



TECHNOLOGY FOR THE RIGHT LOOK, RIGHT NOW.

Fax Transmission

Attention: Ms. Eva Chu Date: 11/04/98
 Company: _____ From: Paul Jones
 Phone: _____ Company: Artesian Environmental
 Fax: (510) 337-9335 Phone: (415) 451-6434 (pager)
 Number of Pages (including Cover Sheet): 10

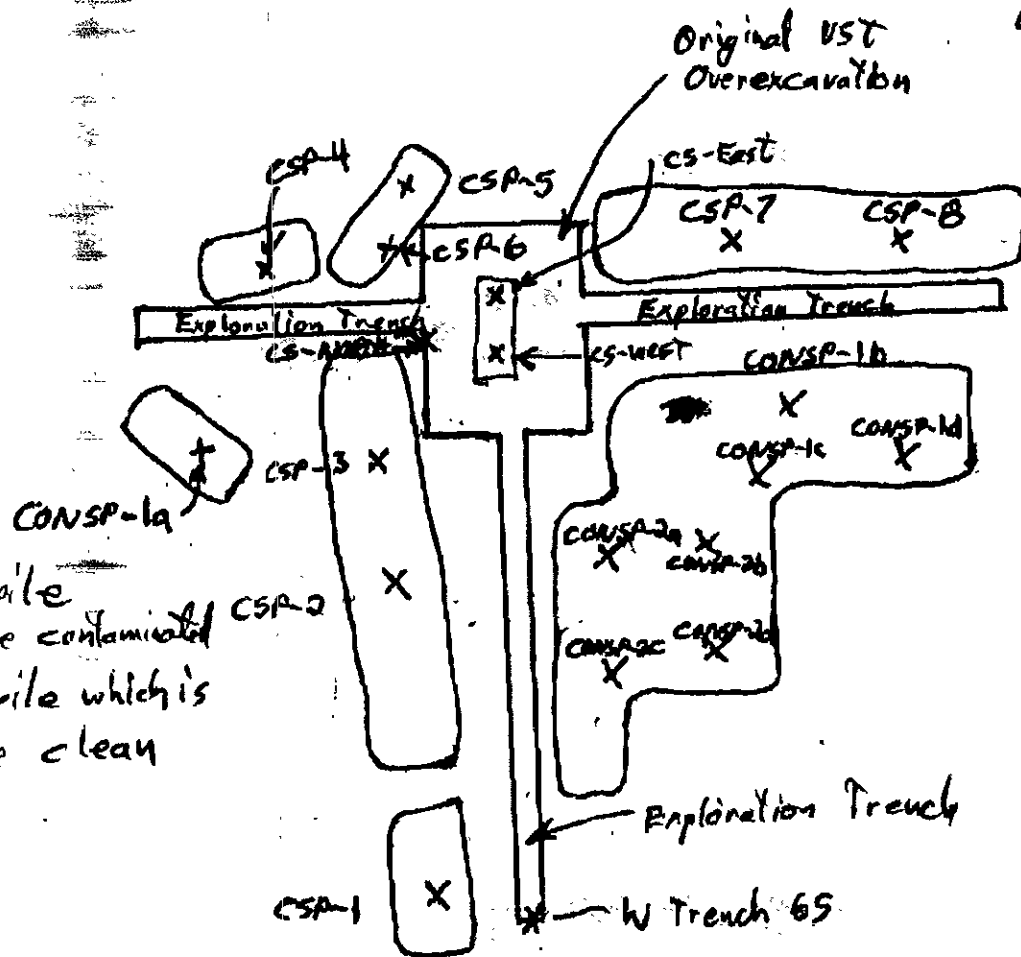
Comments: RE: Laboratory Analytical Results (Soils)
603 Key Route Blvd, Albany

Following are all Lab results available at this time. I will call you on 11/05/98 to discuss.


