STID 3566

JTS

July 30, 1996

ENV - STUDIES, SURVEYS & REPORTS
Former Texaco Service Station
1127 Lincoln Avenue, Alameda, CA
EBMUD Account No. 502-74621

ENVIRONMENTAL PROTECTION
96 AUG 20 PM 1:44

Mr. Raymond Maxwell
East Bay Municipal Utility District
Source Control Division, M.S. 702
P.O. Box 24055,
375 11th Street,
Oakland, California 94623

Dear Mr. Maxwell:

Enclosed is the *Semi-Annual Self-Monitoring Report Summary* for the subject site.

Regarding the above-referenced report,

I certify under penalty of law that, to the best of my knowledge, this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Any questions regarding this report may be directed to me at (510) 236-9139.

Best Regards,
Texaco Refining and Marketing, Inc.

Karen E. Petryna, P.E.
Project Manager
Environment Health & Safety

KEP:eg
P:\COVERS\KEPCVRS\1127ASMR.CVR

Enclosure

cc: Mr. Thomas Peacock
Alameda County
Hazardous Materials
1131 Harbor Bay Pky
Alameda, CA 94502-6577

Mr. Tim Ross
Kaprealian Engineering Inc
2401 Stanwell Dr., Suite 400
Concord, CA 94520

RRZielinski (w/o enclosure)RAOFile-UCPFile(w/ enclosure)

PR 2/3

FORMER TEXACO SERVICE STATION
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

PERMIT INFORMATION

- EBMUD Permit Number: 502-74621
- Sampling Frequency: Quarterly
- Parameters Reported: TPH-g & BTEX
- Reporting Period: 12/1/95 - 6/30/96
- Report Due: 7/31/96

PERMITTEE

Texaco Refining & Marketing, Inc.
108 Cutting Boulevard
Richmond, CA 94804

Contact: Karen E. Petryna, P.E.
Phone: (510) 236-9139

CONSULTANT

Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, CA 94520

Contact Sarkis A Soghomonian
Phone (510) 602-5100

FORMER TEXACO SERVICE STATION
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

GROUND WATER DISCHARGE DATA

Sample I.D.	Sample Date	Flow Rate (gpm)	Totalizer Readings (gallons)	Cumulative Volume (gallons)
Effluent	6/10/96	6.50	2,161,632	1,710,474
	4/9/96	N/A	NM	NM
	4/2/96	5.40	2,106,830	1,655,672
	3/13/96	6.80	2,077,696	1,626,538
	2/14/96	7.20	2,022,587	1,571,429
	1/2/96	7.10	1,882,521	1,431,363
	12/6/95	7.10	1,776,877	1,325,719
MW-5	6/10/96	NM	207,654	552,207
	4/9/96	N/A	NM	NM
	4/2/96	1.70	177,495	522,048
	3/13/96	1.48	161,468	506,021
	2/14/96	3.20	130,892	475,445
	1/2/96	3.65	80,097	424,650
	12/6/95	3.94	45,143	389,696
W-1	6/10/96	NM	128,340	182,578
	4/9/96	N/A	NM	NM
	4/2/96	4.13	118,902	173,140
	3/13/96	5.36	104,498	158,736
	2/14/96	5.50	87,490	141,728
	1/2/96	4.43	54,565	108,803
	12/6/95	4.01	30,965	85,203
W-2	6/10/96	Cycled Off	NM	NM
	4/9/96	Cycled Off	NM	NM
	4/2/96	Cycled Off	183,505	722,786
	3/13/96	Cycled Off	182,524	721,805
	2/14/96	Cycled Off	170,894	710,175
	1/2/96	Cycled Off	104,998	644,279
	12/6/95	Cycled Off	58,002	597,283

FLOW RATE FOR THIS REPORTING PERIOD: 5.73 gpm

TOTAL VOLUME OF GROUND WATER
DISCHARGED DURING THIS REPORTING PERIOD: 384,755 gallons

FORMER TEXACO SERVICE STATION
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

GROUND WATER SAMPLING RESULTS

Sample I.D.	Sample Date	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
Influent	6/10/96	NS	NS	NS	NS	NS
	4/9/96	NS	NS	NS	NS	NS
	4/2/96	260	33	4.6	0.81	7.1
	3/13/96	1,300	260	66	8.9	100
	2/14/96	230	11	1.6	2.1	4
	1/2/96	360	19	2.4	6.5	15
	12/6/95	820	100	22	4.5	57
A - Carbon Inf.	6/10/96	NS	NS	NS	NS	NS
	4/9/96	< 50	< 0.5	< 0.5	< 0.5	< 1
	4/2/96	< 50	2.6	0.73	< 0.5	2.2
	3/13/96	71	12	3.3	0.60	4.8
	2/14/96	< 50	5.3	1.4	< 0.5	2.5
	1/2/96	55	5.1	1.2	0.84	2.9
	12/6/95	63	7.2	1.9	0.72	5.3
B - BT-1	6/10/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	4/9/96	< 50	< 0.5	< 0.5	< 0.5	< 1
	4/2/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	3/13/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	2/14/96	*	*	*	*	*
	1/2/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	12/6/95	< 50	< 0.5	< 0.5	< 0.5	< 0.5
C - Effluent	6/10/96	NS	NS	NS	NS	NS
	4/9/96	< 50	< 0.5	< 0.5	< 0.5	< 1
	4/2/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	3/13/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	2/14/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	1/2/96	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	12/6/95	< 50	< 0.5	< 0.5	< 0.5	< 0.5
DISCHARGE LIMITS		N/A	5	5	5	5

* = NOT ANALYZED. SAMPLE CONTAINER INADVERTENTLY BROKEN.
TPH-g = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
(ug/L) = MICROGRAMS PER LITER
< ( ) = BELOW DETECTION LIMIT
gpm = GALLONS PER MINUTE
NM = NOT MEASURED
N/A = NOT APPLICABLE
NS = NOT SAMPLED

FIELD DATA SHEETS

FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	C. Giddings
DATE	8-25-96
TIME	16:30

GROUND WATER EXTRACTION SYSTEM

1.	[ ]	UPON ARRIVAL, SYSTEM WAS	ON / OFF
2.	[✓]	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3.	[✓]	EFFLUENT TOTALIZER	7180029 GALLONS
		WELL MW-5 TOTALIZER	814744 GALLONS
		WELL W-1 TOTALIZER	N/A GALLONS
		WELL W-2 TOTALIZER	101777 GALLONS
4.	[✓]	EFFLUENT FLOW RATE	6.5 GPM
5.	[✓]	AERATION PRESSURE	2 PSI
6.	[✓]	FILTER INFL PRESSURE	8 PSI
7.	[✓]	CARBON VESSEL #2 PRESSURE	N/A PSI
8.	[✓]	SAMPLING CONDUCTED	YES / (NO)
9.	[✓]	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES: _____

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	J. Giddings
DATE	8-18-96
TIME	19:30

GROUND WATER EXTRACTION SYSTEM

1.	✓ UPON ARRIVAL, SYSTEM WAS	ON / (OFF)	
2.	✓ SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) NO	
3.	✓ EFFLUENT TOTALIZER	2172993	GALLONS
	WELL MW-5 TOTALIZER	71192	GALLONS
	WELL W-1 TOTALIZER	N/A	GALLONS
	WELL W-2 TOTALIZER	130384	GALLONS
4.	✓ EFFLUENT FLOW RATE	6*	GPM
5.	✓ AERATION PRESSURE	2	PSI
6.	✓ FILTER INFL PRESSURE	8	PSI
7.	✓ CARBON VESSEL #2 PRESSURE	NA	PSI
8.	✓ SAMPLING CONDUCTED	YES / (NO)	
9.	✓ AT DEPARTURE, SYSTEM WAS	(ON) / OFF	

NOTES: * After back flushing.

System down due to "High Aeration ~~Pressure~~" Tank level"
Back flushed System

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	C. Gaddis>
DATE	6-10-96
TIME	17:00

GROUND WATER EXTRACTION SYSTEM

1.	✓	UPON ARRIVAL, SYSTEM WAS	ON / (OFF)
2.	✓	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3.	✓	EFFLUENT TOTALIZER	216132 GALLONS
		WELL MW-5 TOTALIZER	209654 GALLONS
		WELL W-1 TOTALIZER	N/A GALLONS
		WELL W-2 TOTALIZER	178340 GALLONS
4.	✓	EFFLUENT FLOW RATE	6.5 GPM
5.	✓	AERATION PRESSURE	2 PSI
6.	✓	FILTER INFL PRESSURE	12 PSI
7.	✓	CARBON VESSEL #2 PRESSURE	N/A PSI
8.	✓	SAMPLING CONDUCTED	(YES)* / NO
9.	✓	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES: * Between Carbons Only.
System down due to H2O - fouling on effluent. Backflushed System.

FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	J. Gaddis
DATE	6-5-96
TIME	8:00

GROUND WATER EXTRACTION SYSTEM

1. [ ]	UPON ARRIVAL, SYSTEM WAS	ON / (OFF)
2. [✓]	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3. [✓]	EFFLUENT TOTALIZER	2145544 GALLONS
	WELL MW-5 TOTALIZER	2012734 GALLONS
	WELL W-1 TOTALIZER	N/A GALLONS
	WELL W-2 TOTALIZER	1256729 GALLONS
4. [✓]	EFFLUENT FLOW RATE	5 GPM
5. [✓]	AERATION PRESSURE	2 PSI
6. [✓]	FILTER INFL PRESSURE	12 PSI
7. [✓]	CARBON VESSEL #2 PRESSURE	N/A PSI
8. [✓]	SAMPLING CONDUCTED	YES / (NO)
9. [✓]	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES: Effluent discharge rate unable to keep up w/ influent. back-flushed bag filters.

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	J. Gaddis
DATE	8/30-96
TIME	10:15

GROUND WATER EXTRACTION SYSTEM

1. ☑	UPON ARRIVAL, SYSTEM WAS	ON / (OFF)
2. ☑	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3. ☑	EFFLUENT TOTALIZER	7147568 GALLONS
	WELL MW-5 TOTALIZER	199967 GALLONS
	WELL W-1 TOTALIZER	N/A GALLONS
	WELL W-2 TOTALIZER	175735 GALLONS
4. ☑	EFFLUENT FLOW RATE	6.5 GPM
5. ☑	AERATION PRESSURE	1 PSI
6. ☑	FILTER INFL PRESSURE	8 PSI
7. ☑	CARBON VESSEL #2 PRESSURE	N/A PSI
8. ☐	SAMPLING CONDUCTED	YES / (NO)
9. ☑	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES: Back flushed system; eff. rate rose from 7 1/2 gpm to 6 1/2 gpm.

