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NMED Hazardous Waste Bureau

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Environmental Protection Division
Water Quality & RCRA (ENV-RCRA)
P.O. Box 1663, Mail Stop K490
Los Alamos, New Mexico 87545
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Date: June 12, 2007
Refer To: ENV-RCRA: 07-123

Mr. James Bearzi
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

SUBJECT: REQUEST FOR "CONTAINED-IN" DETERMINATION FOR ASPHALT AND ASSOCIATED SOIL AT SWMU 21-024(c) FROM THE TA-21 DELTA PRIME SITE AGGREGATE AREA REMEDIATION PROJECT

Dear Mr. Bearzi:

The purpose of this letter is to request that the New Mexico Environment Department (NMED) Hazardous Waste Bureau use its authority under 20.4.1.200 NMAC 261.3(f) to determine that environmental media and debris at the Los Alamos National Laboratory (LANL) Technical Area (TA)-21, Delta Prime Site Aggregate Area (DPSAA) do not warrant management as F-listed hazardous waste, pursuant to the requirements of 20.4.1.200 NMAC 261.31. The waste was generated as part of corrective actions for SWMU 21-024(c) and consists of asphalt and associated soil that was removed from on top of a drainline to a septic tank.

A "contained-in" determination was approved by NMED for another waste stream (soil and associated metal debris) for SWMU 21-024(c) on May 29, 2007. Data for this waste stream had not been available at the time of the previous request. In the future, LANL will attempt to include all waste streams for a given SWMU in site-specific contained-in requests, to minimize the number of requests being made to NMED.

The SWMU 21-024(c) at DPSAA was a septic tank and an associated drain line that ran from a machine shop to the tank, in a closed system. The asphalt and soil waste (approximately 6 cubic yards) was containerized in a DOT-approved roll-off bin and is being managed as hazardous waste in a less-than-90-day accumulation area at TA-21 pending this "contained-in" determination. Waste characterization samples were collected directly from the roll-off bin. Total analytical results indicate that the asphalt and soil contain very low concentrations of organic constituents that may have originated from processes for which F-listed hazardous wastes are identified. The organic constituents are also a chemical constituent of asphalt itself. Results also indicate that the asphalt and soil do not contain characteristic hazardous waste.

Toxicity Characteristic Leaching Procedure (TCLP) concentrations for all metals were below the regulatory levels. All validated organic and metals data from sampling and analysis of the asphalt are included as enclosure 1 to this letter. Radionuclide data are also included for information purposes.

LANL has compared the maximum detected concentrations of benzene and toluene (F005 listed organic constituents), with NMED Soil Screening Levels (SSLs) and U.S. Environmental Protection Agency (EPA) Region 6 Human Health Medium-Specific Screening Levels (MSSLs) to determine whether the detected concentrations present a health-based concern for an industrial receptor. Acetone, ethylbenzene, and xylenes (F003 listed organic constituents) were also detected, however these constituents are not present in the waste at high enough concentrations to exhibit the characteristic of ignitability for which they are listed. Industrial screening levels were selected because the anticipated final disposition of the asphalt and soil is at an authorized waste disposal facility for low-level radioactive waste.

The comparisons in Table 1 are limited to those organic constituents that are potentially F-listed hazardous waste (i.e., benzene, and toluene) based on historical knowledge of their uses. The maximum detected concentrations of benzene and toluene in the asphalt and soil are below the industrial SSLs and MSSLs as shown in Table 1.

According to EPA documents and associated guidance, the authorized state may also make a determination on a case-specific basis as to how the Land Disposal Restrictions (LDRs) apply to the waste when a "contained-in" determination has been made. Because the maximum detected concentrations of benzene and toluene from the TA-21 DPSAA remediation project are below their respective LDR treatment standards, as shown in Table 1, LANL also requests a determination from NMED that LDRs will not apply to this asphalt and associated soil, and that it may be disposed of as nonhazardous waste.

LANL believes that a "contained-in" determination for the organic constituents shown in Table 1 is appropriate because it would be protective of human health and the environment, and would allow for cost-effective removal of the asphalt and soil from the TA-21, DPSAA Remediation project currently staged at TA-21.

If you have any questions, please contact me at 667-0666 or Gene Turner at 667-5794.