J. Jones

Albany Unified
School District
603 Key Ave Blvd.
Albany, CA
Confirmation Sample
Locations

← North



CONSP denotes stockpile
which is suspected to be contaminated
CSP denotes stockpile which is
suspected to be clean

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Artesian Environmental 229 Tewksbury Avenue Point Richmond, CA 94801	Client Project ID: #378-002-01; Albany USD	Date Sampled: 10/16/98
	Client Contact: Paul Jones	Date Received: 10/19/98
	Client P.O:	Date Extracted: 10/23/98
		Date Analyzed: 10/23/98


Petroleum Oil & Grease (with Silica Gel Clean-up) *
 EPA methods 413.1, 9070 or 9071; Standard Methods 5520 D/E&F or 503 D&E for solids and 5520 B&F or 503 A&E for liquids

Lab ID	Client ID	Matrix	Oil & Grease*
97509	W Trench 65	S	14,000
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		5 mg/L
	S		50 mg/kg

* water samples are reported in mg/L, wipe samples in mg/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in mg/L
 h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5vol. % sediment

DHS Certification No. 1644

14 Edward Hamilton, Lab Director

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	Client Contact: Paul Jones	Date Received: 10/19/98
	Client P.O.:	Date Extracted: 10/21/98
		Date Analyzed: 10/24-10/25/98

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *				
EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)				
Lab ID	Client ID	Matrix	TPH(d)*	% Recovery Surrogate
97509	W Trench 65	S	2500,b.g	100
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

* cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or, surrogate has been diminished by dilution of original extract.

*The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern, c) aged diesel? is significant), d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present, g) oil range compounds are significant; h) lighter than water immiscible sheen is present, i) liquid sample that contains greater than ~5 vol % sediment.

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Chicago USD Date Analyzed: ...

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	Client Contact: Paul Jones	Date Received: 10/19/98
	Client P.O:	Date Extracted: 10/21/98
		Date Analyzed: 10/22-10/23/98


Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*
 EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)*	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	% Recovery Surrogate
97509	W Trench 65	S	—	—	ND	0.067	ND	0.79	94
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		50 ug/L	5.0	0.5	0.5	0.5	0.5	
	S		1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

* cluttered chromatogram; sample peak coelutes with surrogate peak

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant (aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

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Artesian Environmental 229 Tewksbury Avenue Point Richmond, CA 94801	Client Project ID: #37B-002-01; AVSD	Date Sampled: 10/22/98
		Date Received: 10/23/98
	Client Contact: Paul Jones	Date Extracted: 10/23-10/28/98
	Client P.O:	Date Analyzed: 10/23-10/28/98

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*
 EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)*	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	% Recovery Surrogate
97622	CSP-1	S	--	--	ND	ND	ND	ND	105
97623	CSP-2	S	--	--	ND	ND	ND	ND	106
97624	CSP-3	S	--	--	ND	ND	ND	ND	107
97625	CSP-4	S	--	--	ND	ND	ND	ND	103
97626	CSP-5	S	--	--	ND	0.007	0.013	ND	107
97627	CSP-6	S	--	--	ND	ND	0.011	ND	99
97628	CSP-7	S	--	--	ND	ND	0.007	0.006	104
97629	CSP-8	S	--	--	ND	ND	ND	ND	103
97630	CONF-1a-d	S	--	--	ND	ND	ND	ND	109
97631	CONF-2a-d	S	--	--	ND	ND	ND	0.063	105
Reporting limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L.

* cluttered chromatogram; sample peak coelutes with surrogate peak

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

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		Date Received: 10/23/98
	Client Contact: Paul Jones	Date Extracted: 10/23/98
	Client P.O:	Date Analyzed: 10/26-10/29/98


Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *
 EPA methods modified 8015, and 3550 or 3510; California RWQC:9 (SF Bay Region) method (KFID(3550) or GC/FID(3510))

Lab ID	Client ID	Matrix	TPH(d) ^a	% Recovery Surrogate
97622	CSP-1	S	2.0.g	101
97623	CSP-2	S	26.b.g	101
97624	CSP-3	S	250.c.g	102
97625	CSP-4	S	ND	100
97626	CSP-5	S	2600.b.g	109
97627	CSP-6	S	990.b.g	109
97628	CSP-7	S	210.b.g	89
97629	CSP-8	S	2.7.g	89
97630	CONF-1a-1d	S	430.b.g	105
97631	CONF-2a-1	S	180.b.g	104
Reporting Limit unless otherwise stated: ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

^a water and vapor samples are reported in ug/l., wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

^b cluttered chromatogram resulting in coeluted surrogate and sample peaks, or, surrogate peak is on elevated baseline, or, surrogate has been diminished by dilution of original extract.