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	J. Goodwin
DATE	5-22-93
TIME	15:13

GROUND WATER EXTRACTION SYSTEM

1. [✓]	UPON ARRIVAL, SYSTEM WAS	ON / (OFF)
2. [✓]	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3. [ ]	EFFLUENT TOTALIZER	2142414 GALLONS
	WELL MW-5 TOTALIZER	199890 GALLONS
	WELL W-1 TOTALIZER	Ref Equipment GALLONS
	WELL W-2 TOTALIZER	175162 GALLONS
4. [✓]	EFFLUENT FLOW RATE	3.5 GPM
5. [✓]	AERATION PRESSURE	7.5 PSI
6. [✓]	FILTER INFL PRESSURE	70 PSI
7. [✓]	CARBON VESSEL #2 PRESSURE	N/A PSI
8. [✓]	SAMPLING CONDUCTED	YES / (NO)
9. [✓]	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES: _____

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	Giddings
DATE	5-15-96
TIME	15:45

GROUND WATER EXTRACTION SYSTEM

1.	UPON ARRIVAL, SYSTEM WAS	ON / (OFF)
2.	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3.	EFFLUENT TOTALIZER	2142115 GALLONS
	WELL MW-5 TOTALIZER	199727 GALLONS
	WELL W-1 TOTALIZER	Not Found GALLONS
	WELL W-2 TOTALIZER	1750328 GALLONS
4.	EFFLUENT FLOW RATE	3 GPM
5.	AERATION PRESSURE	NA PSI
6.	FILTER INFL PRESSURE	20 PSI
7.	CARBON VESSEL #2 PRESSURE	NA PSI
8.	SAMPLING CONDUCTED	YES / (NO)
9.	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES:

Re-Started System; System down due to a carbon Canister & vapor extraction system

FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	John Goddard
DATE	5-7-96
TIME	11:30

GROUND WATER EXTRACTION SYSTEM

1. ✓	UPON ARRIVAL, SYSTEM WAS	ON / (OFF)	
2. ✓	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO	
3. ✓	EFFLUENT TOTALIZER	214115	GALLONS
	WELL MW-5 TOTALIZER	199723 ~~125032~~	GALLONS
	WELL W-1 TOTALIZER	Not functional	GALLONS
	WELL W-2 TOTALIZER	125032	GALLONS
4. ✓	EFFLUENT FLOW RATE	3	GPM
5. ✓	AERATION PRESSURE	2 1/4	PSI
6. ✓	FILTER INFL PRESSURE	20	PSI
7. ✓	CARBON VESSEL #2 PRESSURE	N/A	PSI
8. ✓	SAMPLING CONDUCTED	YES / (NO)	
9. ✓	AT DEPARTURE, SYSTEM WAS	(ON) / (OFF)	

NOTES: Totalizer not functioning. System down due to creek bank float sensor malfunction.

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	John Goddard
DATE	04-30-96
TIME	9:30

GROUND WATER EXTRACTION SYSTEM

1. [✓]	UPON ARRIVAL, SYSTEM WAS	ON / (OFF)
2. [✓]	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3. [✓]	EFFLUENT TOTALIZER	2140385 GALLONS
	WELL MW-5 TOTALIZER	198869 GALLONS
	WELL W-1 TOTALIZER	* GALLONS
	WELL W-2 TOTALIZER	174719 GALLONS
4. [✓]	EFFLUENT FLOW RATE	5 GPM
5. [✓]	AERATION PRESSURE	N/A PSI
6. [✓]	FILTER INFL PRESSURE	30 PSI
7. [✓]	CARBON VESSEL #2 PRESSURE	N/A PSI
8. [✓]	SAMPLING CONDUCTED	YES / (NO)
9. [✓]	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES: * MW1 Totalizer not functioning
System logs down for UES evaluation

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	[illegible signature]
DATE	4-25-96
TIME	9:00

GROUND WATER
EXTRACTION SYSTEM

1. ✓	UPON ARRIVAL, SYSTEM WAS	(ON) / OFF	
2. ✓	SECONDARY CONTAIN. FLOAT OPERATIONAL	YES / NO	
3. ✓	EFFLUENT TOTALIZER	2140754	GALLONS
	WELL MW-5 TOTALIZER	198832	GALLONS
	WELL W-1 TOTALIZER	*	GALLONS
	WELL W-2 TOTALIZER	174698	GALLONS
4. ✓	EFFLUENT FLOW RATE	4	GPM
5.	AERATION PRESSURE	* * *	PSI
6. ✓	FILTER INFL PRESSURE	22	PSI
7. ✓	CARBON VESSEL #2 PRESSURE	* *	PSI
8. ✓	SAMPLING CONDUCTED	YES / (NO)	
9. ✓	AT DEPARTURE, SYSTEM WAS	~~ON~~ / (OFF)	

NOTES: * MW1 Totalizer not functioning.
** No pressure gauge on vessel #2
*** Aeration Tank does not have pressure gauge.

Repaired leaks in MW5 Inf. hose

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FORMER TEXACO/CURRENT EXXON
1127 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

NAME	J. Goldsmith
DATE	4-17-96
TIME	Approx. 10 a.m.

GROUND WATER EXTRACTION SYSTEM

1.	✓	UPON ARRIVAL, SYSTEM WAS	(ON) / OFF
2.	✓	SECONDARY CONTAIN. FLOAT OPERATIONAL	(YES) / NO
3.	✓	EFFLUENT TOTALIZER	212207 GALLONS
		WELL MW-5 TOTALIZER	N/A GALLONS
		WELL W-1 TOTALIZER	N/A GALLONS
		WELL W-2 TOTALIZER	N/A GALLONS
4.	✓	EFFLUENT FLOW RATE	51 GPM
5.	✓	AERATION PRESSURE	N/A PSI
6.	✓	FILTER INFL PRESSURE	20 PSI
7.	✓	CARBON VESSEL #2 PRESSURE	N/A PSI
8.	✓	SAMPLING CONDUCTED	YES / (NO)
9.	✓	AT DEPARTURE, SYSTEM WAS	(ON) / OFF

NOTES: _____

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COPY

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STROM
Site: Tex/1127 Lincoln Ave Alam Scheduled: 4/02/96
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 4-2-96 Arrival Time: 1138 Departure Time: 1458

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)/N

Called PM? Y/N Time: 1445 Who: DAVID LITTLE Topic: TRANSFER STATUS

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? (Y)/N

Job # and task # 98

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) UPON DEPARTURE - (site down) UPON ARRIVAL

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STEEM
Site: Tex/1127 Lincoln Ave Alam Scheduled: 4/02/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	X

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly] 98

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthouugh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	1.25

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS labeled? NA/Y/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/N size:_____cu.yds SITE LEFT CLEAN? (Y)/N

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STREM
Site: Tex/1127 Lincoln Ave Alam Scheduled: 4/02/96
Project Mgr: Brian Garber Site Mgr:

TECHNICIAN'S COMMENTS

- MET W/ KAPRILLIAN AND WENT OVER SITE STATUS FOR COMPLETE TRANSFER.
- NOTE: KAPRILLIAN (K) DID NOT HAVE STEEL TOE BOOTS, SAFETY GLASSES, HARD HAT AND DID NOT WANT TO SIGN SITE SAFETY PLAN AFTER I REVIEW THE PLAN WITH HIM.
- (K) DID NOT HAVE A FID AS CALLED OUT BY PERMIT AND THERE VELOCITY METER (PITOT TUBE) WAS NOT CALIBRATED AND WAS ~~@~~ ITS NEEDLE WAS "STICKING"

Total Hours Estimated	2.00	Total Hours Used	1.25
Travel Time Estimated	1.00	Travel Time Used	.75

2.00

Technician

PLUS 2.25 HRS FOR SITE TRANSFER INFO

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN SHEM Date: 4-2-96

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WASTE TRAILER	—	NA		—	—	—	—	
INF CARB #1	53" @ 3"			20.0	0.5	19.5	—	EFFICIENCY
INF CARB #2	—			15.0	0.5	14.5	—	%
INF CARB #3	—	1400#		13.0	1.5	11.5	—	
EFF CARB #3	—			0.0	0.0	0.0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
25 Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: PITOT TUBE USED FOR VELOCITY — NOTE PRESSURE IS CONSTANT FROM PREVIOUS DATA ASSUME VELOCITY IS SIMILAR TO PREVIOUS DATA

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 4-2-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner	X		
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		2106830
Effluent Flow Rate (gpm)		5.4gpm
Aeration Pressure (psi)		1.8
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		16 / 8
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y X N
Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissovlved O2 (ppm)				
Electrical Conductivity				

4" Meter BACKFLUSH

WELL READINGS

	Well # MW-1 5	Well # MW-2 1	Well # MW-5 2	Well # AUX
Flow Totalizer (gals)	177495	118902	183505	—
Flow Rate (gpm)	1.70	1.13	—	—
Hour Meter (hours)				
DTW form TOC (ft)				

CHAIN OF CUSTODY RECORD

BILL TEXACO DIRECT

BCA Log Number ______

Client name	Project or PO#
GROUNDWATER TECHNOLOGY	020270x3006 1437 LINCOLN AVE ALAMEDA
Address	**Phone #**
4151 Business Dr. #140	(916) 372 4700
City, State, Zip	**Report attention**
West Sacramento CA 95691	BRIAN GARBER

Sampled by: STEVEN STROM

Lab Sample number	Date sampled	Time sampled	Type* See key below	Sample description	Preservation: ICE	Preservation: HCL	Number of containers	BTEX/TPH-G							Hazardous sample Special handling required	Remarks
	4-2-96	1332	AQ	C-EFF	X	X	2	X								
	4-2-96	1337	AQ	B-BT-1	X	X	2	X								
	4-2-96	1322	AQ	A-INF	X	X	2	X								
	4-2-96	1338	AQ	INF	X	X	2	X								
	4-2-96	1316	AIR	AIR-INF			1	X								
	4-2-96	1312	AIR	AIR INF to 2ND			1	X								
	4-2-96	1311	AIR	AIR EFF			1	X								

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	Steven Strom	GROUNDWATER TECHNOLOGY	4-3-96	1250
Received by	[signature]	B. H. Lyons	BCA	4-3-96	1250
Relinquished by					
Received by					
Relinquished by					
Received by Laboratory					

B C ANALYTICAL

[X] 1255 Glory Circle, Concord, CA 94518 (510) 825-3894
[ ] 801 Western Avenue, Glendale, CA 91201 (818) 247-5737
[ ] 1230 Gene Autry Way, Anaheim, CA 92805 (714) 978-0113

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements: ______

*KEY: AQ—Aqueous NA—Nonaqueous SL—Sludge GW—Groundwater SO—Soil PE—Petroleum

COPY

SITE VISIT FORM

Groundwater Technology, Inc. - Concord, California

Project: 20700006.00
Site: Tex/1127 Lincoln Ave Alam
Project Mgr: Brian Garber

Technician: Steven Stasn
Scheduled: 3/25/96
Site Mgr:

PREPARATORY COMMENTS

Visit Date: 3-28-96 Arrival Time: 1525 Departure Time: 1825

Work Order read in office (Y)/N upon arrival (Y)/N upon departure: (Y)/N

Called PM? (Y)/N Time: 1610/1655 Who: David E Topic: MW-5 pump / sys. tank w/ MW-1

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? (Y)/N

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down) Arrival

SYSTEM STATUS = Water I (inactive) + (site up) Departure (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: Steven Strem
Site: Tex/1127 Lincoln Ave Alam Scheduled: 3/25/96
Project Mgr: Brian Carber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.5

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? Y/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other WATER TREATMENT

DRUMS labeled? NA/Y/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/N size:_____cu.yds. SITE LEFT CLEAN? Y/N

TECHNICIAN'S COMMENTS

MW-5 AND MW-2 REVERSED AS PER INSTRUCTION & PIPING

MW-5 PUMP DOWN WILL FIX on FRIDAY DONE

Total Hours Estimated	.50	Total Hours Used	.75
Travel Time Estimated	1.00	Travel Time Used	1.00

