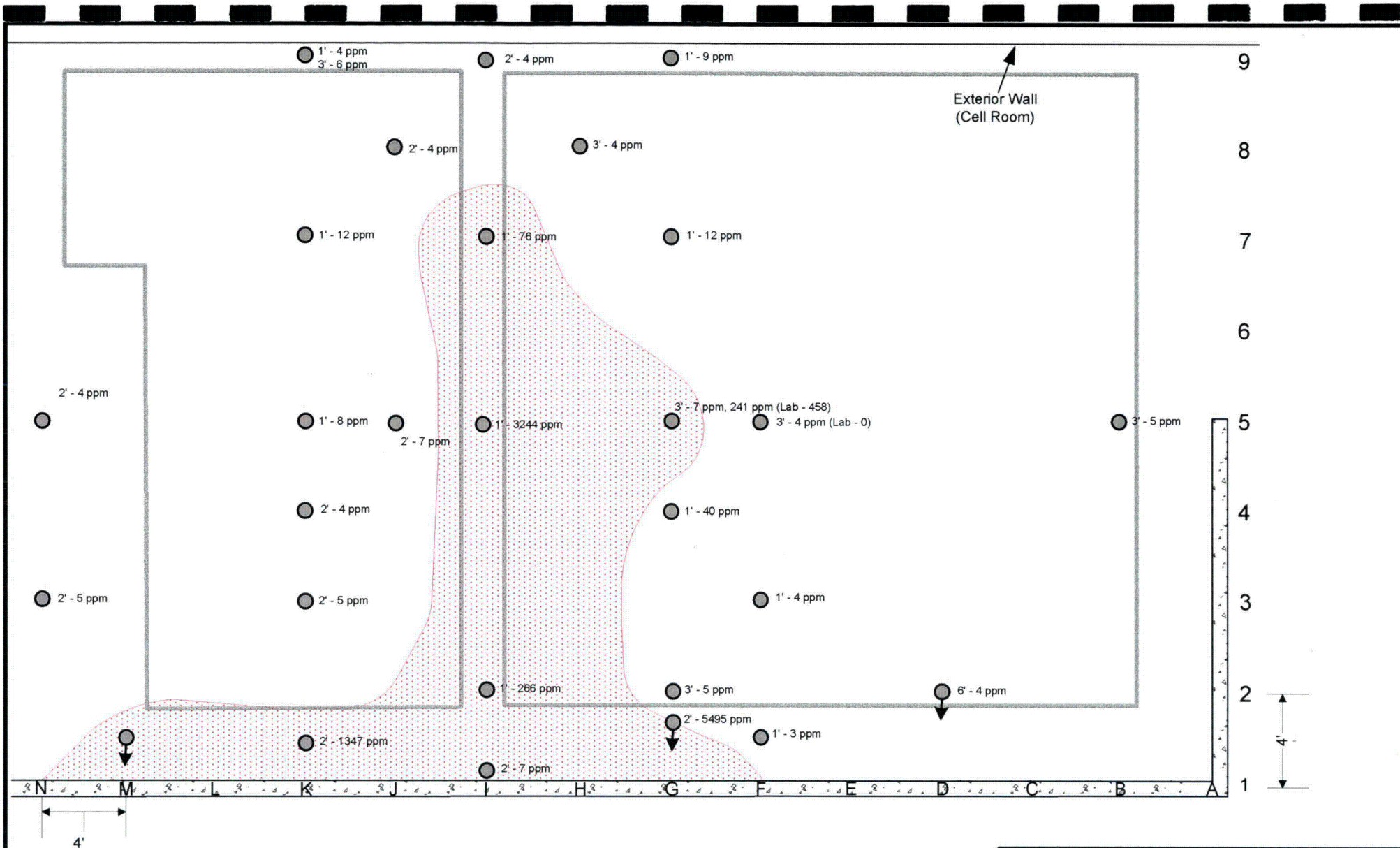
PROJECT NO.: 494-04 DATE: 08/27/04 BY: JBO



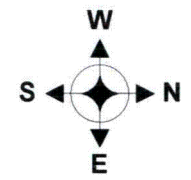
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Environmental Engineering and Consulting

**BORING LOCATION MAP WITH
ANALYTICAL RESULTS**
Sequoyah Fuels Corporation
Gore, Oklahoma

PROJECT NO.: 494-04 DATE: 08/27/04 BY: JBO



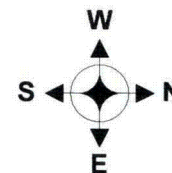
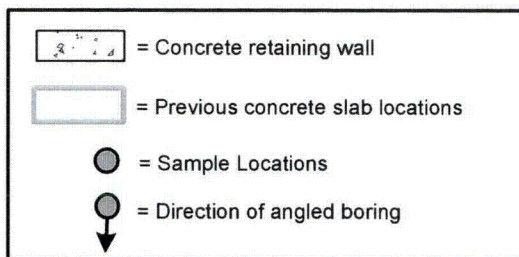
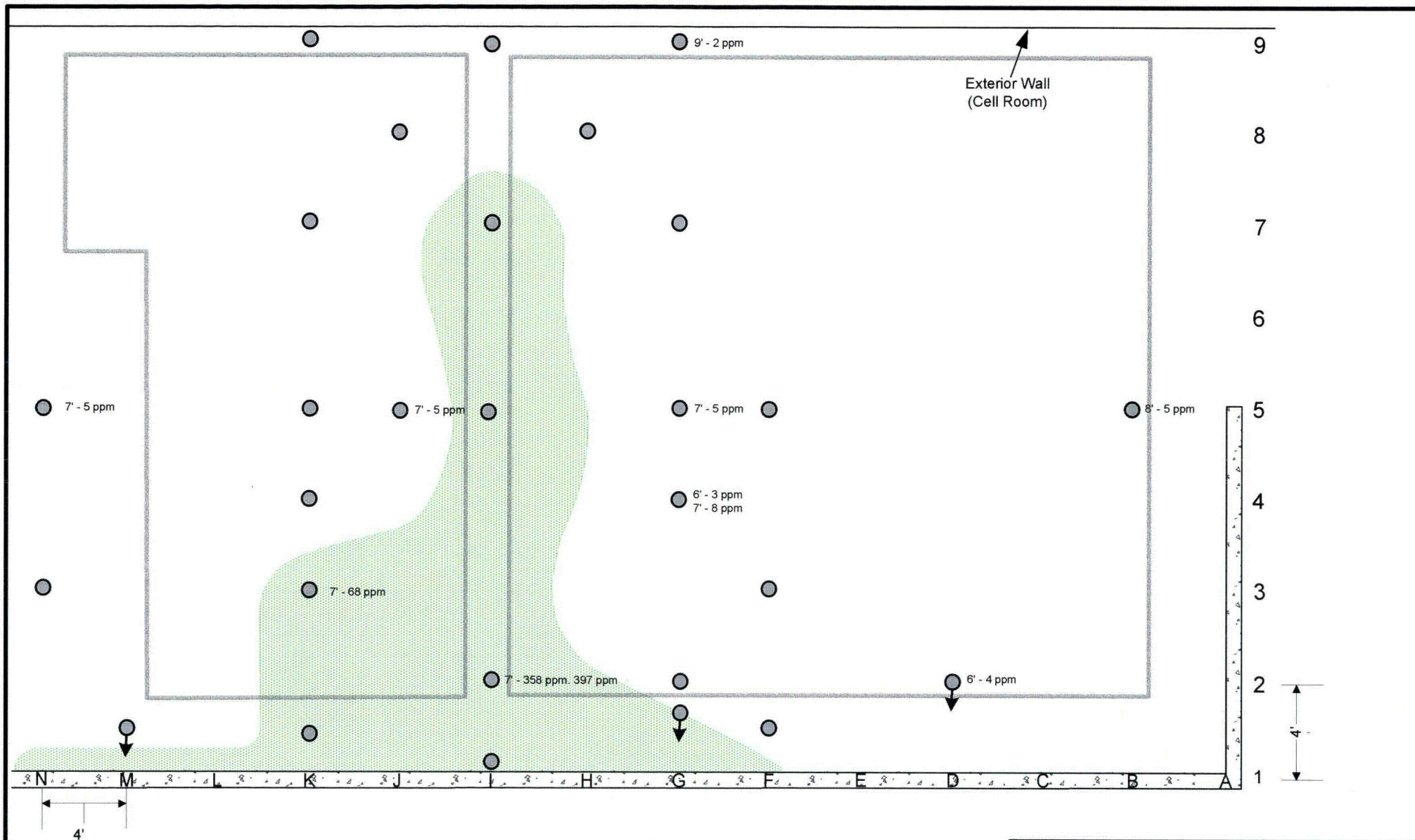
- = Concrete retaining wall
- = Previous concrete slab locations
- = Sample Locations
- = Direction of angled boring