Sincerely,

A. R. Grieggs

Anthony R. Grieggs
Group Leader
Water Quality & RCRA (ENV-RCRA) Group

ARG:KV/lm

Enclosures: a/s

Cy: John Young, NMED/HWB, Santa Fe, NM, w/enc.
David Cobrain, NMED/HWB, Santa Fe, NM, w/enc.
Gene Turner, LASO/EO, w/enc., MS A316
Michael B. Mallory, PADOPS, w/o enc., MS A102
Richard S. Watkins, ADESHQ, w/o enc., MS K491
Tori George, ENV-DO, w/enc., MS J978
Kelly VanDerpoel, ENV-RCRA, w/enc., MS K490
John Tymkowych, ENV-RCRA, w/enc., MS K490
Roy Bohn, ERSS-RS, w/enc., MS C349
Mark Thacker, ERSS-RS, w/enc., MS C349
Bill Criswell, TA-21 Closure Project, w/o enc., MS C349
Allan Chaloupka, TA-21 Closure Project, w/o enc., MS C349
TA-21 Project File, w/enc., MS C349
ENV-RCRA, File, w/enc., MS K490
IRM-RMMSO, w/enc., MS A150

Table 1
Comparison of Potential F-Listed Organic Constituents Detected in TA-21 DPSAA Soil Samples to SSLs, MSSLs, and LDR Treatment Standards

Constituent	Sample No.	Matrix	Maximum Concentration (mg/kg)	NMED Industrial SSL (mg/kg)[1]	EPA Region 6 Industrial/Outdoor Worker MSSL (mg/kg)[2]	LDR Treatment Standard (mg/kg)[3]
Toluene	RE21-07-76250	Solid	0.232	252	520	10
Benzene	RE21-07-76250	Solid	0.0108	25.8	16	10

mg/kg = milligrams per kilogram
MSSL = Medium Specific Screening Level
NMED = New Mexico Environment Department
LDR = Land Disposal Restrictions
SSL= Soil Screening Level
1 – From "Technical Background Document for Development of Soil Screening Level" Revision 4.0 June 2006, New Mexico Environment Department
2 – From "EPA Region 6 Human Health Medium-Specific Screening Levels", February 2007, US Environmental Protection Agency
3 – LDR Treatment Standards for Hazardous Wastes, Nonwastewaters, as provided in 40 CFR 268.40 and adopted by 20.4.1.800 NMAC