.75

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STROM

Date: 3-28-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate			
Filter Checked ~~and Cleaned~~	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner	X		
Calibrate LEL			X

4 GALLON LEFT

	N/A	Field Data
Effluent Totalizer (gals)		2103046
Effluent Flow Rate (gpm)		5.9gpm / 7.1gpm
Aeration Pressure (psi)		0.18
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		13 / 8.0*
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

*AFTER BACKFLUSH

SYSTEM SAMPLING

System sampled Y___ N X

Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW 5	Well # W-1	Well # W-2	Well #
Flow Totalizer (gals)	175370	117796	182524	
Flow Rate (gpm)	1.25 STEADY	4.94	OFF	
Hour Meter (hours)				
DTW from TOC (ft)				

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: Steven Stetler

Date: 3-28-96

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	EFFICIENCY %
WATER TANK	—	1410	—	—	—	—	—	
INF CARB #1	53"@ 3"	2090	—	7.0	3.5	4.5	—	
INF CARB #2	—	2110	—	15.0	3.5	11.5	—	
INF CARB #3	—	2110	—	15.0	4.0	11.0	—	
EFF CARB #3	—	—	—	0.5	0	0.5	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature
Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
5 Gals. Removed

SPARGE PUMP
ON OFF N/A

PSI- CFM-

REMARKS: MW-5 NEW CASING

SITE VISIT FORM
Groundwater Technology, Inc. -- Concord, California

Project: 20700006.00 Technician: Chris McCormick
Site: Tex/1127 Lincoln Ave Alam Scheduled: 3/18/96
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 3-19-96 Arrival Time: 11:00 Departure Time: 15:25

Work Order read in office: (Y)N upon arrival: (Y)N upon departure: (Y)N

Called PM? Y/N Time: 4 times Who: E.S, Topic: W-1 / W-2 SWAP

Are You In Possession of a Site Safety Plan? (Y)N

COC: Complete with store #, site address & proj office address? Y/N

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in ~~blue container beneath trailer~~ MAIL BOX. Record activities in site log.

✓1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

✓2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

✓3. At the exhaust of the first air carbon ~~canister~~ record ppm with FID WITH AND WITHOUT carbon tip.

✓4. At the inlet of the first air carbon ~~canister~~ record ppm with FID WITHOUT carbon tip.

✓5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

✓6. Record all readings on the appropriate logs on site.

✓7. At the inlet to the first air carbon canister measure the flow rate.

✓8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: ew
Site: Tex/1127 Lincoln Ave Alam Scheduled: 3/18/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon ~~canister~~ exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water ½; Soil Ø, Empty 1, Other Ø

DRUMS labeled? NA/Y(N) Gen. Date: ? Label Type: ?

SOIL pile? Y(N) size: ~~~~ cu.yds. SITE LEFT CLEAN? (Y)/N

TECHNICIAN'S COMMENTS

Attached

Total Hours Estimated	.50	Total Hours Used	
Travel Time Estimated	1.00	Travel Time Used	

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 Lincoln - Alameda
Site Address

Sampled By Chris McCormack

Date: 3-19-96

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRAILER	— 2"	1310	—	—	—	—	—	
'8 INF CARB #1	53" 3"	540	—	3	0	3	—	EFFICIENCY ? %
96 INF CARB #2	— 2"	2070	—	11	1	10	—	
INF CARB #3	— 2"	2060	—	7	1	6	—	
EFF CARB #3	—	—	—	7	1	6	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
20 Gals. Removed

SPARGE PUMP
ON OFF (N/A)
PSI— CFM—

REMARKS:

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 Lincoln - Alameda
Site Address

Sampled By: Chris McCormack

Date: 3-19-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working			
Adjust Flow Rate			X
Filter Checked and Cleaned		X	
Strainer Checked and Cleaned	X ←	~~X~~	
Check/Add Water Conditioner	X	~~X~~	
Calibrate LEL		~~X~~ →	X
→ 5 Gallon Left			

	N/A	Field Data
Effluent Totalizer (gals)		2091196 @ 11:25
Effluent Flow Rate (gpm)		6 gpm - cycling
Aeration Pressure (psi)	@ carbon vessel tank	→ 0.20
Filter INFL Pressure (psi)		~~8~~ 10 @ 1.28 GPM
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		10
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y__ N X

Monthly Qtrly Semi-Ann **Annual**

	Sample Point ______	Sample Point ______	Sample Point ______	Sample Point ______
Temperature (F)				
pH (units)				
Dissovlved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # ____
Flow Totalizer (gals)	168375 @ 11:20	112057 @ 11:20	182524	
Flow Rate (gpm)	1.28 - steady	5.38 - cycling	OFF	
Hour Meter (hours)				
DTW from TOC (ft)				

GTI 06/94 O&MFORM.WK3

↗ W-1 & W-2 Have been swapped All

To: Ed Simonis@Sacramento@grdwtr
Jason Fedota@Sacramento@grdwtr
Cc: Mark Czipka@Concord@grdwtr
Steve Strem@Concord@grdwtr
Bcc:
From: Chris McCormack@Concord@grdwtr
Subject: 1127 Lincoln
Date: Tuesday, March 19, 1996 20:44:58 PST
Attach:
Certify: N
Forwarded by:

03-19-96 Arrive-11:00 Depart-15:30
Totalizer 03-19-96=2091196
Totalizer 03-13-96=2077696
Ave. GPM=1.56
Transfere Pump is a LOWARA LPA 0513 Motor No. 75KM712
115/230v 6/3.2A single phase 1/2hp 3400 RPM
At 10 PSI it pumps at 6 GPM, at 0 PSI it pumps at 10 GPM.
5 Gallons of GW 4040 left on-site.
MW-5=5.86'(DTW) Max flow 1.3 GPM, seems to run steady (not cycling) at about 1.3 to 1.1 GPM. Closing control valve lets the pump pressure up to >40 PSI. Probably clogged impellers/intake.
W-2 (formerly labeled W-1, and refered to as W-1 on all previous data), Pump Cycles at 5+ GPM, well is drawn down to over 11' DTW.
W-1 (formerly labeled W-2, and refered to as W-2 on all previous data), Pump is getting clean power to the start components and well controller. Switched start components with known operational well, W-1 still not working. Car over well, cannot pull pump. Checked winding resistence:
Black-yellow= 6.9 Ohms
Black-red =33.9 Ohms
Red-yellow =27.6 Ohms
All start boxes are Franklin brand for 1/3 hp 230v pumps.
Mark: What do the winding resistence numbers mean? we think they are Gould pumps.
Ed/Jason:Mark thinks that along time ago in a galaxy far away the wells were switched at the Ceecon trailer by possibly Greg M? because of some problem?? Old notes may help??

SITE VISIT FORM

Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STOCK

Site: Tex/1127 Lincoln Ave Alam Scheduled: 3/11/96 3/13/96

Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 3-13-96 Arrival Time: 1518 Departure Time: ~~1700~~ 1700

Work Order read in office: Y/N upon arrival: Y/N upon departure: Y/N

Called PM? Y/N Time: 1650 Who: JASON/DAVID Topic: SYSTEM — EXTRA WORK - WELLS

Are You In Possession of a Site Safety Plan? Y/N

COC: Complete with store #, site address & proj office address? Y/N

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: Steve Stoen
Site: Tex/1127 Lincoln Ave Alam Scheduled: ~~3/11/96~~ 3/13/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.5

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthouugh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	1.50

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? Y/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS labeled? NA Y/N Gen. Date:_____ Label Type:_____

SOIL pile? Y (N) size:_____cu.yds. SITE LEFT CLEAN? Y/N

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician:
Site: Tex/1127 Lincoln Ave Alam Scheduled: 3/11/96
Project Mgr: Brian Garber Site Mgr:

TECHNICIAN'S COMMENTS

SAMPLED SYSTEM
REQUIRED SMALL DIAMETER I.P.
NEED 2ND MAN TO PULL PUMP

Total Hours Estimated	2.00	Total Hours Used	2.00
Travel Time Estimated	1.00	Travel Time Used	1.00

Technician

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

TES
1127 LINCOLN, ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 3-13-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	Y		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			

	N/A	Field Data
Effluent Totalizer (gals)		2077696
Effluent Flow Rate (gpm)		6.8 / 7.2*
Aeration Pressure (psi)		.27
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		10.0 / 8.0*
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled (Y) N
(Monthly) Qtrly Semi-Ann Annual

*AFTER BACKFLUSH

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2 OFF	Well #
Flow Totalizer (gals)	161468.	~~5.36~~ 104498	182524	
Flow Rate (gpm)	1.48	5.36		
Hour Meter (hours)				
DTW from TOC (ft)				

GTI 06/94 O&MFORM.WK3

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

TES

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM

Date: 3-13-96

SAMPLE/MONITOR LOCATION	VACUUM (H2O) ~~OR (H20)~~	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRLR	—	1470	—	—	—	—	—	
INF 1ST	48" @ 3"	2450	—	18.0	3.0	15.0	—	EFFICIENCY %
INF 2ND	—	—	—	16.0	2.5	13.5	—	
INF 3RD	—	—	—	10.0	1.5	8.5	—	
EFF	—	2860	—	0.0	0.0	0.0	—	

IC ENGINE (ONLY)

Readings	Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT

3 Gals. Removed

SPARGE PUMP

ON	OFF	(N/A)
PSI-	CFM-	

REMARKS: BACK FLUSH SYSTEM
SAMPLE AIR & WATER

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: Steven Steven
Site: Tex/1127 Lincoln Ave Alam Scheduled: 3/04/96
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 3-8-96 Arrival Time: 1355 Departure Time: 1448

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)/N

Called PM? Y/N Time: 1446 Who: DAVID LITTLE Topic: SYSTEM STATUS

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? Y/N (NA)

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: Steven Strom
Site: Tex/1127 Lincoln Ave Alam Scheduled: 3/04/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? Y/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other 2 - DRUMS WATER TREATMENT

DRUMS labeled? NA/Y/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/N size:_____cu.yds. SITE LEFT CLEAN? Y/N

TECHNICIAN'S COMMENTS

BACK FLUSHED SYSTEM
DURING "CALL-IN" 4 POLICE CARS ARRIVED NEAR THE PHONE
BOTH WITH PISTOLS DRAWN — I BUGGED OUT OF
THERE AFTER QUICKLY CONCLUDING MY REPORT

Total Hours Estimated	.50	Total Hours Used	.75
Travel Time Estimated	1.00	Travel Time Used	1.25

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 3-8-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			✓

	N/A	Field Data
Effluent Totalizer (gals)		2063943
Effluent Flow Rate (gpm)		6.8 / *7.2
Aeration Pressure (psi)		.3
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		10.0 / *8.0
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y (N) X

Monthly Qtrly Semi-Ann **Annual**

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

* AFTER BACKFLUSH

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2 OFF	Well #
Flow Totalizer (gals)	152336	98818.8	182524	
Flow Rate (gpm)	2.63	4.51		
Hour Meter (hours)				
DTW from TOC (ft)				

GTI 06/94 OAMFORM WK3

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STROM

Date: 3-8-96

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRL	—	1710	—	—	—	—	—	
INF 1ST	48 @ 3"	2760	—	48.0	10.0	38.0	—	EFFICIENCY %
INF 2ND	—	—	—	28.0	3.0	25.0	—	
INF 3RD	—	—	—	15.0	1.5	13.5	—	
EFF	—	3080	—	5.0	1.0	4.0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT

Gals. Removed

SPARGE PUMP

ON OFF N/A

PSI- CFM-

REMARKS: BACK FLUSH SYSTEM

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00
Site: Tex/1127 Lincoln Ave Alam
Project Mgr: Brian Garber
Technician: STEVEN STREM
Scheduled: ~~8/29/96~~
Site Mgr: 8/28/96

PREPARATORY COMMENTS

Visit Date: 8-29-96 Arrival Time: 1410 Departure Time: 1535

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)N

Called PM? Y/N Time: 1430 Who: JASON Topic: SYSTEM STATUS

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? Y/N (NA)

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in ~~blue container beneath trailer~~ BLACK MAILBOX IN COMPOUND. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: Steven Sutton
Site: Tex/1127 Lincoln Ave Alam Scheduled: ~~3/25/96~~ 2-28-96
Project Mgr: Brian Garber Site Mgr: ...