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Environmental Engineering and Consulting

**ESTIMATED AREA OF PCB-
CONTAMINATED SOILS IN EXCESS OF 50
PPM (0-3 FEET BGS)**
Sequoyah Fuels Corporation
Gore, Oklahoma

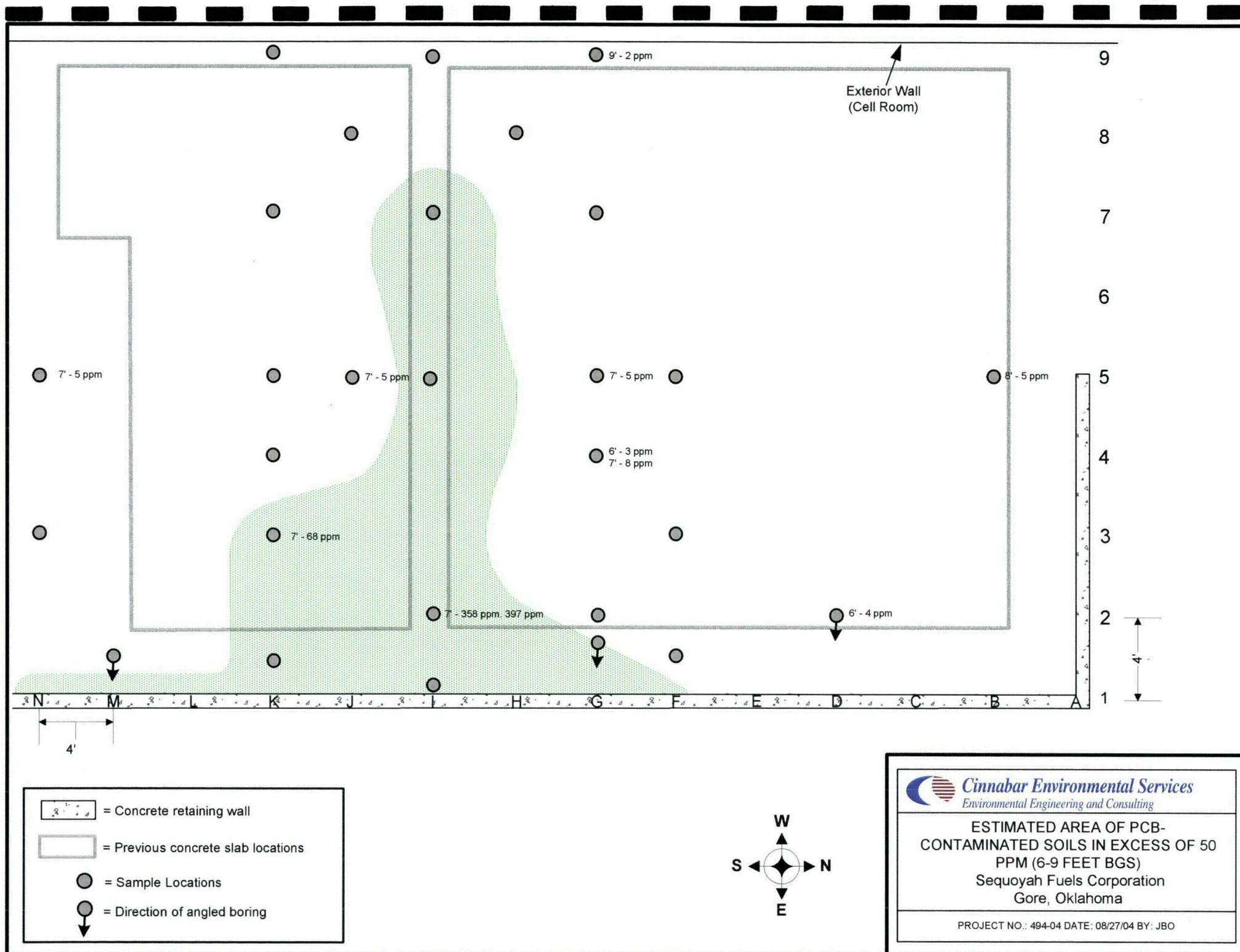
PROJECT NO.: 494-04 DATE: 08/27/04 BY: JBO