URI	REQUEST_NUM	SAMPLE_ID	RFI_CLASS	NALYTICAL_SUI	NYL_METH_COD	ANALYTE_NAME	D_SAMPLE_VAL	REPORTING_U	LUTION_FACTO	FU4_QUAL
43932642	6867S	RE21-07-76250	INORGANIC	CN	SW-846:9012A	Cyanide (Total)	0.249	MG/KG	1	U
43948022	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	D[2,4-]	0.0505	MG/KG	10	U
43948002	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	Dalapon	1.01	MG/KG	10	U
43948092	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	DB[2,4-]	0.0505	MG/KG	10	U
43948082	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	Dicamba	0.0505	MG/KG	10	U
43948062	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	Dichlorprop	0.0505	MG/KG	10	U
43948042	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	Dinoseb	0.0505	MG/KG	10	U
43948012	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	MCPA	10.1	MG/KG	10	U
43948052	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	MCPP	10.1	MG/KG	10	U
43948032	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	T[2,4,5-]	0.0505	MG/KG	10	U
43948072	6866S	RE21-07-76250	ORGANIC	HERB	SW-846:8151A	TP[2,4,5-]	0.0505	MG/KG	10	U
43933022	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:6020_TCLP	Arsenic	50	UG/L	1	U
43933032	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:6020_TCLP	Barium	360	UG/L	1	
43933042	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:6020_TCLP	Cadmium	10	UG/L	1	U
43933052	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:6020_TCLP	Chromium	24	UG/L	1	U
43933062	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:6020_TCLP	Lead	22	UG/L	1	
43933082	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:6020_TCLP	Selenium	50	UG/L	1	U
43933092	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:6020_TCLP	Silver	10	UG/L	1	U
43933072	6867S	RE21-07-76250	INORGANIC	METAL_TCLP	846:7470A_TCL	Mercury	2	UG/L	1	U
43932402	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Aluminum	3670	MG/KG	1	J+
43932422	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Arsenic	1.74	MG/KG	1	
43932432	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Barium	59	MG/KG	1	J
43932452	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Cadmium	0.493	MG/KG	1	U
43932462	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Calcium	2570	MG/KG	1	
43932472	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Chromium	2.72	MG/KG	1	
43932482	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Cobalt	2.75	MG/KG	1	
43932492	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Copper	13.2	MG/KG	1	
43932502	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Iron	2780	MG/KG	1	
43932512	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Lead	9.78	MG/KG	1	J+
43932522	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Magnesium	1990	MG/KG	1	
43932532	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Manganese	148	MG/KG	1	J
43932562	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Potassium	476	MG/KG	1	
43932572	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Selenium	1.48	MG/KG	1	U
43932592	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Sodium	191	MG/KG	1	
43932612	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Vanadium	8.85	MG/KG	1	
43932622	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6010B	Zinc	23.2	MG/KG	1	
43932412	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6020	Antimony	0.389	MG/KG	2	UJ
43932442	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6020	Beryllium	0.0699	MG/KG	2	J
43932552	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6020	Nickel	1.46	MG/KG	2	
43932582	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6020	Silver	0.195	MG/KG	2	U
43932602	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:6020	Thallium	0.195	MG/KG	2	U
43932542	6867S	RE21-07-76250	INORGANIC	METALS	SW-846:7471A	Mercury	0.0249	MG/KG	1	
43948102	6866S	RE21-07-76250	ORGANIC	PCB	SW-846:8082	Aroclor-1016	0.336	MG/KG	20	U
43948112	6866S	RE21-07-76250	ORGANIC	PCB	SW-846:8082	Aroclor-1221	0.336	MG/KG	20	U
43948122	6866S	RE21-07-76250	ORGANIC	PCB	SW-846:8082	Aroclor-1232	0.336	MG/KG	20	U
43948132	6866S	RE21-07-76250	ORGANIC	PCB	SW-846:8082	Aroclor-1242	0.336	MG/KG	20	U
43948142	6866S	RE21-07-76250	ORGANIC	PCB	SW-846:8082	Aroclor-1248	0.336	MG/KG	20	U
43948152	6866S	RE21-07-76250	ORGANIC	PCB	SW-846:8082	Aroclor-1254	0.336	MG/KG	20	U
43948162	6866S	RE21-07-76250	ORGANIC	PCB	SW-846:8082	Aroclor-1260	0.336	MG/KG	20	U