^c The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible phase is present; i) liquid sample that contains greater than ~5 vol. % sediment.

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	(Additional contact information or address)


Artesian Environmental 229 Tewksbury Avenue Point Richmond, CA 94801	Client Project ID: #378-002-01; AVSD	Date Sampled: 10/22/98
	Client Contact: Paul Jones	Date Received: 10/23/98
	Client P.O:	Date Extracted: 10/23-10/26/98
		Date Analyzed: 10/23-10/26/98

Petroleum Oil & Grease (with Silica Gel Clean-up) *
 EPA methods 413.1, 9070 or 9071; Standard Methods 5520 D/E&F or 503 D&E for solids and 5520 B&F or 503 A&E for liquids

Lab ID	Client ID	Matrix	Oil & Grease*
97622	CSP-1	S	380
97623	CSP-2	S	620
97624	CSP-3	S	2200
97625	CSP-4	S	ND
97626	CSP-5	S	2600
97627	CSP-6	S	3000
97628	CSP-7	S	1300
97629	CONSP-1a	S	ND
97630	CONP-1a-d	S	1300
97631	CONP-2a-d	S	440

Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W	5 mg/L
	S	50 mg/kg

* water samples are reported in mg/L, wipe samples in mg/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in mg/L
 h) lighter than water (immiscible when is present); i) liquid sample that contains greater than ~5ml % sediment.

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	Client Contact: Paul Jones	Date Extracted: 10/23/98
	Client P.O:	Date Analyzed: 10/26/98

Lead*

EPA analytical methods 6010/200.7, 239.2

Lab ID	Client ID	Matrix	Extraction ^a	Lead [*]	% Recovery Surrogate
97630	CONSP-1a-d	S	TTLIC	10	102

Reporting Limit unless otherwise stated; N/D means not detected above the reporting limit	S	TTLIC	3.0 mg/kg
	W	TTLIC	0.005 mg/L
	—	STLC, TCLP	0.2 mg/l.

* soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC/SPLP/TCLP extracts in mg/L


¹ Lead is analyzed using EPA method 6010 (ICP) for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

² EPA extraction methods 1311 (TCLP), 3010/3020 (water, TTLIC), 3040 (organic matrices, TTLIC), 3050 (solids, TTLIC); STLC - CA Title 23

³ surrogate diluted out of range; N/A means surrogate not applicable to this analysis

⁴ reporting limit raised due matrix interference

⁵ liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

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		Date Received: 10/23/98
	Client Contact: Paul Jones	Date Extracted: 10/26/98
	Client P.O:	Date Analyzed: 10/26/98

RCI (Reactivity, Corrosivity & Ignitability) for Solids
 California Title 22, Section 66261.21-66261.23

Lab ID	Client ID	Matrix	Reactivity ¹	Corrosivity ² (pH @ °C)	Ignitability ³
97630	CONSP-1a-d	S	negative	7.70 @ 23°	negative
97631	CONSP-2a-d	S	negative	6.87 @ 22°	negative

¹ negative means no obvious reaction with water, no evolution of gas upon contact with water, appears to contain no reactive cyanide or sulfide (<5 mg/kg cyanide and 50 mg/kg sulfide by EPA SW-846, chapter 7, modified), and shows no indication of explosivity.
² EPA method 9045: pH = -log(a_{H+}) @ °C: ± 0.1 units
³ negative for a soil means the absence of spontaneous combustion and the absence of flammability upon exposure to a naked flame.

DHS Certification No. 1644

 Edward Hamilton, Lab Director