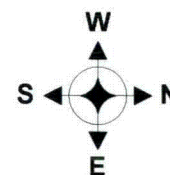
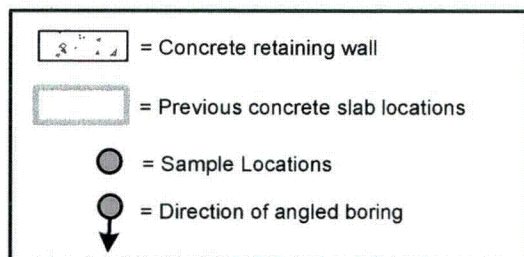
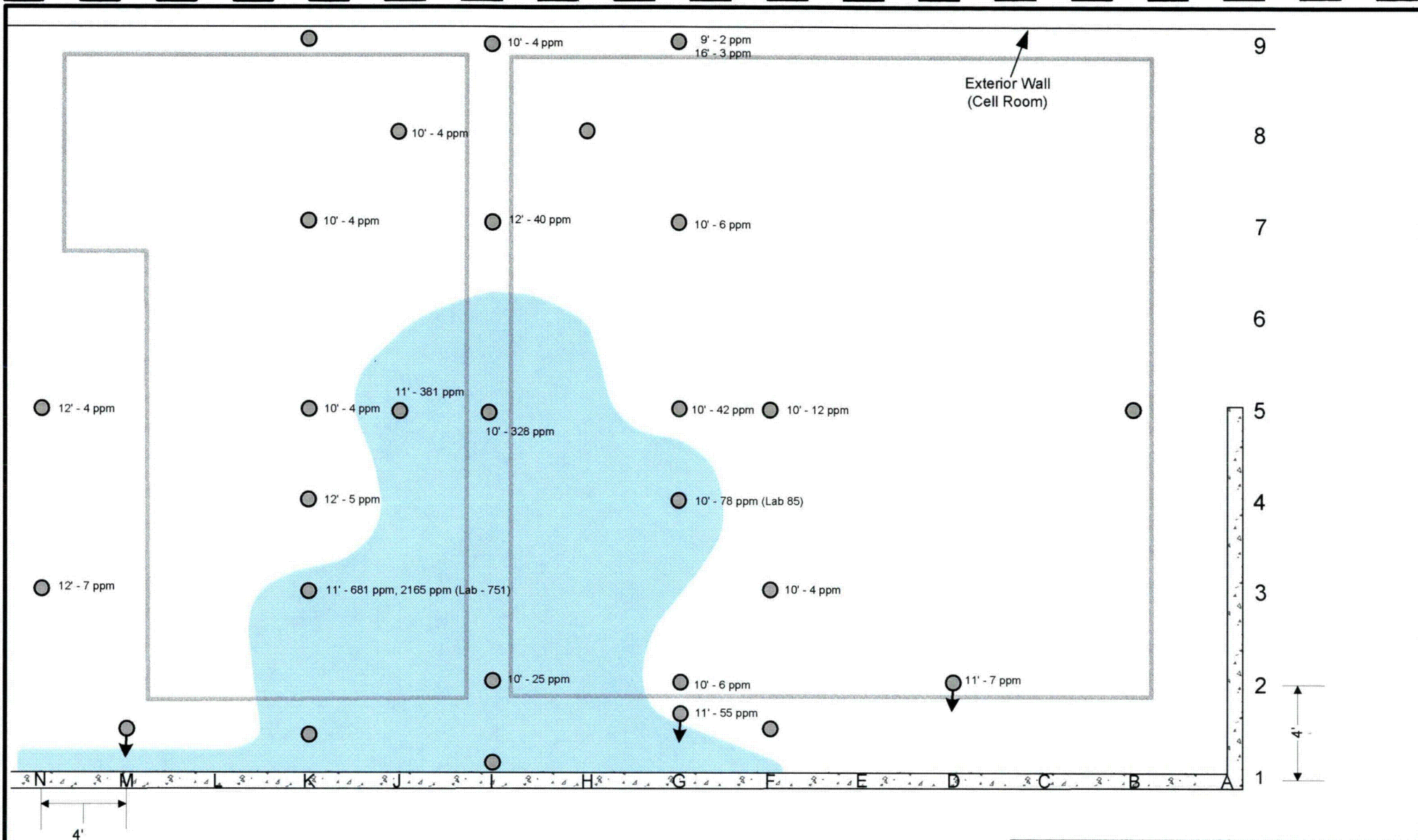


 **Cinnabar Environmental Services**
Environmental Engineering and Consulting

ESTIMATED AREA OF PCB-
CONTAMINATED SOILS IN EXCESS OF 50
PPM (6-9 FEET BGS)
Sequoyah Fuels Corporation
Gore, Oklahoma

PROJECT NO.: 494-04 DATE: 08/27/04 BY: JBO





Cinnabar Environmental Services
Environmental Engineering and Consulting

ESTIMATED AREA OF PCB-
CONTAMINATED SOILS IN EXCESS OF 50
PPM (9-12+ FEET BGS)
Sequoyah Fuels Corporation
Gore, Oklahoma

PROJECT NO.: 494-04 DATE: 08/27/04 BY: JBO



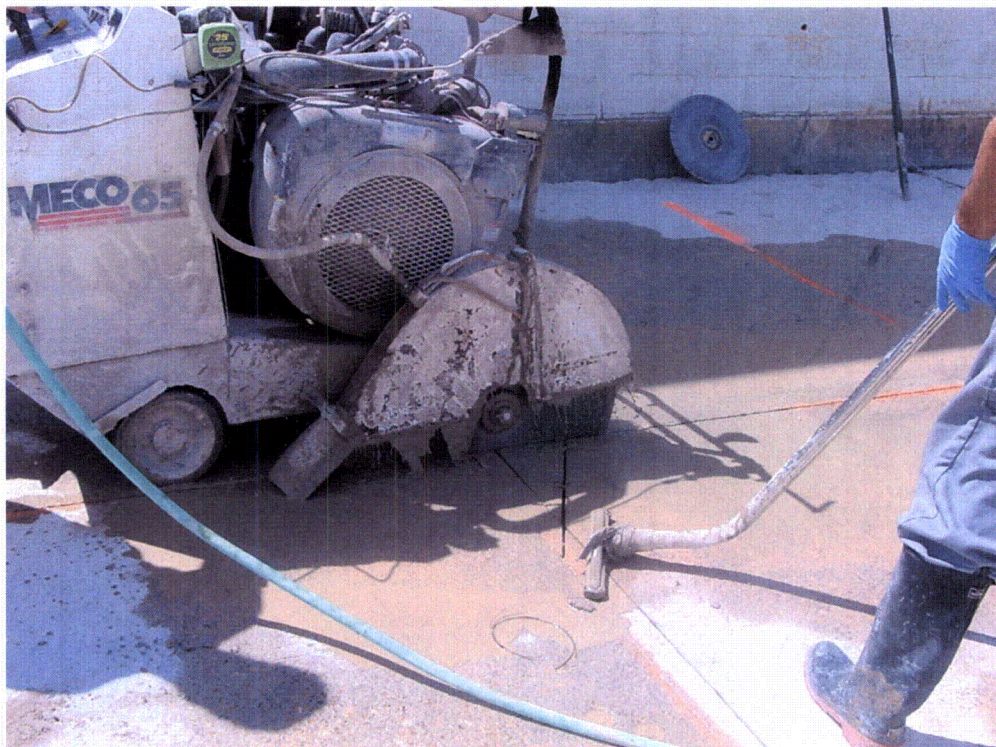
View of PCB Area with slabs looking west