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	1.25

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthough of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1885 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	XS

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other CSM - 2

DRUMS ~~labeled? Y/N/?~~ Gen. Date:_____ label Type:_____

SOIL pile? Y/(N) size:_____cu.yds. SITE LEFT CLEAN? (Y)N

SITE VISIT FORM

Groundwater Technology, Inc. - Concord, California

Project: 20700006.00
Site: Tex/1127 Lincoln Ave Alam
Project Mgr: Brian Garber

Technician: Steven Strem
Scheduled: ~~4/25/96~~
Site Mgr:

TECHNICIAN'S COMMENTS

HEAVY RAIN
WORKED ON AERATION TANK WATER LEVEL
SWITCHES

Total Hours Estimated	2.00	Total Hours Used	1.25
Travel Time Estimated	1.00	Travel Time Used	.75

Technician

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

2701 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN SCOTT Date: 2-28-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		204824
Effluent Flow Rate (gpm)		7.0
Aeration Pressure (psi)		.31
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		8.9
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y (N)
Monthly Qtrly Semi-Ann **Annual**

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissovived O2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well #
Flow Totalizer (gals)	141857	930750	182524	
Flow Rate (gpm)	2.20	3.3	—	
Hour Meter (hours)				
DTW from TOC (ft)				

GTI 06/94 SAMPFORM.WRD

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINDEN AVENUE
Site Address

Sampled By: STEVE SERBIN

Date: 2-28-96

SAMPLE/MONITOR LOCATION	VACUUM (IHG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRP	—	1420	1420	~~0.0~~	—	—	—	
INF 1ST	50 @ 3"	2850	2850	10.0	0	10.0	—	EFFICIENCY %
INF 2ND	—	—	—	6.0	0	6.0	—	
INF 3RD	—	—	←	6.0	0	6.0	—	
EFF	—	3030	3030	0.0	0	0.0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT

9 Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: RAINY
WORKED ON HIGH AERATION SWITCH & WIRING
LOOKED LIKE A POSIBLE SHORT IN WIRING—FIXED

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00
Site: Tex/1127 Lincoln Ave Alam
Project Mgr: Brian Garber

Technician: STEVE.J Stefan
Scheduled: 2/26/96
Site Mgr:

PREPARATORY COMMENTS

Visit Date: 2-23-96 Arrival Time: 1255 Departure Time: 1512

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)/N

Called PM? (Y)/N Time: 1509 Who: JASON Topic: SYSTEM STATUS

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? (Y)/N

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) (DEPARTURE) (site down) (ARRIVAL)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician:
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/26/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.5

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthouugh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? Y/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS Labeled? NA/Y/N Gen. Date._____ Label Type:_____

SOIL pile? Y/N size:_____cu.yds. SITE LEFT CLEAN? Y/N

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00
Site: Tex/1127 Lincoln Ave Alam
Project Mgr: Brian Garber

Technician: Steven Strom
Scheduled: ~~2/20/96~~ 2/23/96
Site Mgr:

TECHNICIAN'S COMMENTS

RAINY
RE-SAMPLED WATER - LAB BROKE BOTTLES
BACKFLUSHED SYSTEM

Total Hours Estimated	2.00	Total Hours Used	1.75
Travel Time Estimated	1.00	Travel Time Used	.75

Technician

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 2-23-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		2046249
Effluent Flow Rate (gpm)		7.1
Aeration Pressure (psi)		03
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		8.8
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled (Y) N

Monthly Qtrly Semi-Ann **Annual**

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

BACKFLUSH ✓

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well #
Flow Totalizer (gals)	140519	926485	181660	
Flow Rate (gpm)	2.10	3.2	—	
Hour Meter (hours)				
DTW from TOC (ft)				

GTI O&M O1MFORM WR3

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: _____ Date: 2-23-96

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRL	—	1490	—	—		—	—	
INF 1ST	40" @ 3"	3220	—	15.0	0	15.0	—	EFFICIENCY %
INF 2ND	—	—	—	12.0	0	12.0	—	
INF 3RD	—	—	—	10.0	0	10.0	—	
EFF	—	3300	—	0	0	0	—	

IC ENGINE (ONLY)

Readings	Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
38 Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: RE-SAMPLE WATER (LAB BROKE BOTTLES)

SITE VISIT FORM
Groundwater Technology, Inc. Concord, California

Project: 20700006.00 Technician: Steven Strem
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/14/96
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 2-14-96 Arrival Time: 1148 Departure Time: 1250

Work Order read in office: Y/N upon arrival: Y/N upon departure: Y/N

Called PM? (Y)/N Time: 1245 Who: Jason F Topic: System Status

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? (Y)/N

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. Concord, California

Project: 20700006.00 Technician: Steven Shewy
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/14/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthouugh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS labeled? NA/(Y)/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/(N) size:_____cu.yds. SITE LEFT CLEAN? (Y)/N

CHAIN OF CUSTODY RECORD

BCA Log Number 051005

Client name: GROUNDWATER TECHNOLOGY
Address: 1401 HAVARD DR #140
City, State, Zip: W. SACRAMENTO CA
Project or PO#: D 20700006 TEs LINCOLN ALAMEDA
Phone #: (916) 372 4700
Report attention: BRIAN GARBER
Sampled by: STEVEN STREM

Analyses required: BTEX / TPH-G; Hazardous sample / Special handling required

Lab Sample number	Date sampled	Time sampled	Type* See key below	Sample description	Number of containers	Remarks
	2-14-96	1201	AQ	C - EFF	2	
	2-14-96	1202	AQ	B2 - BT-1	2	
	2-14-96	1203	AQ	A - INF	2	
	2-14-96	1204	AQ	INF	2	
	2-14-96	1216	AIR	EFF · AIR	1	
	2-14-96	1218	AIR	INF - 2ND - AIR	1	
	2-14-96	1220	AIR	INF - AIR	1	

	Signature	Print Name	Company	Date	Time
Relinquished by		STEVEN STREM	GROUNDWATER TECH	2-14-96	1350
Received by		Ameeta Parekh	BCA	2-14-96	13:55
Relinquished by					
Received by					
Relinquished by					
Received by Laboratory					

B C ANALYTICAL
☒ 1095 Shary Circle, Concord, CA 94518 (510) 825-0894
☐ 1801 Western Avenue, Glendale, CA 91201 (818) 247-5737
☐ 1200 Gene Autry Way, Anaheim, CA 92805 (714) 978-0113

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements: _____

*KEY: AQ—Aqueous NA—Nonaqueous SL—Sludge GW—Groundwater SO—Soil PE—Petroleum WW—Wastewater

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM

Date: 2-14-96

SAMPLE/MONITOR LOCATION	VACUUM ~~(HG) OR~~ (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/02	
WATER TRL	—	1420	—	—	—	—	—	
INF 1ST	43" @ 3"	2970	—	26	0	26.0	—	EFFICIENCY %
INF 2ND	—	—	—	22	0	22.0	—	
INF 3RD	—	—	—	6	0	6.0	—	
EFF	—	3120	—	4	2	2	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
02		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
8 Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: SAMPLED SITE FOR AIR & WATER

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 2-14-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		2022587
Effluent Flow Rate (gpm)		7.2
Aeration Pressure (psi)		.3
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		8.5
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled (Y) N

Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

* W-1 ON FOR ABOUT 10-15 SEC THEN OFF FOR 2MIN
-MW-5 ON FOR 35 SEC THEN OFF FOR 1.5MIN

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX OFF
Flow Totalizer (gals)	130892	87489.7	170894	—
Flow Rate (gpm)	3.2	5.5 PUMP*		
Hour Meter (hours)				
DTW from TOC (ft)				

TURNED BACK ON PER ED @ 1220

GW05/94 OMFORM.WK3

SITE VISIT FORM
Groundwater Technology, Inc. -- Concord, California

Project: 20700006.00 Technician: Steven Simon
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/[redacted]/96
Project Mgr: Brian Garber Site Mgr: 9

SPECIAL REQUEST — SYSTEM DOWN

TECHNICIAN'S COMMENTS

- BLAIN TECH TURNED ON W-2 AND ADJUSTED ALL WELLS TO PUMP AT "~~MAX~~ FLOW" THEREFORE "HIGH AERATION TANK SHUT DOWN" OCURRED.
- CLEANED AERATION TANK WITH BRUSH AND BLEACH PER ED SIMONIS — BACK FLUSHED SYSTEM
- RESET SYSTEM — ADJUSTED FLOW

Total Hours Estimated	2.00	Total Hours Used	.75
Travel Time Estimated	1.00	Travel Time Used	.50

Technician

SITE VISIT FORM

Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STREM

Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/6/96

Project Mgr: Brian Garber Site Mgr: B

PREPARATORY COMMENTS

Visit Date: 2-6-96 Arrival Time: 1440 Departure Time: 1559

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)/N

Called PM? Y/N Time: 1525 Who: ED SIMONS Topic: SYSTEM SHUT DOWN

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? Y/N (NA)

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down) ARRIVAL

SYSTEM STATUS = Water I (inactive) + (site up) - (site down) DEPARTURE

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. -- Concord, California

Project: 20700006.00 Technician: Steven Strem
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/[illegible]/96
Project Mgr: Brian Garber Site Mgr: [illegible]

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.75

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthourgh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	[illegible]

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___ - 2nd CARBON 30gm

DRUMS labeled? NA/Y/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/(N) size:_____cu.yds. SITE LEFT CLEAN? (Y)/N

SITE VISIT FORM
Groundwater Technology, Inc. -- Concord, California

Project: 20700006.00 Technician: STEVEN STREM
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/8/96
Project Mgr: Brian Garber Site Mgr:

TECHNICIAN'S COMMENTS

- BACK FLUSHED SYSTEM
- TURNED W-2 WELL OFF
- CLEANED SITE
- IT WAS NOTED THAT IF WE COULD START THE TRANSFER PUMP FROM THE AERATION TANK SOONER IT WOULD ALLOW MORE TIME TO EMPTY SO IT WOULD HAVE LESS TIME TO OVERFILL.