43948222	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Aldrin	0.0404	MG/KG	20	U
43948172	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	BHC[alpha-]	0.0404	MG/KG	20	U
43948182	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	BHC[beta-]	0.0404	MG/KG	20	U
43948192	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	BHC[delta-]	0.0404	MG/KG	20	UJ
43948202	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	BHC[gamma-]	0.0404	MG/KG	20	U
43948372	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	]	0.0404	MG/KG	20	U
43948362	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	ma-]	0.0404	MG/KG	20	U
43948292	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	DDD[4,4'-]	0.0807	MG/KG	20	UJ
43948262	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	DDE[4,4'-]	0.0807	MG/KG	20	U
43948312	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	DDT[4,4'-]	0.0807	MG/KG	20	U
43948252	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Dieldrin	0.0807	MG/KG	20	U
43948242	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Endosulfan I	0.0404	MG/KG	20	U
43948282	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Endosulfan II	0.0807	MG/KG	20	U
43948302	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Sulfate	0.0807	MG/KG	20	U
43948272	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Endrin	0.0807	MG/KG	20	U
43948342	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Endrin Aldehyde	0.0807	MG/KG	20	U
43948332	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Endrin Ketone	0.0807	MG/KG	20	U
43948212	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Heptachlor	0.0404	MG/KG	20	U
43948232	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	Epoxide	0.0404	MG/KG	20	U
43948322	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	4'-]	0.404	MG/KG	20	U
43948352	6866S	RE21-07-76250	ORGANIC	PEST	SW-846:8081A	(Technical	2.02	MG/KG	20	U
43948742	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Acenaphthene	0.336	MG/KG	10	U
43948732	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Acenaphthylene	0.336	MG/KG	10	U
43948402	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Aniline	3.36	MG/KG	10	U
43948882	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Anthracene	0.336	MG/KG	10	U
43948842	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Azobenzene	3.36	MG/KG	10	UJ
43948932	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	cene	0.336	MG/KG	10	U
43949002	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Benzo(a)pyrene	0.336	MG/KG	10	U
43948982	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	thene	0.336	MG/KG	10	U
43949032	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	lene	0.336	MG/KG	10	U
43948992	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	thene	0.336	MG/KG	10	U
43948592	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Benzoic Acid	6.73	MG/KG	10	UJ
43948462	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Benzyl Alcohol	3.36	MG/KG	10	U
43948572	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	chloroethoxy)m	3.36	MG/KG	10	U
43948422	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	chloroethyl)ethe	3.36	MG/KG	10	U
43948962	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	ethylhexyl)phtha	1.68	MG/KG	10	U
43948852	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	phenylether[4-]	3.36	MG/KG	10	U
43948922	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	alate	3.36	MG/KG	10	U
43948642	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	methylphenol[4-	3.36	MG/KG	10	U
43948622	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Chloroaniline[4-]	3.36	MG/KG	10	U
43948692	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	ne[2-]	0.336	MG/KG	10	U
43948432	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	]	3.36	MG/KG	10	U
43948802	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	phenyl[4-] Ether	3.36	MG/KG	10	U
43948952	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Chrysene	0.336	MG/KG	10	U
43949022	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	racene	0.336	MG/KG	10	U
43948762	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Dibenzofuran	3.36	MG/KG	10	U
43948472	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	e[1,2-]	3.36	MG/KG	10	U
43948442	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	e[1,3-]	3.36	MG/KG	10	U