View of PCB Area with slabs looking northwest



View of Scabblers removing concrete samples



View of concrete saw cutting slabs



View of concrete slabs being loaded into roll-off containers



View of PCB Area after slab removal



View of PCB Area during subsurface investigation

**Outreach
Laboratory**

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

September 3, 2004

Scott Munson
Sequoyah Fuels Corp.
Hwy 10 & I-40
Gore, OK 74435

PROJECT: SF04-255
OUTREACH LAB ID: 20040608

Dear Mr. Munson:

Please find enclosed an analytical report for your samples received in our laboratory on August 26, 2004 for the above captioned project. The four samples were received in good condition and analyzed for PCBs, Volital Organics, and Uranium.

All QC is within limits.

Thank you for choosing Outreach Laboratory and if you have any questions feel free to call.

Laboratory Director

ODEQ ID #9517
NRC ODEQ LIC. #27522-01



Cert ID# OK 001



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client:

Sequoyah Fuels Corp.

Client Project:

Lab Number:

20040608

Date Reported:

9/3/2004

Date Received:

8/26/04

Page Number:

1 of 5

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
--------	--------	-------	----	-----------	---------------	---------

Lab ID: 20040608-01

Client ID: Misc/IS-5

Date Sampled: 8/25/2004 11:00:00 AM

Matrix: Soil

Organics Analyses

Aroclor 1260	EPA 3550B/8082	32000	mg/kg	800	8/27/2004	8/31/2004	RE
Bromomethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Chloroethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Chloromethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Dichlorodifluoromethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Vinyl Chloride	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,1-Dichloroethene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Acetone	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Methylene chloride	EPA 8260B	11.6	mg/kg	232		9/1/2004	RE
cis-1,2-Dichloroethene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,1-Dichloroethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
trans-1,2-Dichloroethene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
2-Butanone (MEK)	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Chloroform	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Bromochloromethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,1,1-Trichloroethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Carbon tetrachloride	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,2-Dichloroethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,2-Dichloropropane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Benzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Trichloroethene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Bromodichloromethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
4-Methyl-2-pentanone (MIBK)	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
cis 1,3-dichloropropene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Toluene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
trans 1,3-dichloropropene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,1,2-Trichloroethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
2-Hexanone (MBK)	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,3-Dichloropropane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Tetrachloroethene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Dibromochloromethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE

BDL = Below Detection Limit



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client:

Sequoyah Fuels Corp.

Client Project:

Lab Number:

20040608

Date Reported:

9/3/2004

Date Received:

8/26/04

Page Number:

2 of 5

Analytical Report

	Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Dibromomethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Chlorobenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,1,1,2-Tetrachloroethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Ethylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Xylenes (M,P)	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Xylenes (O)	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Total Xylenes	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Styrene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Bromoform	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,2,3-Trichloropropane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,1,2,2-Tetrachloroethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,3-Dichlorobenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,4-Dichlorobenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,2-Dichlorobenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Trichlorofluoromethane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Acrylonitrile	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
2,2-Dichloropropane	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,1-Dichloropropene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Isopropylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
n-Propylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Bromobenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,3,5-Trimethylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
2-Chlorotoluene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
4-Chlorotoluene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
tert-Butylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,2,4-Trimethylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
sec-Butylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Isopropyltoluene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
n-Butylbenzene	EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
1,2,4-Trichlorobenzene	EPA 8260B	2120	mg/kg	200		9/1/2004	RE
1,2,3-Trichlorobenzene	EPA 8260B	1550	mg/kg	200		9/1/2004	RE

Lab ID: 20040608-02

Client ID: Misc/G4-10

Date Sampled: 8/25/2004 11:30:00 PM

Matrix: Soil

Organics Analyses

BDL = Below Detection Limit



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client:

Sequoyah Fuels Corp.

Client Project:

Lab Number:

20040608

Date Reported:

9/3/2004

Date Received:

8/26/04

Page Number:

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Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Aroclor 1260 EPA 3550B/8082	86.4	mg/kg	40.00	8/27/2004	9/1/2004	RE
Lab ID: 20040608-03 Client ID: Misc/K2-2 Date Sampled: 8/25/2004 11:50:00 AM Matrix: Soil						
Radiochemical Analyses						
Uranium ASTM D 5174M	38.6	ug/g	0.098	8/30/2004	9/1/2004	MD
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	801	mg/kg	40.0	8/27/2004	9/1/2004	RE
Bromomethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Chloroethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Chloromethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Dichlorodifluoromethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Vinyl Chloride EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
1,1-Dichloroethene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Acetone EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Methylene chloride EPA 8260B	29.2	mg/kg	20		9/1/2004	RE
cis-1,2-Dichloroethene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
1,1-Dichloroethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
trans-1,2-Dichloroethene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
2-Butanone (MEK) EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
Chloroform EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Bromochloromethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
1,1,1-Trichloroethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Carbon tetrachloride EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
1,2-Dichloroethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
1,2-Dichloropropane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Benzene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Trichloroethene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Bromodichloromethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
4-Methyl-2-pentanone (MIBK) EPA 8260B	BDL	mg/kg	200		9/1/2004	RE
cis 1,3-dichloropropene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
Toluene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
trans 1,3-dichloropropene EPA 8260B	BDL	mg/kg	20		9/1/2004	RE
1,1,2-Trichloroethane EPA 8260B	BDL	mg/kg	20		9/1/2004	RE

BDL = Below Detection Limit



Outreach Laboratory

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Client:

Sequoyah Fuels Corp.