Total Hours Estimated	~~2.00~~ .75	Total Hours Used	.75
Travel Time Estimated	1.00	Travel Time Used	1.0

Technician

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 2-8-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		2009219
Effluent Flow Rate (gpm)		7.2
Aeration Pressure (psi)		13
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		8.0
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y (N)

Monthly Qtrly Semi-Ann **Annual**

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

TURNED OFF PER ED @ 1525

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	122380	82334.4	170428	—
Flow Rate (gpm)	3.62	[illegible]	—	—
Hour Meter (hours)				
DTW from TOC (ft)				

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN SIREM

Date: 2-8-96

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRL	— / —	1490	—	—	—	—	—	
INF 1ST	55* / 46'	3240	—	27	0	27.0	—	EFFICIENCY %
INF 2ND	—	—	—	20	0	20.0	—	
INF 3RD	—	—	—	16	0	16.0		
EFF	—	3320	—	0	0	0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT

36 Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: * INF VACUUM WAS 55" HAD TO PURGE WATER OUT OF SYSTEM (VEW) TO LOWER PRESSURE

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVE STREM
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/05/96
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 2-2-96 Arrival Time: 1235 Departure Time: 1340

Work Order read in office: Y/N upon arrival: Y/N upon departure: Y/N

Called PM? (Y)/N Time: 1335 Who: JASON Topic: SYSTEM STATUS

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? Y/N (N/A)

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

DEPARTURE ARRIVAL

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

RECEIVED
FEB 12 1996

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STRON
Site: Tex/1127 Lincoln Ave Alam Scheduled: 2/05/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS labeled? NA/(Y)/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/N size:_____cu.yds. SITE LEFT CLEAN? (Y)/N

TECHNICIAN'S COMMENTS

- CLEANED AERATION TANK ~ .25
- BACK FLUSHED CARBON
- SLOWED DOWN FLOW FROM WELLS TO AERATION TANK

Total Hours Estimated	.50	Total Hours Used	.75
Travel Time Estimated	1.00	Travel Time Used	1.00

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

Sampled By: STEVEN STREM

1127 LINCOLN ALAMEDA
Site Address

Date: 2-2-96

SAMPLE/MONITOR LOCATION	VACUUM (HG)—OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRL	—	1560	—	—	—	—	—	
INF 1"	50*/45	2710	—	15	0	15	—	EFFICIENC'
INF 2ND	—	—	—	6.5	0	6.5	—	%
INF 3RD	—	—	—	3	0	3	—	
EFF	—	2730	—	0	0		—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
2 Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: * INF VACUUM WAS 50" H_2O → HAD TO PURGE WATER OUT OF THE SYSTEM TO GET TO 45" H_2O

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 7-2-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X
REPLACED AIR FILTER	X		

	N/A	Field Data
Effluent Totalizer (gals)		1985193
Effluent Flow Rate (gpm)		7.6
Aeration Pressure (psi)		.3
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		8.5
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y (N)

Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	113748	77455.6	158089	—
Flow Rate (gpm)	—	—	—	—
Hour Meter (hours)				
DTW from TOC (ft)				

BACK FLUSH SYSTEM

To: Kristine McIlvenna@Concord,Steve Strem@Concord
Mark Czipka@Concord,Sacramento_Files
Chris McCormack@Concord@GRDWTR,Ed Simonis,Jason Fedota
Cc:
Bcc:
From: David Little@Sacramento@grdwtr
Subject: Work Request, 1127 Lincoln
Date: Wednesday, January 31, 1996 14:17:07 PST
Attach:
Certify: Y
Forwarded by:

ONE-TIME WORK REQUEST

JOB NAME: Lincoln Alameda

JOB NUMBER: 02070-0006-051098

SITE ADDRESS: 1127 Lincoln
Alameda, CA

START DATE: 2/2/96

PREPARED BY: David Little

PREPARED FOR: Jason Fedota

WORK DESCRIPTION: INSTALL TARP

As discussed during out telephone conversation today, please install the tarp over the compound to keep most of the rain from filling the secondary containment and quickly verify that there are no system leaks.

Thank you,
David

DONE
2-2-96

C:/DOCUMENT/LINCLON/WKREQ04.TXT

SITE VISIT FORM

Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STREM

Site: Tex/1127 Lincoln Ave Alam Scheduled: 1/29/96

Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 1-25-96 Arrival Time: 1521 Departure Time: 1556

Work Order read in office: (Y)N upon arrival: (Y)N upon departure: (Y)N

Called PM? (Y)N Time: 1555 Who: JASON FEDOR Topic: SYSTEM PRESSURE VEW

Are You In Possession of a Site Safety Plan? (Y)N

COC: Complete with store #, site address & proj office address? Y/N (N/A)

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STERN
Site: Tex/1127 Lincoln Ave Alam Scheduled: 1/29/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.50

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? Y/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other 2-30gal CARBON NORTHWESTERN

DRUMS labeled? NA/Y/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/N size:_____cu.yds. SITE LEFT CLEAN? Y/N

TECHNICIAN'S COMMENTS

- CAN WE REMOVE THE LIQUID CARBON FILTER CANISTERS
NORTHWESTERN? (916) 527-2664

Total Hours Estimated	.50	Total Hours Used	.50
Travel Time Estimated	1.00	Travel Time Used	1.00

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Date: 1-25-96

mpled By: STEVEN STREM

AMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	EFFICIENCY %
WATER TRL	~~44"~~ / 34"*	1610	—	42	1.5	40.5	—	
INF 1ST	44"* / 34"*	3220	—	30	1.5	28.5	—	
INF 2ND	—	—	—	18.0	1.0	17.0	—	
INF 3RD	—	—	—	0.5	0	0	—	
EFF	—	3280	—					

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

AIA

UNIT	Hour Meter

MOISTURE KNOCKOUT
2 Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: * INITIAL VACUUM WAS 44" H20 - AFTER LINES WERE PURGED IT DROPPED DOWN TO 34" H_2O

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Date: 1-25-96

pled By: STEVEN STREM

SYSTEM CHECK / READINGS

pplicable	Yes	No	N/A
ystem Operational	X		
Contain. Float Switch Working	X		
just Flow Rate		X	
ter Checked and Cleaned	X		
ainer Checked and Cleaned	X		
eck/Add Water Conditioner		X	
librate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		198169.3
Effluent Flow Rate (gpm)		8.0
Aeration Pressure (psi)		.3
Filter INFL Pressure (psi)		8.0
Filter EFFL Pressure (psi)	X	0
Carbon Vessel #1 Pressure (psi)		8.0
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

ystem sampled Y (N)

Monthly Qtrly Semi-Ann Annual

	Sample Point ____	Sample Point ____	Sample Point ____	Sample Point ____
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	11257	76700.7	156086	____
Flow Rate (gpm)	3.25	____	____	____
Hour Meter (hours)				
Headspace TOC (ppm)				

SITE VISIT FORM

Groundwater Technology, Inc. -- Concord, California

Project: 20700006.00 Technician: STEVEN SIDEM

Site: Tex/1127 Lincoln Ave Alam Scheduled: 1/22/96

Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 1-18-96 Arrival Time: 1330 Departure Time: 1402

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)/N

Called PM? Y/N Time: 1400 Who: JASON FENDON Topic: SYSTEM STATUS

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with store #, site address & proj office address? Y/N (N/A)

Job # and task #

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

SITE VISIT FORM

Groundwater Technology, Inc. Concord, California

Project: 20700006.00 Technician: STEVEN STRAM

Site: Tex/1127 Lincoln Ave Alam Scheduled: 1/22/96

Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

9. Notify the project manager by phone if the following conditions exist at the site:

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.50

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS labeled? N/A/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/N size:_____cu.yds. SITE LEFT CLEAN? (Y)/N

TECHNICIAN'S COMMENTS

Total Hours Estimated	.50	Total Hours Used	.50
Travel Time Estimated	1.00	Travel Time Used	1.00

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Date: 1-16-96

Sampled By: STEVEN

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	EFFICIENCY %
WATER TBL		1520						
INF 1ST	32"	3500		38		38		
INF 2ND				20		20		
INF 3RD				8				
EFF		3512						

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT

Gals. Removed

SPARGE PUMP

ON	OFF	N/A
PSI-	CFM-	

REMARKS: HEAVY RAIN

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1627 LINCOLN [illegible]
Site Address

Date: 1-18-96

mpled By: STEVEN STROM

SYSTEM CHECK / READINGS

Applicable	Yes	No	N/A
System Operational	X		
id Contain. Float Switch Working	X		
djust Flow Rate		X	
ilter Checked and Cleaned	X		
trainer Checked and Cleaned	X		
heck/Add Water Conditioner		X	
alibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		1948741
Effluent Flow Rate (gpm)		1.0
Aeration Pressure (psi)		5
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	✓	
Carbon Vessel #1 Pressure (psi)		13+ / 7.5
Carbon Vessel #2 Pressure (psi)	/	
Air Compressor Pressure (psi)	/	
Hour Meter (hours)	\	

SYSTEM SAMPLING

System sampled Y___ N___
Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissovlved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # [illegible]	Well # [illegible]	Well # MW-X
Flow Totalizer (gals)	102035	69742.[illegible]	37865	
Flow Rate (gpm)	356	4.59		
Hour Meter (hours)				
DTW from TOC (ft)				

DR BEFORE BACK FLUSH

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STROM
Site: Tex/1127 Lincoln Ave Alam Scheduled: 1/01/96
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 1-2-95 Arrival Time: 1438 Departure Time: 1546

Work Order read in office: (Y)/N upon arrival: (Y)N upon departure: (Y)N

Called PM? Y/N Time: 1539 Who: STEVEN Topic: SYSTEM

Are You In Possession of a Site Safety Plan? (Y)N

COC: Complete with job #, site address & project office address? (Y)N

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

9. Notify the project manager by phone if the following conditions exist at the site:

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician:
Site: Tex/1127 Lincoln Ave Alam Scheduled: 1/01/96
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.5

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthouugh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	1.50

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS labeled? (Y)/N Gen. Date:_____ Label Type:_____

SOIL pile? Y (N) size:_____cu.yds. SITE LEFT CLEAN? (Y)/N

SITE VISIT FORM

Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: Steven Sperry

Site: Tex/1127 Lincoln Ave Alam Scheduled: 1/01/96

Project Mgr: Brian Garber Site Mgr:

TECHNICIAN'S COMMENTS

Total Hours Estimated	2.00	Total Hours Used	1.75
Travel Time Estimated	1.00	Travel Time Used	.50

Technician

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM

Date: 1-2-96

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRL	—	1570	—	—	—	—	—	
INF 1ST	31" 3"	3610	—	40.0	2.0	38.0	—	EFFICIENCY %
INF 2ND	—	—	—	70.0	3.0	67.0	—	
INF 3RD	—	—	—	76.0	1.0	75.0	—	
EFF	—	3540	—	0	0	0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT

0 Gals. Removed

SPARGE PUMP

ON OFF (N/A)

PSI- CFM-

REMARKS: NOTE INF 3RD & 2ND HIGHER THAN INF 1ST
CLEANED SITE
SAMPLED AIR & WATER FROM SYSTEM

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STROM

Date: 1-2-96

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		188252.1
Effluent Flow Rate (gpm)		7.1
Aeration Pressure (psi)		3
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		8
Carbon Vessel #2 Pressure (psi)	X	
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y X N ___

Monthly Qtrly Semi-Ann **Annual**

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissovlved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	80097.4	54565.0	104998.0	—
Flow Rate (gpm)	3.65	4.43	—	—
Hour Meter (hours)				
DTW from TOC (ft)				

GTI 06/94 CAMFORM WK3

SITE VISIT FORM - Groundwater Technology, Inc. - Concord, California

Project: 2070006.00 Technician: Steven Strom

Site: Texaco 1127 Lincoln Ave Alam Scheduled: 12/25/95

Project Mgr: Brian Gerber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 12-28-95 Arrival Time: 1320 Departure Time: 1355

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)N

Called PM? Y(N) Time: ____ Who: ____ Topic: Jason Idaho not at office

Are You In Possession of a Site Safety Plan? (Y)N

COC: Complete with job #, site address & project office address? (Y)N (NA)

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8 On the logs at the site record the above measurements and hours of operation.