43948452	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	e[1,4-]	3.36	MG/KG	10	U
43948942	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	ne[3,3'-]	3.36	MG/KG	10	U
43948582	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	2,4-]	3.36	MG/KG	10	U
43948772	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Diethylphthalate	3.36	MG/KG	10	U
43948722	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Phthalate	3.36	MG/KG	10	U
43948562	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	2,4-]	3.36	MG/KG	10	U
43948892	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	butylphthalate	3.36	MG/KG	10	U
43948812	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	methylphenol[4,	3.36	MG/KG	10	U
43948752	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	4-]	6.73	MG/KG	10	UJ
43949052	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	4-]	3.36	MG/KG	10	U
43949062	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	6-]	3.36	MG/KG	10	U
43948972	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	octylphthalate	3.36	MG/KG	10	U
43948832	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Diphenylamine	3.36	MG/KG	10	U
43948902	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Fluoranthene	0.336	MG/KG	10	U
43948792	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Fluorene	0.336	MG/KG	10	U
43949042	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	ene	3.36	MG/KG	10	U
43948632	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	diene	3.36	MG/KG	10	U
43948662	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	opentadiene	3.36	MG/KG	10	U
43948522	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	ne	3.36	MG/KG	10	U
43949012	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	cd)pyrene	0.336	MG/KG	10	U
43948542	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Isophorone	3.36	MG/KG	10	U
43948652	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	ne[2-]	0.336	MG/KG	10	U
43948492	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	]	3.36	MG/KG	10	U
43948512	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	,4-]	3.36	MG/KG	10	U
43948612	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Naphthalene	0.336	MG/KG	10	U
43948702	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Nitroaniline[2-]	3.36	MG/KG	10	U
43948712	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Nitroaniline[3-]	3.36	MG/KG	10	U
43948822	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Nitroaniline[4-]	3.36	MG/KG	10	U
43948532	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Nitrobenzene	3.36	MG/KG	10	U
43948552	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Nitrophenol[2-]	3.36	MG/KG	10	U
43948782	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Nitrophenol[4-]	3.36	MG/KG	10	UJ
43948382	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	amine[N-]	3.36	MG/KG	10	U
43948502	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	propylamine[N-]	3.36	MG/KG	10	U
43948482	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	chloropropane)[	3.36	MG/KG	10	U
43948862	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	nol	3.36	MG/KG	10	U
43948872	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Phenanthrene	0.336	MG/KG	10	U
43948412	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Phenol	3.36	MG/KG	10	U
43948912	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Pyrene	0.336	MG/KG	10	U
43948392	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	Pyridine	3.36	MG/KG	10	U
43948602	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	e[1,2,4-]	3.36	MG/KG	10	U
43948682	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	2,4,5-]	3.36	MG/KG	10	U
43948672	6866S	RE21-07-76250	ORGANIC	SVOC	SW-846:8270C	2,4,6-]	3.36	MG/KG	10	U
43949072	6866S	RE21-07-76250	ORGANIC	TPH-DRO	846:8015M_EX	Hydrocarbons	239	MG/KG	10	J
43949082	6866S	RE21-07-76250	ORGANIC	TPH-GRO	846:8015M_PU	Hydrocarbons	0.103	MG/KG	1	U
43947452	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Acetone	0.0441	MG/KG	1	J+
43947612	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Benzene	0.0108	MG/KG	1	J+
43947862	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Bromobenzene	0.0101	MG/KG	1	UJ
43947552	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	thane	0.0101	MG/KG	1	U
43947652	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ethane	0.0101	MG/KG	1	U
43947822	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Bromoform	0.0101	MG/KG	1	UJ
43947412	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Bromomethane	0.0101	MG/KG	1	U
43947522	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Butanone[2-]	0.0225	MG/KG	1	U
43947952	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	]	0.0101	MG/KG	1	UJ
43947932	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ec-]	0.0101	MG/KG	1	UJ
43947922	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	rt-]	0.0101	MG/KG	1	UJ
43947482	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Disulfide	0.0505	MG/KG	1	U
43947592	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Tetrachloride	0.0101	MG/KG	1	U
43947762	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Chlorobenzene	0.0101	MG/KG	1	U
43947742	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	methane	0.0101	MG/KG	1	U
43947422	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Chloroethane	0.0101	MG/KG	1	U
43947562	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Chloroform	0.0101	MG/KG	1	U
43947392	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Chloromethane	0.0101	MG/KG	1	U
43947882	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	]	0.0101	MG/KG	1	UJ
43947912	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	]	0.0101	MG/KG	1	UJ
43947962	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Chloropropane[	0.0101	MG/KG	1	UJ
43947752	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	1,2-]	0.0101	MG/KG	1	U
43947642	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	e	0.0101	MG/KG	1	U
43947992	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	e[1,2-]	0.0101	MG/KG	1	UJ
43947972	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	e[1,3-]	0.0101	MG/KG	1	UJ
43947982	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	e[1,4-]	0.0101	MG/KG	1	UJ
43947382	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	methane	0.0101	MG/KG	1	UJ
43947512	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	1,1-]	0.0101	MG/KG	1	U
43947602	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	1,2-]	0.0101	MG/KG	1	U
43947442	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	1,1-]	0.0101	MG/KG	1	U
43947532	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	cis-1,2-]	0.0101	MG/KG	1	U
43947502	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	rans-1,2-]	0.0101	MG/KG	1	U
43947632	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	[1,2-]	0.0101	MG/KG	1	U
43947712	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	[1,3-]	0.0101	MG/KG	1	U
43947542	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	[2,2-]	0.0101	MG/KG	1	U
43947582	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	[1,1-]	0.0101	MG/KG	1	U
43947662	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	[cis-1,3-]	0.0101	MG/KG	1	U
43947692	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	[trans-1,3-]	0.0101	MG/KG	1	U
43947782	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Ethylbenzene	0.0131	MG/KG	1	J+
43947722	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Hexanone[2-]	0.0225	MG/KG	1	U
43947472	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Iodomethane	0.0505	MG/KG	1	U
43947832	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	e	0.0101	MG/KG	1	UJ
43947942	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	[4-]	0.0101	MG/KG	1	UJ
43947672	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	pentanone[4-]	0.0505	MG/KG	1	U
43947492	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Chloride	0.0505	MG/KG	1	UJ
43947872	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	1-]	0.00978	MG/KG	1	J
43947812	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Styrene	0.0101	MG/KG	1	U
43947772	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ne[1,1,1,2-]	0.0101	MG/KG	1	U
43947842	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ne[1,1,2,2-]	0.0101	MG/KG	1	UJ
43947732	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ne	0.0101	MG/KG	1	U
43947682	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Toluene	0.232	MG/KG	1	J+
43947462	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	trifluoroethane[1	0.0505	MG/KG	1	U
43947572	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	1,1,1-]	0.0101	MG/KG	1	U
43947702	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	1,1,2-]	0.0101	MG/KG	1	U