Client Project:

Lab Number:

20040608

Date Reported:

9/3/2004

Date Received:

8/26/04

Page Number:

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Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
2-Hexanone (MBK)	BDL	mg/kg	200		9/1/2004	RE
1,3-Dichloropropane	BDL	mg/kg	20		9/1/2004	RE
Tetrachloroethene	BDL	mg/kg	20		9/1/2004	RE
Dibromochloromethane	BDL	mg/kg	20		9/1/2004	RE
Dibromomethane	BDL	mg/kg	20		9/1/2004	RE
Chlorobenzene	BDL	mg/kg	20		9/1/2004	RE
1,1,1,2-Tetrachloroethane	BDL	mg/kg	20		9/1/2004	RE
Ethylbenzene	BDL	mg/kg	20		9/1/2004	RE
Xylenes (M,P)	BDL	mg/kg	40		9/1/2004	RE
Xylenes (O)	BDL	mg/kg	20		9/1/2004	RE
Total Xylenes	BDL	mg/kg	60		9/1/2004	RE
Styrene	BDL	mg/kg	20		9/1/2004	RE
Bromoform	BDL	mg/kg	20		9/1/2004	RE
1,2,3-Trichloropropane	BDL	mg/kg	20		9/1/2004	RE
1,1,2,2-Tetrachloroethane	BDL	mg/kg	20		9/1/2004	RE
1,3-Dichlorobenzene	BDL	mg/kg	20		9/1/2004	RE
1,4-Dichlorobenzene	BDL	mg/kg	20		9/1/2004	RE
1,2-Dichlorobenzene	BDL	mg/kg	20		9/1/2004	RE
Trichlorofluoromethane	BDL	mg/kg	20		9/1/2004	RE
Acrylonitrile	BDL	mg/kg	20		9/1/2004	RE
2,2-Dichloropropane	BDL	mg/kg	20		9/1/2004	RE
1,1-Dichloropropene	BDL	mg/kg	20		9/1/2004	RE
Isopropylbenzene	BDL	mg/kg	20		9/1/2004	RE
n-Propylbenzene	BDL	mg/kg	20		9/1/2004	RE
Bromobenzene	BDL	mg/kg	20		9/1/2004	RE
1,3,5-Trimethylbenzene	BDL	mg/kg	20		9/1/2004	RE
2-Chlorotoluene	BDL	mg/kg	20		9/1/2004	RE
4-Chlorotoluene	BDL	mg/kg	20		9/1/2004	RE
tert-Butylbenzene	BDL	mg/kg	20		9/1/2004	RE
1,2,4-Trimethylbenzene	BDL	mg/kg	20		9/1/2004	RE
sec-Butylbenzene	BDL	mg/kg	20		9/1/2004	RE
Isopropyltoluene	BDL	mg/kg	20		9/1/2004	RE
n-Butylbenzene	BDL	mg/kg	20		9/1/2004	RE
1,2,4-Trichlorobenzene	67.4	mg/kg	20		9/1/2004	RE
1,2,3-Trichlorobenzene	65.6	mg/kg	20		9/1/2004	RE

BDL = Below Detection Limit



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client: Sequoyah Fuels Corp.
Client Project:
Lab Number: 20040608
Date Reported: 9/3/2004
Date Received: 8/26/04
Page Number: 5 of 5

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID: 20040608-04 Client ID: Misc/K5-5 Date Sampled: 8/25/2004 2:30:00 PM Matrix: Soil	Organics Analyses					
Aroclor 1260 EPA 3550B/8082	20	mg/kg	4.00	8/27/2004	9/1/2004	RE

QC Report

Parameter	Blank	LCS %REC	LCSD %REC	RPD	DUP RPD	MS %REC	MSD %REC	RPD	Date
Aroclor 1260	BDL	120.0				NC	NC		8/31/2004
Benzene	BDL	91.8				54.0	54.8	1.5	8/27/2004
Chlorobenzene	BDL	101.0				90.0	97.6	8.1	8/27/2004
Toluene	BDL	93.9				79.2	76.4	3.6	8/27/2004
Trichloroethene	BDL	103.0				68.0	65.4	3.9	8/27/2004
Uranium	BDL	107.9	108.2	0.3		103.2	96.9	6.3	9/1/2004

Lab Approval: 

BDL = Below Detection Limit



OUTREACH LABORATORY

**311 North Aspen
Broken Arrow, OK 74012
Phone: (918) 251-2515
Fax: (918) 251-0008**

CHAIN OF CUSTODY

Results To: Company <u>SEQUOIA FUELS CORP</u> Name _____ Address _____ City _____ State _____ Zip _____ Phone _____ Fax # _____	Bill To: Company _____ Name _____ Address _____ City _____ State _____ Zip _____
---	---

ANALYSIS REQUESTED

[illegible]

RELINQUISHED BY: Joe Blackley DATE 8/26/04 TIME 11:50 RECEIVED BY: [Signature] DATE 8/26/04 TIME 11:50

RELINQUISHED BY: _____ DATE _____ TIME _____ RECEIVED BY: _____ DATE _____ TIME _____

My signature on this chain of custody form indicates that I am authorized by the above company to release samples for analysis. The company agrees to pay the entire balance upon receipt of sample data and it is understood and agreed that any balance carried over thirty (30) days is subject to a 1.5% per month (18% per annum) late charge. In the event of default, the company becomes legally liable for any reasonable attorney and/or collection fees and all related costs necessary to remit the entire balance to Outreach Technologies, Inc. (Outreach Laboratory).

SAMPLE RETURN DISPOSAL: All non-hazardous wastes shall be disposed of [redacted] after [redacted] final report [redacted] others with [redacted] and a [redacted] expenses

FOR LABORATORY USE ONLY: 79710608

Sample Condition Upon Receipt

Custody Seals Intact

Cooler Temperature



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

September 17, 2004

Tom Blachly
Cinnabar Environmental Services
5121 S Wheeling
Tulsa, OK 74105

PROJECT: SF04-231
OUTREACH LAB ID: 20040645

Dear Mr. Blachly,

Please find enclosed the analytical report for your samples received in our laboratory on September 10, 2004 for the above captioned project. Four soil samples were received in good condition and analyzed for PCB's.

All QC is within control limits. The samples will be disposed of after 30 days unless notified otherwise.

Thank you for choosing Outreach Laboratory. If you have any questions please call us at 918-251-2515.