9. Notify the project manager by phone if the following conditions exist at the site:

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM

Date: 12-19-95

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		1861914
Effluent Flow Rate (gpm)		7.1
Aeration Pressure (psi)		3.0
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		12* / 8
Carbon Vessel #2 Pressure (psi)	X	—
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y ___ N X

Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

* BEFORE BACKFLUSH

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	73011.5	49621.2	95450.3	—
Flow Rate (gpm)	3.47	4.63	—	—
Hour Meter (hours)				
DTW from TOC (ft)				

GTI 6691 OKMFORM WR3

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM

Date: 12/28/95

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRT	—	1480 (2)	—	—			—	EFFICIENCY %
INF 1ST	32 3"	3560 (2)	—	112	2.5	109.5	—	
INF 2ND	—	—	—	33	2.0	31.0	—	
INF 3RD	—	—	—	56	1.0	55.0	—	
EFF	—	3490 (2)	—	0	0	0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature
Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT

0 Gals. Removed

SPARGE PUMP

ON OFF (N/A)

PSI- CFM-

REMARKS: CLEAND SITE

SITE VISIT FORM

Groundwater Technology, Inc. Concord, California

Project: 20700006.00 Technician: Steven Siron
Site: Tex/1127 Lincoln Ave Alam Scheduled: 12/25/95
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.5

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: ~~# of Drums w/: Water___, Soil___, Empty___, Other___~~

DRUMS ~~labeled? NA~~ (Y)/N ~~Gen. Date:_______ Label Type:_______~~

SOIL pile? Y/(N) size:______cu.yds. SITE LEFT CLEAN? (Y)/N

TECHNICIAN'S COMMENTS

Total Hours Estimated	.50	Total Hours Used	.50
Travel Time Estimated	1.00	Travel Time Used	1.00

[signature]

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: STEVEN STROM
Site: Tex/1127 Lincoln Ave Alam Scheduled: 12/18/95
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 12/19/95 Arrival Time: 1201 Departure Time: 1248

Work Order read in office: Y/N upon arrival: Y/N upon departure: Y/N

Called PM? Y/N Time: 1245 Who: JASON FODOTA Topic: SYSTEM STATUS

Are You In Possession of a Site Safety Plan? Y/N

COC: Complete with job #, site address & project office address? Y/N NA

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation

9. Notify the project manager by phone if the following conditions exist at the site

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00
Site: Tex/1127 Lincoln Ave Alam
Project Mgr: Brian Garber

Technician: Steven Strom
Scheduled: 12/18/95
Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.50

~~O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]~~

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthouugh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894) under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	~~1.50~~	Hours Used	

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

~~WASTE COMPLIANCE: # of Drums w/ Water___, Soil___, Empty___, Other___~~

DRUMS labeled? NA/(Y)/N Gen. Date:_____ Label Type:_____

SOIL ~~piled? Y/N size~~ _____ cu yds SITE LEFT CLEAN? (Y)/N

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00
Site: Tex/1127 Lincoln Ave Alam
Project Mgr: Brian Garber

Technician:
Scheduled: 12/18/95
Site Mgr:

TECHNICIAN'S COMMENTS

Total Hours Estimated	2.00	Total Hours Used	0.5
Travel Time Estimated	1.00	Travel Time Used	1.00

Technician

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STROM

Date: 12-19-95

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
Is System Operational	X		
2nd Contain. Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner		X	
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		1829 240
Effluent Flow Rate (gpm)		7.0
Aeration Pressure (psi)		3.1
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		9
Carbon Vessel #2 Pressure (psi)		—
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y ___ N X

Monthly Qtrly Semi-Ann Annual

	Sample Point ____	Sample Point ____	Sample Point ____	Sample Point ____
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	62399.3	42388.4	81212.2	—
Flow Rate (gpm)	3.78	4.38	—	
Hour Meter (hours)				
DTW from TOC (ft)				

GTI 06/94 O&MFORM WK3

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM

Date: 12/19/95

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRL	—	1540	—	—	—	—	—	
INF 1ST	31	3590	—	106	3.5	102.5	—	EFFICIENCY %
INF 2ND	—	—	—	51.0	4.0	47.0	—	
INF 3RD	—	—	—	32.0	4.0	28.0	—	
EFF	—	3460	—	0	0	0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
27 Gals. Removed

SPARGE PUMP
ON OFF (N/A)
PSI- CFM-

REMARKS: CLEANED SITE
LAST WEEK HAD HEAVY RAIN

SITE VISIT FORM
Groundwater Technology, Inc. -- Concord, California

Project: 20700006.00 Technician: STEVEN W. STRONG
Site: Tex/1127 Lincoln Ave Alam Scheduled: 12/11/95
Project Mgr: Brian Garber Site Mgr: JS

PREPARATORY COMMENTS

Visit Date: 12/13/95 Arrival Time: 1305 Departure Time: 1343

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)/N

Called PM? (Y)/N Time: 1340 Who: Jason Foote Topic: _____

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with job #, site address & project office address? Y/N (NA)

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

9. Notify the project manager by phone if the following conditions exist at the site:

SITE VISIT FORM
Groundwater Technology, Inc. Concord, California

Project: 20700006.00 Technician:
Site: Tex/1127 Lincoln Ave Alam Scheduled: 12/11/95
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.50

FINAL CHECKS

SITE SECURITY: well/covers/gates... secure? (Y)/N-If No, Explain

WASTE COMPLIANCE: # of Drums w/: Water___, Soil___, Empty___, Other___

DRUMS labeled? NA/Y/N Gen. Date:_____ Label Type:_____

SOIL pile? Y/(N) size:_____cu.yds. SITE LEFT CLEAN? Y/(N)

TECHNICIAN'S COMMENTS

DID NOT CLEAN DUE TO HEAVY RAIN

BOX FLUSHED @ LIQUID CARBON

HEAVY RAINFALL

Total Hours Estimated	.50	Total Hours Used	.50
Travel Time Estimated	1.00	Travel Time Used	1.00

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

ampled By: STEVEN STREM

Date: 12-13-95

SYSTEM CHECK / READINGS

f Applicable	Yes	No	N/A
; System Operational	X		
nd Contain. Float Switch Working	X		
.djust Flow Rate		X	
ilter Checked and Cleaned	X		
trainer Checked and Cleaned	X		
:heck/Add Water Conditioner		X	
:alibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		180,337
Effluent Flow Rate (gpm)		7 / 7.2*
Aeration Pressure (psi)		3.0
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		13 / 7
Carbon Vessel #2 Pressure (psi)		—
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

*AFTER BACKFLUSH

System sampled Y__ N X

Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	531,911.6	366,116.4	[illegible]	0
Flow Rate (gpm)	3.61	4.26	—	
Hour Meter (hours)				
DTW from TOC (ft)				

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STREM Date: 12/13/95

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW ACFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRL	—	1500	—	—	—	—	—	
INF 1ST	27	3960	—	210	2.5	207.5	—	EFFICIENCY %
INF 2ND	—	—	—	23	2.5	17.5	—	
INF 3RD	—	—	—	12	1.5	10.5	—	
EFF	—	3920	—	0	0	0	—	

IC ENGINE (ONLY)

Readings	Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature
Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
0 Gals. Removed

SPARGE PUMP
ON OFF (N/A)
PSI- CFM-

REMARKS: "HEAVY RAINFALL

NEED TO GET A NEW TARP FOR
SECONDARY CONTAINMENT

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006-00 Technician: Steven Stern
Site: Tex/1127 Lincoln Ave Alam Scheduled: ~~11/27/95~~ 12/6/95
Project Mgr: Brian Garber Site Mgr:

PREPARATORY COMMENTS

Visit Date: 12/5/95 Arrival Time: 1215 Departure Time: 1325

Work Order read in office: (Y)/N upon arrival: (Y)/N upon departure: (Y)/N

Called PM? (Y)/N Time: 1320 Who: Jason Foote Topic: System Status

Are You In Possession of a Site Safety Plan? (Y)/N

COC: Complete with job #, site address & project office address? (Y)/N

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Weekly]

SYSTEM STATUS = Vapor I (inactive) + (site up) - (site down)

SYSTEM STATUS = Water I (inactive) + (site up) - (site down)

Logbook in blue container beneath trailer. Record activities in site log.

1. Record flow totalizer on site visitation form. Put pink copy in the O&M binder and give the other two copies to Krissi ASAP.

2. Document sampling performed (if any), maintenance perfomed on system, and any operational changes. Note down time, leaks, carbon change -out, and/or carbon back flush.

3. At the exhaust of the first air carbon canister record ppm with FID WITH AND WITHOUT carbon tip.

4. At the inlet of the first air carbon canister record ppm with FID WITHOUT carbon tip.

5. At the exhaust (to atmosphere) of the second carbon canister record ppm with FID WITHOUT carbon tip.

6. Record all readings on the appropriate logs on site.

7. At the inlet to the first air carbon canister measure the flow rate.

8. On the logs at the site record the above measurements and hours of operation.

9. Notify the project manager by phone if the following conditions exist at the site:

SITE VISIT FORM
Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician: Steven Simon
Site: Tex/1127 Lincoln Ave Alam Scheduled: ~~11/27/95~~ 12/6/95
Project Mgr: Brian Garber Site Mgr:

O&M SYSTEM MAINTENANCE (Continued) - Task Nr: 051005 [Weekly]

a.) The system is not operational when you leave site.

b.) If the readings from the exhaust of the first air carbon canister exceeds 10ppmv by FID without carbon tip.

c.) Any unsafe condition which may damage property or machinery.

EQUIPMENT NEEDED: Flame Ionization Detector (FID) with a removable carbon tip. Air velocity gauge.

Hours Estimated	.50	Hours Used	.25

O&M SYSTEM MAINTENANCE - Task Nr: 051005 [Monthly]

1. Collect samples from four sampling locations. Collect 2 voa containers from the locations as shown on the map (refer to O&M binder).

(A-INF Influent to system) (B-INF Influent to 1st carbon canister) (C-BT-1 Breakthouugh of 1st carbon canister) (D-EFF Effluent from system)

2. Water samples are to be analyzed for BTEX/TPH-G.

3. Collect Air samples: for BTEX/TPH-G.

4. Fill out chain-of-custody manifest appropriately with the correct analyses requested as per O&M table in site O&M binder.

5. Samples will be sent to BC Analytical - (1085 Shary Circle, Concord (510) 825-3894), under the appropriate COC manifest.

EQUIPMENT NEEDED: Site safety plan and safety equipment, PID, Chain-of-Custody manifests, labels, 40ml VOAs.