43947622	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Trichloroethene	0.0101	MG/KG	1	U
43947432	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ethane	0.0101	MG/KG	1	U
43947852	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	e[1,2,3-]	0.0101	MG/KG	1	UJ
43947902	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ne[1,2,4-]	0.0156	MG/KG	1	U
43947892	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	ne[1,3,5-]	0.00518	MG/KG	1	U
43947402	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Vinyl Chloride	0.0101	MG/KG	1	U
43947802	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	Xylene[1,2-]	0.0104	MG/KG	1	J+
43947792	6866S	RE21-07-76250	ORGANIC	VOC	SW-846:8260B	]+Xylene[1,4-]	0.0203	MG/KG	1	J+

URI	REQUEST_NUM	SAMPLE_ID	RFI_CLASS	NALYTICAL_SUI	NYL_METH_COD	ANALYTE_NAME	D_SAMPLE_VAL	D_UNCERTAINT	REPORTING_U	MDA	RCENT_MOISTU	LUTION_FACTO	FU4_QUAL
43932652	6867S	RE21-07-76250	RAD	AM_241	241	Americium-241	0.000984	0.014	PCI/G	0.041		1	U
43932662	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Americium-241	0.00532	0.064	PCI/G	0.2		1	U
43932672	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Bismuth-211	1.88	0.23	PCI/G	0.32		1	R
43932682	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Bismuth-214	0.61	0.067	PCI/G	0.097		1	
43932692	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Cadmium-109	0.977	0.45	PCI/G	1.5		1	U
43932702	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Cerium-139	0.0662	0.026	PCI/G	0.051		1	R
43932712	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Cesium-134	0.0464	0.02	PCI/G	0.075		1	U
43932722	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Cesium-137	0.0117	0.018	PCI/G	0.059		1	U
43932732	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Cobalt-60	0.034	0.021	PCI/G	0.058		1	U
43932742	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Europium-152	-0.0778	0.067	PCI/G	0.16		1	U
43932752	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Lanthanum-140	0.0309	0.035	PCI/G	0.12		1	U
43932762	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Lead-212	0.711	0.057	PCI/G	0.09		1	
43932772	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Lead-214	0.653	0.081	PCI/G	0.11		1	
43932782	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Mercury-203	0.0275	0.021	PCI/G	0.073		1	U
43932792	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Potassium-40	14.7	0.77	PCI/G	0.45		1	
43932802	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Radium-223	0.326	0.35	PCI/G	1.1		1	U
43932812	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Radium-224	2.36	0.65	PCI/G	1		1	R
43932822	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Radium-226	0.61	0.067	PCI/G	0.097		1	
43932832	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Radium-228	0.782	0.12	PCI/G	0.2		1	
43932842	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Ruthenium-106	0.00523	0.14	PCI/G	0.46		1	U
43932852	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Sodium-22	-0.0165	0.022	PCI/G	0.064		1	U
43932862	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Strontium-85	0.0828	0.022	PCI/G	0.074		1	R
43932872	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Thallium-208	0.243	0.034	PCI/G	0.05		1	
43932882	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Thorium-227	0.057	0.19	PCI/G	0.65		1	U
43932892	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Thorium-231	0.506	0.17	PCI/G	0.36		1	R
43932902	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Thorium-234	1.5	0.75	PCI/G	1.7		1	U
43932912	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Tin-113	-0.0285	0.021	PCI/G	0.069		1	U
43932922	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Uranium-235	0.031	0.12	PCI/G	0.36		1	U
43932932	6867S	RE21-07-76250	RAD	GAMMA_SPEC	EPA:901.1	Yttrium-88	-0.00138	0.016	PCI/G	0.052		1	U
43932942	6867S	RE21-07-76250	RAD	GROSSAB	EPA:900	alpha/beta	6.43	1.5	PCI/G	2.9		1	
43932952	6867S	RE21-07-76250	RAD	GROSSAB	EPA:900	Gross beta	19.8	2.5	PCI/G	5.4		1	
43932962	6867S	RE21-07-76250	RAD	H3	EPA:906.0	Tritium	0.007304286	0.001141783	PCI/G	180	1.54	1	
43932972	6867S	RE21-07-76250	RAD	ISO_PU	300:ISOPU	Plutonium-238	0.00347	0.0078	PCI/G	0.024		1	U
43932982	6867S	RE21-07-76250	RAD	ISO_PU	300:ISOPU	239/Plutonium-	0.0208	0.0078	PCI/G	0.034		1	U
43932992	6867S	RE21-07-76250	RAD	ISO_U	HASL-300:ISOU	Uranium-234	0.433	0.038	PCI/G	0.048		1	
43933002	6867S	RE21-07-76250	RAD	ISO_U	HASL-300:ISOU	Uranium-235	0.0489	0.011	PCI/G	0.032		1	
43933012	6867S	RE21-07-76250	RAD	ISO_U	HASL-300:ISOU	Uranium-238	0.498	0.042	PCI/G	0.069		1	
43932632	6867S	RE21-07-76250	RAD	SR_90	EPA:905.0	Strontium-90	-0.0664	0.046	PCI/G	0.2		1	U

Field1
Reporting Qualifier Description
U = nondetect
UJ = estimated non detect
J = estimated detect
R = reject
Null = detect