Laboratory Director

ODEQ ID #9517
NRC ODEQ LIC. #27522-01





Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client: Sequoyah Fuels Corp.
Client Project: SF04-231
Lab Number: 20040645
Date Reported: 9/17/2004
Date Received: 9/10/04
Page Number: 1 of 2

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID: 20040645-01						
Client ID: Misc/N5-5R						
Date Sampled: 8/26/2004 12:00:00 PM						
Matrix: Solid						
Organics Analyses						
Aroclor 1260	EPA 3550B/8082	51.3 mg/kg	9.79	9/14/2004	9/16/2004	RE
Lab ID: 20040645-02						
Client ID: Misc/N3-5						
Date Sampled: 8/26/2004 12:00:00 PM						
Matrix: Solid						
Organics Analyses						
Aroclor 1260	EPA 3550B/8082	1.83 mg/kg	0.1	9/14/2004	9/15/2004	RE
Lab ID: 20040645-03						
Client ID: Misc/F5-3						
Date Sampled: 8/26/2004 12:00:00 PM						
Matrix: Solid						
Organics Analyses						
Aroclor 1260	EPA 3550B/8082	0.29 mg/kg	0.09	9/14/2004	9/15/2004	RE
Lab ID: 20040645-04						
Client ID: Misc/G7-5						
Date Sampled: 8/26/2004 12:00:00 PM						
Matrix: Solid						
Organics Analyses						
Aroclor 1260	EPA 3550B/8082	0.38 mg/kg	0.1	9/14/2004	9/16/2004	RE

BDL = Below Detection Limit



Outreach Laboratory

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Client: Sequoyah Fuels Corp.
Client Project: SF04-231
Lab Number: 20040645
Date Reported: 9/17/2004
Date Received: 9/10/04
Page Number: 2 of 2

QC Report

Parameter	Blank	LCS %REC	LCSD		DUP RPD	MS %REC	MSD		Date
			%REC	RPD			%REC	RPD	
Aroclor 1260	BDL	112.0				DO	DO	5.1	9/16/2004

Lab Approval: 

BDL = Below Detection Limit

[illegible]

2004 06 45



Outreach Laboratory

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Client: Sequoyah Fuels Corp.
Client Project: SF04-258
Lab Number: 20040615
Date Reported: 9/7/2004
Date Received: 8/27/04
Page Number: 1 of 2

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID: 20040615-01 Client ID: Misc/G2B-5 Date Sampled: 8/26/2004 1:50:00 PM Matrix: Soil						
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	3400	mg/kg	80.0	8/27/2004	9/2/2004	RE
Lab ID: 20040615-02 Client ID: Misc/K3-11 Date Sampled: 8/26/2004 11:15:00 AM Matrix: Soil						
Radiochemical Analyses						
Uranium ASTM D 5174M	3.28	ug/g	0.095	8/30/2004	9/1/2004	MD
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	751	mg/kg	40.0	8/27/2004	9/2/2004	RE
Lab ID: 20040615-03 Client ID: Misc/G5-3 Date Sampled: 8/26/2004 10:20:00 AM Matrix: Soil						
Radiochemical Analyses						
Uranium ASTM D 5174M	3.17	ug/g	0.097	8/30/2004	9/1/2004	MD
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	458	mg/kg	40.0	8/27/2004	9/2/2004	RE
Lab ID: 20040615-04 Client ID: Misc/N5-5 Date Sampled: 8/26/2004 2:30:00 PM Matrix: Soil						
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	358	mg/kg	40.0	8/27/2004	9/2/2004	RE

BDL = Below Detection Limit

Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Lab Number:

20040010

Date Reported:

9/7/2004

Date Received:

8/27/04

Page Number:

2 of 2

QC Report

Parameter	Blank	LCS	LCSD		DUP	MS	MSD		Date
		%REC	%REC	RPD	RPD	%REC	%REC	RPD	
Aroclor 1260	BDL	120.0				NC	NC		8/31/2004
Uranium	BDL	107.9	108.2	0.3		103.2	96.9	6.3	9/1/2004

Lab Approval:



BDL - Below Detection Limit

**Outreach
Laboratory**311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client: Sequoyah Fuels Corp.
Client Project: SF04-0230
Lab Number: 20040565
Date Reported: 8/11/2004
Date Received: 8/6/04
Page Number: 1 of 1

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID: 20040565-01						
Client ID: 1st Pass						
Date Sampled: 8/5/2004 10:28:00 AM						
Matrix: Soil						
Radiochemical Analyses						
Uranium	ASTM D 5174M	282 ug/g	0.100	8/6/2004	8/10/2004	MD
Organics Analyses						
Aroclor 1016	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1221	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1232	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1242	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1248	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1254	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1260	EPA 3550B/8082	45.8 mg/kg	0.04	8/6/2004	8/9/2004	RE

QC Report

Parameter	Blank	LCS %REC	LCSD %REC	RPD	DUP RPD	MS %REC	MSD %REC	RPD	Date
Aroclor 1254	BDL	66.0				NC	NC		8/9/2004
Uranium	0.119	104.0	101.0	3.6	8.2	97.5	96.6	0.9	8/10/2004

Lab Approval: 

BDL = Below Detection Limit



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
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Client: Sequoyah Fuels Corp.
Client Project: SF04-
Lab Number: 20040568
Date Reported: 8/11/2004
Date Received: 8/6/04
Page Number: 1 of 2

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID: 20040568-01						
Client ID: Misc #2						
Date Sampled: 8/6/2004 9:45:00 AM						
Matrix: Soil						
Radiochemical Analyses						
Uranium	ASTM D 5174M	6.50 ug/g	0.095	8/6/2004	8/10/2004	MD
Organics Analyses						
Aroclor 1016	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1221	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1232	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1242	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1248	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1254	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1260	EPA 3550B/8082	107 mg/kg	0.04	8/6/2004	8/9/2004	RE
Lab ID: 20040568-02						
Client ID: Misc #3						
Date Sampled: 8/6/2004 10:25:00 AM						
Matrix: Soil						
Radiochemical Analyses						
Uranium	ASTM D 5174M	27.3 ug/g	0.091	8/6/2004	8/10/2004	MD
Organics Analyses						
Aroclor 1016	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1221	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1232	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1242	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1248	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1254	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1260	EPA 3550B/8082	864 mg/kg	0.04	8/6/2004	8/9/2004	RE
Lab ID: 20040568-03						
Client ID: Misc #4						
Date Sampled: 8/6/2004 10:30:00 AM						
Matrix: Soil						
Radiochemical Analyses						
Uranium	ASTM D 5174M	56.7 ug/g	0.092	8/6/2004	8/10/2004	MD
Organics Analyses						

BDL = Below Detection Limit



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Client: Sequoyah Fuels Corp.
Client Project: SF04-
Lab Number: 20040568
Date Reported: 8/11/2004
Date Received: 8/6/04
Page Number: 2 of 2

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Aroclor 1016	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1221	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1232	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1242	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1248	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1254	EPA 3550B/8082	BDL mg/kg	0.04	8/6/2004	8/9/2004	RE
Aroclor 1260	EPA 3550B/8082	491 mg/kg	0.04	8/6/2004	8/9/2004	RE

QC Report

Parameter	Blank	LCS %REC	LCS %REC	LCS RPD	DUP RPD	MS %REC	MSD %REC	MSD RPD	Date
Aroclor 1254	BDL	66.0				NC	NC		8/9/2004
Uranium	0.119	104.0	101.0	3.6	8.2	97.5	96.6	0.9	8/10/2004

Lab Approval:

BDL = Below Detection Limit



Outreach Laboratory

311 North Aspen
Broken Arrow, OK 74012
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Client: Sequoyah Fuels Corp.
Client Project: SF04-231
Lab Number: 20040645
Date Reported: 9/17/2004
Date Received: 9/10/04
Page Number: 1 of 2

Analytical Report

Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID: 20040645-01 Client ID: Misc/N5-5R Date Sampled: 8/26/2004 12:00:00 PM Matrix: Solid						
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	51.3	mg/kg	9.79	9/14/2004	9/16/2004	RE
Lab ID: 20040645-02 Client ID: Misc/N3-5 Date Sampled: 8/26/2004 12:00:00 PM Matrix: Solid						
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	1.83	mg/kg	0.1	9/14/2004	9/15/2004	RE
Lab ID: 20040645-03 Client ID: Misc/F5-3 Date Sampled: 8/26/2004 12:00:00 PM Matrix: Solid						
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	0.29	mg/kg	0.09	9/14/2004	9/15/2004	RE
Lab ID: 20040645-04 Client ID: Misc/G7-5 Date Sampled: 8/26/2004 12:00:00 PM Matrix: Solid						
Organics Analyses						
Aroclor 1260 EPA 3550B/8082	0.38	mg/kg	0.1	9/14/2004	9/16/2004	RE

BDL - Below Detection Limit

**Outreach
Laboratory**

311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
FAX (918) 251-0008

Client:

Sequoyah Fuels Corp.

Client Project:

SF04-231

Lab Number:

20040645

Date Reported:

9/17/2004

Date Received:

9/10/04

Page Number:


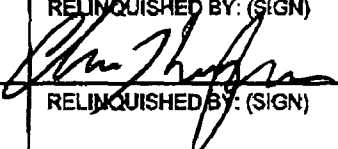
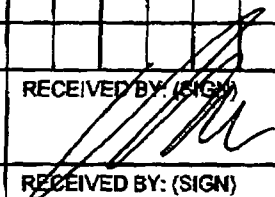
2 of 2

QC Report

Parameter	Blank	LCS	LCSD		DUP	MS	MSD		Date
		%REC	%REC	RPD	RPD	%REC	%REC	RPD	
Aroclor 1260	BDL	112.0				DO	DO	5.1	9/16/2004

Lab Approval:

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

 Cinnabar Environmental Services Environmental Engineering and Consulting 5121 S. Wheeling Tulsa, OK 74105 918/742-0082 918/742-0097(fax)						REPORTING LABORATORY: DATE: September 10, 2004 NAME: Outreach ADDRESS: CONTACT: PHONE:						CLIENT/PROJECT NAME: Sequoyah Fuels PROJECT NUMBER: SF040231 PROJECT LOCATION:						
ANALYSIS REQUESTED																		
SAMPLERS NAME (PRINT): Chris Thompson																		
SAMPLERS AFFILIATION: Cinnabar Environmental Services																		
PRIME LAB ID NO.	NO. & SIZE OF BOTTLE	FIELD IDENTIFICATION / SAMPLE NO.	DATE	TIME	SAMPLE TYPE (LIQUID, SLUDGE, ETC.)	PCB												CONDITION UPON RECEIPT
	4 oz.	Misc/N5-5R	8/26/04	12:00	Soil	X												
	4 oz.	Misc/N3-5	8/26/04	12:00	Soil	X												
	4 oz.	Misc/F5-3	8/25/04	12:00	Soil	X												
	4 oz.	Misc/G7-5	8/25/04	12:00	Soil	X												
COC SEAL DATE:			RELINQUISHED BY: (SIGN)			DATE/TIME:			RECEIVED BY: (SIGN)			DATE/TIME:			DATA RESULTS TO:			
						9-10-04 14:10						9/10/04 14:10			FAX: 918-742-0082			
CARRIER:			RELINQUISHED BY: (SIGN)			DATE/TIME:			RECEIVED BY: (SIGN)			DATE/TIME:						
BILL TO:																		

2004 06 45

w/2004
9/17/04
u

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

KF837468

Form Approved, OMB No. 2050-0030, Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address		SERVOYAH FUELS CORP		U.K. 005196118300001					
4. Generator's Phone		(918) 789-5511		P.O. Box 610 GORE, OK 74435					
5. Transporter 1 Company Name		SMITH SYSTEMS TRANSPORTATION		6. US EPA ID Number		NEP996382133		7. State Transporter's ID	
7. Transporter 2 Company Name				8. US EPA ID Number				8. State Transporter's ID	
9. Designated Facility Name and Site Address		CLEAN HARBORS PPM, LLC		10. US EPA ID Number		KSD981506025		9. State Facility's ID	
RT. 3, BOX 65, HWY 169 NORTH COPPERVILLE, KS 67337								10. State Facility's ID	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		a. RM		12. Containers		13. Total Quantity		14. Unit Wt/Vol	
X HAZARDOUS WASTE, SOLID, N.O.S.		1		CM		212		18.127 K	
b. PCB-SOLID, 9, UN2315, EG II									
c.									
d.									
15. Additional Descriptions for Materials Listed Above		CONCRETE RUBBLE		K. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information		Out of service 8-2304		ADN# TL825 WDH# 127494					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.		17. Transporter 1 Acknowledgement of Receipt of Materials		18. Transporter 2 Acknowledgement of Receipt of Materials		19. Discrepancy Indication Space		20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.	
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.		Printed/Typed Name		Signature		Month Day Year		Month Day Year	
		Craig Hartlin		Craig P. Hartlin		10/8/24/04		10/8/24/04	
		Sean D. Suggs		Sean D. Suggs		10/8/24/04		10/8/24/04	
		Printed/Typed Name		Signature		Month Day Year		Month Day Year	
19. Discrepancy Indication Space		Discrepancy Reported to John Ellis 82504		11A) weight 18127 K (2)					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		Printed/Typed Name		Signature		Month Day Year		Month Day Year	
		Tobias Harns		Tobias Harns		10/8/24/04		10/8/24/04	

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

KF 837468

Form Approved. OMB No. 2030-0038. Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. OKD051961183100002		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address SEQUOYAH FUELS CORP P.O. Box 610 GORE, OK 74435		4. Generator's Phone (918) 489-5511		5. Transporter 1 Company Name SMITH SYSTEMS TRANSPORTATION		6. US EPA ID Number NE D986382133		7. Transporter 2 Company Name	
9. Designated Facility Name and Site Address CLEAN HARBORS P.M., LLC RT. 3, Box 65, Hwy 169 North CORREYVILLE, KS 67337		10. US EPA ID Number KSD981506025		A. State Manifest Document Number		B. State Generator's ID		C. State Transporter's ID	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) POLYCHLORINATED BIPHENYLS XPCB SOLID, 9 UN2315, EG II RQ HAZARDOUS WASTE, SOLID MS.		12. Containers No. Type 1 CM		13. Total Quantity 37981		14. Unit W/Vol L		Waste No.	
15. Special Handling Instructions and Additional Information Out of service 8-2304 ADN# 88 TL815 with 127484 Box# 25151		16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.		K. Handling Codes for Wastes Listed Above					
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name: Terry Stephen Signature: Terry Stephen Month Day Year: 10/8/24/04		18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name: _____ Signature: _____ Month Day Year: _____		19. Discrepancy Indication Space Discrepancy Reported to John Ellis 8-2504 11A) Weight 17981 K. (P)		20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name: Bobbie Haems Signature: Bobbie Haems Month Day Year: 10/8/25/04			



Emergency Contact Telephone Number

KE837468

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

OKDO51961.78.3

Manifest Document No.