TEXACO REPRESENTATIVE: Karen Petryna (510) 236-9139.

Hours Estimated	1.50	Hours Used	~~.80~~ 0.75

FINAL CHECKS

SITE SECURITY: well/covers/gates. . secure? (Y)/N-If No, Explain

WASTE COMPLIANCE. # of Drums w/: Water___ Soil___, Empty___, Other CHEM

DRUMS labeled? NA/(Y)/N Gen Date.________ Label Type: MFG

SOIL pile? Y/N size: ______ cu.yds SITE LEFT CLEAN? (Y)/N

SITE VISIT FORM

Groundwater Technology, Inc. - Concord, California

Project: 20700006.00 Technician:

Site: Tex/1127 Lincoln Ave Alam Scheduled: 11/27/95

Project Mgr: Brian Garber Site Mgr:

TECHNICIAN'S COMMENTS

Total Hours Estimated	2.00	Total Hours Used	1.0
Travel Time Estimated	1.00	Travel Time Used	0.75

Technician

SITE VISITATION FORM
FOR
VAPOR EXTRACTION SYSTEM SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN SIROM

Date: 12-6-95

SAMPLE/MONITOR LOCATION	VACUUM (HG) OR (H20)	VELOCITY (FPM)	FLOW Temp of AGFM	FID	FID WITH CARBON	ADJUSTED CARBON	LEL/O2	
WATER TRAILER	—	1520	79	—	—	—	—	
INF 1ST	26" @ 3"	3970	84	95	2.5	92.5	—	EFFICIENCY %
INF 2ND	—	—	—	21.0	2.5	18.5	—	
INF 3RD	—	—	—	11.0	1.5	9.5	—	
EFF	—	3910	84	0	0	0	—	

IC ENGINE (ONLY)

	Readings Arrival	Departure
By Pass Setting		
Carb Setting		
System Vacuum		
CO		
NOX		
Propane Tank (lbs)		
Gas Meter Reading		
O2		
RPM		

CATOX/RETOX / THERMAL OXIDIZER

Data Point	Temperature

Propane Tanks	
Lbs.	
Gas	

UNIT	Hour Meter

MOISTURE KNOCKOUT
0 Gals. Removed

SPARGE PUMP
ON OFF (N/A)
PSI- CFM-

REMARKS: CLEANED SITE
SAMPLED AIR & WATER

SITE VISITATION FORM
FOR
WASTEWATER DISCHARGE SAMPLING
SYSTEM OPERATION AND MAINTENANCE

1127 LINCOLN ALAMEDA
Site Address

Sampled By: STEVEN STROM Date: 12-6-95

SYSTEM CHECK / READINGS

If Applicable	Yes	No	N/A
s System Operational	X		
2nd Contain Float Switch Working	X		
Adjust Flow Rate		X	
Filter Checked and Cleaned	X		
Strainer Checked and Cleaned	X		
Check/Add Water Conditioner	X		
Calibrate LEL			X

	N/A	Field Data
Effluent Totalizer (gals)		1776877
Effluent Flow Rate (gpm)		7.1
Aeration Pressure (psi)		4.0
Filter INFL Pressure (psi)		0
Filter EFFL Pressure (psi)	X	
Carbon Vessel #1 Pressure (psi)		10.5
Carbon Vessel #2 Pressure (psi)		—
Air Compressor Pressure (psi)	X	
Hour Meter (hours)	X	

SYSTEM SAMPLING

System sampled Y X N __
Monthly Qtrly Semi-Ann Annual

	Sample Point	Sample Point	Sample Point	Sample Point
Temperature (F)				
pH (units)				
Dissolved O_2 (ppm)				
Electrical Conductivity				

WELL READINGS

	Well # MW-5	Well # W-1	Well # W-2	Well # AUX
Flow Totalizer (gals)	45142.0	30964.7	5800201	0
Flow Rate (gpm)	3.94	4.01	—	
Hour Meter (hours)				
DTW from TOC (ft)				

CHAIN OF CUSTODY RECORD

BILL TEXACO DIRECT

BCA Log Number

Client name: GROUNDWATER TECHNOLOGY

Address: 1401 HALYARD DR #140

City, State, Zip: N. SACRAMENTO CA 95691

Project or PO#: 020700006

Project name: TEXACO 1127 LINCOLN, ALAMEDA

Phone #: (916) 372 4700

Report attention: BRIAN GARBER

Sampled by: STEVEN STREM

Analyses required: BTEX/TPH-G

Lab sample number	Date sampled	Time sampled	Type* See key below	Sample description	Preservative TCE	Preservative HCL	Number of containers	BTEX/TPH-G	Hazardous sample / Special handling required	Remarks
	12-6-95	1220	AQ	C-EFF	X	X	2	X		
	12-6-95	1222	AQ	B-BT-1	X	X	2	X		
	12-6-95	1224	AQ	A-INF	X	X	2	X		
	12-6-95	1226	AQ	INF	X	X	2	X		
	12-6-95	1243	AIR	EFF - AIR			1	X		
	12-6-95	1245	AIR	INF TO 2ND - AIR			1	X		
	12-6-95	1217	AIR	INF - AIR			1	X		

	Signature	Print Name	Company	Date	Time
Relinquished by		STEVEN STREM	GROUNDWATER TECH	12-6-95	1348
Received by			BCA	12/6/95	1348
Relinquished by					
Received by					
Relinquished by					
Received by Laboratory					

BC ANALYTICAL
1085 Shary Circle, Concord, CA 94518 (510) 825-3894
1601 Western Avenue, Glendale, CA 91201 (818) 247-5737

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.
Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements:

*KEY: AQ—Aqueous NA—Nonaqueous SL—Sludge
GW—Groundwater SO—Soil PE—Petroleum
WW—Wastewater

ANALYTICAL RESULTS

C Analytical

301 Western Avenue
Glendale, CA 91201
(818)247-5737
Fax: (818)247-9797

ANALYTICAL REPORT

LOG NO: G96-06-252

Received: 11 JUN 96
Mailed : 14 JUN 96

Purchase Order: 94-1446346-4370

Requisition: 624881450
Project: FKEP1001L

Mr. John Giddings
Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, California 94520

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
		Date	1	50	0.5	0.5	0.5	0.5	
RDL									
1*Between Carbons	06/10/96	06/12/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12

Greta Galoustian, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

LOG NO: G96-04-153

Received: 09 APR 96
Mailed : 17 APR 96

Mr. John Giddings
Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, California 94520

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

LOG NO	04-153-4	04-153-5	04-153-6
DATE SAMPLED	09 APR 96	09 APR 96	09 APR 96
SAMPLE DESCRIPTION	A-Inf	B-BT-1	C-Eff
AQUEOUS			
GRO (8015M)			
Date Analyzed	04/10/96	04/10/96	04/10/96
Dilution Factor, Times	1	1	1
Carbon Range,	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	<50	<50	<50
Surrogates **			
a,a,a-Trifluorotoluene Rep., ug/L	51.8	51.9	49.9
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0	50.0

LOG NO: G96-04-153

Received: 09 APR 96
Mailed : 17 APR 96

Mr. John Giddings
Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, California 94520

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

LOG NO	04-153-4	04-153-5	04-153-6
DATE SAMPLED	09 APR 96	09 APR 96	09 APR 96
SAMPLE DESCRIPTION	A-Inf	B-BT-1	C-Eff
AQUEOUS			
Halocarbons (8010)			
Date Analyzed	04/13/96	04/13/96	04/12/96
Date Confirmed	04/13/96	04/13/96	04/12/96
Dilution Factor, Times	1	1	1
1,1,1-Trichloroethane, ug/L	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane, ug/L	<0.5	<0.5	<0.5
1,1,2-Trichloroethane, ug/L	<0.5	<0.5	<0.5
1,1-Dichloroethane, ug/L	<0.5	<0.5	<0.5
1,1-Dichloroethene, ug/L	<0.5	<0.5	<0.5
1,2-Dichloroethane, ug/L	<0.5	<0.5	<0.5
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5
1,2-Dichloropropane, ug/L	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5

LOG NO: G96-04-153

Received: 09 APR 96
Mailed : 17 APR 96

Mr. John Giddings
Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, California 94520

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

LOG NO	04-153-4	04-153-5	04-153-6
DATE SAMPLED	09 APR 96	09 APR 96	09 APR 96
SAMPLE DESCRIPTION	A-Inf	B-BT-1	C-Eff
AQUEOUS			
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5
Bromodichloromethane, ug/L	<0.5	<0.5	<0.5
Bromomethane, ug/L	<0.5	<0.5	<0.5
Bromoform, ug/L	<0.5	<0.5	<0.5
Chlorobenzene, ug/L	<0.5	<0.5	<0.5
Carbon Tetrachloride, ug/L	<0.5	<0.5	<0.5
Chloroethane, ug/L	<0.5	<0.5	<0.5
Chloroform, ug/L	<0.5	<0.5	<0.5
Chloromethane, ug/L	<0.5	<0.5	<0.5
Dibromochloromethane, ug/L	<0.5	<0.5	<0.5
Freon 113, ug/L	<0.5	<0.5	<0.5
Methylene chloride, ug/L	<2	<2	<2
Trichloroethene, ug/L	<0.5	<0.5	<0.5

LOG NO: G96-04-153

Received: 09 APR 96
Mailed : 17 APR 96

Mr. John Giddings
Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, California 94520

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

LOG NO	04-153-4	04-153-5	04-153-6
DATE SAMPLED	09 APR 96	09 APR 96	09 APR 96
SAMPLE DESCRIPTION	A-Inf	B-BT-1	C-Eff
AQUEOUS			
Trichlorofluoromethane, ug/L	<0.5	<0.5	<0.5
Tetrachloroethene, ug/L	36	2.1	<0.5
Vinyl chloride, ug/L	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene, ug/L	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene, ug/L	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene, ug/L	<0.5	<0.5	<0.5
Surrogates **			
Bromochloromethane Reported, ug/L	49.3	58.7	54.4
Bromochloromethane Theoretical, ug/L	50.0	50.0	50.0

LOG NO: G96-04-153

Received: 09 APR 96
Mailed : 17 APR 96

Mr. John Giddings
Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, California 94520

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

LOG NO	04-153-4	04-153-5	04-153-6
DATE SAMPLED	09 APR 96	09 APR 96	09 APR 96
SAMPLE DESCRIPTION	A-Inf	B-BT-1	C-Eff
AQUEOUS			
Volatile Aromatics (8020)			
Date Analyzed	04/13/96	04/13/96	04/12/96
Date Confirmed	04/13/96	04/13/96	04/12/96
Dilution Factor, Times	1	1	1
1,2-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5
1,3-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5
1,4-Dichlorobenzene, ug/L	<0.5	<0.5	<0.5
Benzene, ug/L	<0.5	<0.5	<0.5
Chlorobenzene, ug/L	<0.5	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	<0.5	<0.5
Toluene, ug/L	<0.5	<0.5	<0.5
Total Xylene Isomers, ug/L	<1	<1	<1
Surrogates **			

LOG NO: G96-04-153

Received: 09 APR 96
Mailed : 17 APR 96

Mr. John Giddings
Kaprealian Engineering, Inc.
2401 Stanwell Drive, Suite 400
Concord, California 94520