03002

2. Page 1

of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

SEADYAH FUELS CORP

PO BOX 610

MORE OK 74435

4. Generator's Phone

(918) 489-5511

5. Transporter 1 Company Name

SMITH SYSTEMS TRANSPORTATION

6. US EPA ID Number

NEO 986382133

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

CLEAN HARBORS PPM, LLC

RT 3 BOX 65, HWY 164 NORTH

COFFEEVILLE, KS 67337

10. US EPA ID Number

KSD98.15.08.025

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

HM

X PCB-SOLID, 9, UN 2315, EG II

12. Containers

No.

Type

1 CM

13. Total Quantity

19218

Unit

kg

14. Unit

kg

Waste No.

J. Additional Descriptions for Materials Listed Above

Concrete Rubble

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

AUN# TL605

Storage Date 8-24-04

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimized the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

Discrepancy Reported to John Ellis 8-26-04

11A) Received 42280 lbs, 19218K.

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

Robert Harris

Robert Harris

10/8/2004

GENERATOR'S COPY

Emergency Contact Telephone Number

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address		OK.D.05.196.1783		A. State Manifest Document Number (8)		
SEQUOIA FUELS CORP PO BOX 610 GORE, OK 74435				B. State Generator's ID		
4. Generator's Phone (918) 489-5511		6. US EPA ID Number		C. State Transporter's ID		
5. Transporter 1 Company Name		NED 986382133		D. Transporter's Phone		
SMITH SYSTEMS TRANSPORTATION		8. US EPA ID Number		E. State Transporter's ID		
7. Transporter 2 Company Name		10. US EPA ID Number		F. Transporter's Phone		
9. Designated Facility Name and Site Address				G. State Facility's ID		
CLEAN HARBORS PPM, LLC RT 3 BOX 65, HWY 169 NORTH COFFEYVILLE, KS 67337		1KSD981508025		H. Facility's Phone		620-251-6380
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity	14. Unit	Waste No.
HM Polychlorinated biphenyls		No. Type				
a. PCB-SOLID, 9, UN 2315, E6 II		1. CM		40.520	IP	
b. RD HAZARDOUS WASTE SOLID						
c. N.O.S.						
d.						
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
Contaminated Sand						
15. Special Handling Instructions and Additional Information						
Storage Date 8-24-04 BOX 25177 TL655						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimized the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name		Signature		Month Day Year		
Craig Harlin		Craig Harlin		09/25/04		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Month Day Year		
Printed/Typed Name		Signature		Month Day Year		
Terry Stephen		Terry Stephen		08/25/04		
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year		
Printed/Typed Name		Signature		Month Day Year		
19. Discrepancy Indication Space						
Discrepancy Reported to John Ellis. 8-26-04 Received 38620 lbs, 17534 K. (R)						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Month Day Year		
Bobbie Harms		Bobbie Harms		10/26/04		

ORIGINAL — RETURN TO GENERATOR

Emergency Contact Telephone Number

KE 837468

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

OK 0051961783

Manifest
Document No.

00005

2. Page 1
of 1Information in the shaded areas is
not required by Federal law.

3. Generator's Name and Mailing Address

SEQUOYAH FUELS CORP.

PO BOX 610

GORE, OK 74435

4. Generator's Phone (918)

489-5511

5. Transporter 1 Company Name

SMITH SYSTEMS

6. US EPA ID Number

MED9863821.3.3

7. Transporter 2 Company Name

8. US EPA ID Number

10. US EPA ID Number

9. Designated Facility Name and Site Address

CLEAN HARBORS PAM, LLC

RT 3 BOX 65, HWY 169 NORTH

COFFEYVILLE, KS 67337

KSD.98.1508025

A. State Manifest Document Number (not required for non-hazardous materials)

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone

620-251-6380

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

HM

a. PCB - SOLID, 9, UN 2315, PG II

Polychlorinated biphenyls n.o.s.

12. Containers

No.

Type

1 CM

13. Total
Quantity

14100

14. Unit
Weight

163

J. Additional Descriptions for Materials Listed Above

CONCRETE RUBBLE & SAND

ADN# TL90S 100# 127513

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Storage date: 8-24-04

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name

Craig Hartin

Signature

Craig Hartin

Month Day Year

08/27/04

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Terry Stephen

Signature

Terry Stephen

Month Day Year

08/27/04

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

Discrepancies Reported to John Ellis.

Received 31020 lbs, 14100K.

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name

Bobbie Hays

Signature

Bobbie Hays

Month Day Year

08/27/04

ORIGINAL — RETURN TO GENERATOR

Emergency Contact Telephone Number

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

OK DO 51961783

Manifest
Document No.2. Page 1
of 1Information in the shaded areas is
not required by Federal law.

3. Generator's Name and Mailing Address

SEQUOYA FUELS CORP
PO BOX 610
COPE, OK 74435

A. State Manifest Document Number

B. State Generator's ID

4. Generator's Phone

(918) 489-5511

5. Transporter 1 Company Name

SMITH SYSTEMS TRANSPORTATION

6. US EPA ID Number

NE D 986382133

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address

CLEAN HARBORS PPM, LLC
RT 3 BOX 610, HWY 169 NORTH
COFFEYVILLE, KS 67337

10. US EPA ID Number

KSD.98150802

G. State Facility's ID

H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

HM

a. PCB-SOLID, 9, UN2315, PG II

12. Containers

No.

Type

13. Total
Quantity14. Unit
Wt/Vol

Waste No.

b.

c.

d.

J. Additional Descriptions for Materials Listed Above

CONCRETE RUBBLE 9 SAND

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

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Printed/Typed Name

Craig Harkin

Signature

Craig Harkin

Month Day Year

11 27 04

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JAN D. SARG

Signature

JAN D. SARG

Month Day Year

11 27 04

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 18.

Printed/Typed Name

Signature

Month Day Year

11 27 04

GENERATOR'S COPY