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

LOG NO	04-153-4	04-153-5	04-153-6
DATE SAMPLED	09 APR 96	09 APR 96	09 APR 96
SAMPLE DESCRIPTION	A-Inf	B-BT-1	C-Eff
AQUEOUS			
a,a,a-Trifluorotoluene Rep., ug/L	49.3	53.8	49.3
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0	50.0

Greta Galoustian, Laboratory Director

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247 6337
Fax: 818/247 9797

ANALYTICAL REPORT

LOG NO: G96-04-074

Received: 03 APR 96

Mailed: APR 9 1996

Mr. Brian Garber
Groundwater Technology, Inc.
1401 Halyard Drive, Suite 140
West Sacramento, California 95691

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	0.5	
1*C Eff	04/02/96	04/05/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
2*B Bf-1	04/02/96	04/05/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
3*A Inf	04/02/96	04/05/96	1	<50	2.6	0.73	<0.5	2.2	C6-C12
4*Inf	04/02/96	04/05/96	1	260	33	4.6	0.81	7.1	C6-C12

Karen Petryna
1127 Lincoln Ave., Alameda
Alameda County

COPY

RECEIVED
APR 12 1996

B C Analytical

BCA

B C Analytical

3801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

ANALYTICAL REPORT

LOG NO: G96-04-074

Received: 03 APR 96

Mr. Brian Garber
Groundwater Technology, Inc.
1401 Halyard Drive, Suite 140
West Sacramento, California 95691

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

VAPOR

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed Date	Dilution Factor Times	TPH-g mg/M3	Benzene mg/M3	Toluene mg/M3	Ethyl-Benzene mg/M3	Total Xylenes Isomers mg/M3	Carbon Range
RDL			1	1	0.005	0.005	0.005	0.005	
5*Air-Inf	04/02/96	04/04/96	1	<10	<0.2	<0.2	<0.2	<0.2	C6-C12
6*Air-Inf to 2nd	04/02/96	04/04/96	1	<10	<0.2	<0.2	<0.2	<0.2	C6-C12
7*Air-Eff	04/02/96	04/04/96	1	<10	0.43	<0.2	<0.2	<0.2	C6-C12

Dick Swenson, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

BCA

: ORDER PLACED FOR CLIENT: Groundwater Technology, Inc. 9604074 :
: BC ANALYTICAL : GLEN LAB : 14:10:41 08 APR 1996 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9604074*1	C-Eff	GAS.BTX.TESNC	04.05.96	8015M.TX	536-36	96642	6843
9604074*2	B-BT-1	GAS.BTX.TESNC	04.05.96	8015M.TX	536-36	96642	6843
9604074*3	A-Inf	GAS.BTX.TESNC	04.05.96	8015M.TX	536-36	96642	6843
9604074*4	Inf	GAS.BTX.TESNC	04.05.96	8015M.TX	536-36	96642	6843
9604074*5	Air-Inf	GAS.BTX.TES.VA	04.04.96	8015M	536-36	96640	6843
9604074*6	Air-Inf to 2nd	GAS.BTX.TES.VA	04.04.96	8015M	536-36	96640	6843
9604074*7	Air-Eff	GAS.BTX.TES.VA	04.04.96	8015M	536-36	96640	6843

***

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

ORDER QC REPORT FOR G9604074

DATE REPORTED : 04/08/96

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER		DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. GRO	C604514*1						
Date Analyzed		04.04.96	96642	04/04/96	04/04/96	Date	N/A
Benzene		04.04.96	96642	16.2	15.2	ug/L	107
Toluene		04.04.96	96642	91.4	97.4	ug/L	94
Ethylbenzene		04.04.96	96642	19.5	20.4	ug/L	96
Total Xylene Isomers		04.04.96	96642	109	119	ug/L	92
TPH (Gasoline Range)		04.04.96	96642	1030	1100	ug/L	94
a,a,a-Trifluorotoluene	Rep.	04.04.96	96642	52.7	50.0	ug/L	105
a,a,a-Trifluorotoluene	Th.	04.04.96	96642	50.0	50.0	ug/L	100
2. TPH/BTEX	C604262*1						
Date Analyzed		04.03.96	96640	04/03/96	04/03/96	Date	N/A
Benzene		04.03.96	96640	5.56	6.40	mg/M3	87
Toluene		04.03.96	96640	5.58	6.40	mg/M3	87
Ethylbenzene		04.03.96	96640	5.20	6.40	mg/M3	81
Total Xylene Isomers		04.03.96	96640	10.6	12.8	mg/M3	83
TPH (Gasoline Range)		04.03.96	96640	94.4	119	mg/M3	79
a,a,a-Trifluorotoluene	Rep.	04.03.96	96640	49.4	50.0	mg/M3	99
a,a,a-Trifluorotoluene	Th.	04.03.96	96640	50.0	50.0	mg/M3	100
3. TPH/BTEX	C604263*1						
Date Analyzed		04.03.96	96640	04/03/96	04/03/96	Date	N/A
Benzene		04.03.96	96640	6.30	6.40	mg/M3	98
Toluene		04.03.96	96640	6.44	6.40	mg/M3	101
Ethylbenzene		04.03.96	96640	5.89	6.40	mg/M3	92
Total Xylene Isomers		04.03.96	96640	12.0	12.8	mg/M3	94
TPH (Gasoline Range)		04.03.96	96640	97.8	119	mg/M3	82
a,a,a-Trifluorotoluene	Rep.	04.03.96	96640	51.2	50.0	mg/M3	102
a,a,a-Trifluorotoluene	Th.	04.03.96	96640	50.0	50.0	mg/M3	100

BC ANALYTICAL

ORDER QC REPORT FOR G9604074

DATE REPORTED : 04/08/96

ADDITIONAL LCS PRECISION (DUPLICATES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	LC1 RESULT	LC2 RESULT	UNIT	RELATIVE % DIFF
1. TPH/BTEX							
Date Analyzed		04.03.96	96640	04/03/96	04/03/96	Date	N/A
Benzene		04.03.96	96640	5.56	6.30	mg/M3	12
Toluene		04.03.96	96640	5.58	6.44	mg/M3	14
Ethylbenzene		04.03.96	96640	5.20	5.89	mg/M3	12
Total Xylene Isomers		04.03.96	96640	10.6	12.0	mg/M3	12
TPH (Gasoline Range)		04.03.96	96640	94.4	97.8	mg/M3	4
a,a,a-Trifluorotoluene Rep.		04.03.96	96640	49.4	51.2	mg/M3	4
a,a,a-Trifluorotoluene Th.		04.03.96	96640	50.0	50.0	mg/M3	0

BC ANALYTICAL

ORDER QC REPORT FOR G9604074

DATE REPORTED : 04/08/96

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
1. GRO	9604074*1						
Benzene		04.05.96	96642	106	105	15.2	ug/L
Toluene		04.05.96	96642	95	93	97.4	ug/L
Ethylbenzene		04.05.96	96642	95	95	20.4	ug/L
Total Xylene Isomers		04.05.96	96642	92	92	119	ug/L
TPH (Gasoline Range)		04.05.96	96642	91	90	1100	ug/L
a,a,a-Trifluorotoluene Rep.		04.05.96	96642	105	106	50.0	ug/L
a,a,a-Trifluorotoluene Th.		04.05.96	96642	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9604074

DATE REPORTED : 04/08/96

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. GRO	9604074*1						
Date Analyzed		04.05.96	96642	04/05/96	04/05/96	Date	N/A
Benzene		04.05.96	96642	16.1	16.0	ug/L	1
Toluene		04.05.96	96642	92.1	90.4	ug/L	2
Ethylbenzene		04.05.96	96642	19.4	19.3	ug/L	1
Total Xylene Isomers		04.05.96	96642	110	109	ug/L	1
TPH (Gasoline Range)		04.05.96	96642	999	990	ug/L	1
a,a,a-Trifluorotoluene Rep.		04.05.96	96642	52.3	53.0	ug/L	1
a,a,a-Trifluorotoluene Th.		04.05.96	96642	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9604074

DATE REPORTED : 04/08/96

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER		DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
1. GRO	B604277*1						
Date Analyzed		04.05.96	96642	04/05/96	NA	Date	8015M.TX
Benzene		04.05.96	96642	0	0.5	ug/L	8015M.TX
Toluene		04.05.96	96642	0	0.5	ug/L	8015M.TX
Ethylbenzene		04.05.96	96642	0	0.5	ug/L	8015M.TX
Total Xylene Isomers		04.05.96	96642	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)		04.05.96	96642	0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene	Rep.	04.05.96	96642	51.7	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene	Th.	04.05.96	96642	50.0	NA	ug/L	8015M.TX
2. TPH/BTEX	B604149*1						
Date Analyzed		04.03.96	96640	04/03/96	NA	Date	8015M
Benzene		04.03.96	96640	0	NA	mg/M3	8015M
Toluene		04.03.96	96640	0	NA	mg/M3	8015M
Ethylbenzene		04.03.96	96640	0	NA	mg/M3	8015M
Total Xylene Isomers		04.03.96	96640	0	NA	mg/M3	8015M
TPH (Gasoline Range)		04.03.96	96640	0	NA	mg/M3	8015M
a,a,a-Trifluorotoluene	Rep.	04.03.96	96640	49.5	NA	mg/M3	8015M
a,a,a-Trifluorotoluene	Th.	04.03.96	96640	50.0	NA	mg/M3	8015M

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 14:11:48 08 APR 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9604074*1							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	51.1	50.0	102	
9604074*2							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	50.8	50.0	102	
9604074*3							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	50.6	50.0	101	
9604074*4							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	49.9	50.0	100	
9604074*5							
8015M	a,a,a-Trifluorotoluene	Re96640	04/04/96	50.0	50.0	100	
9604074*6							
8015M	a,a,a-Trifluorotoluene	Re96640	04/04/96	50.4	50.0	101	
9604074*7							
8015M	a,a,a-Trifluorotoluene	Re96640	04/04/96	50.4	50.0	101	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 14:11:56 08 APR 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9604074*1*R1							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	51.1	50.0	102	
9604074*1*S1							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	52.3	50.0	105	
9604074*1*S2							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	53.0	50.0	106	
9604074*1*T							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	50.0	50.0	100	
B604149*1*MB							
8015M	a,a,a-Trifluorotoluene	Re96640	04/03/96	49.5	50.0	99	
B604277*1*MB							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/05/96	51.7	50.0	103	
C604262*1*LC							
8015M	a,a,a-Trifluorotoluene	Re96640	04/03/96	49.4	50.0	99	
C604262*1*LT							
8015M	a,a,a-Trifluorotoluene	Re96640	04/03/96	50.0	50.0	100	
C604263*1*LC							
8015M	a,a,a-Trifluorotoluene	Re96640	04/03/96	51.2	50.0	102	
C604263*1*LT							
8015M	a,a,a-Trifluorotoluene	Re96640	04/03/96	50.0	50.0	100	
C604514*1*LC							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/04/96	52.7	50.0	105	
C604514*1*LT							
8015M.TX	a,a,a-Trifluorotoluene	Re96642	04/04/96	50.0	50.0	100	

CHAIN OF CUSTODY RECORD

BCA Log Number [illegible]

BILL TEXACO DIRECT

Client name: GROUNDWATER TECHNOLOGY	Project or PO# 0207CLOOG 1127 LINCOLN AVE ALAMEDA
Address: 4101 HALYARD DR #140	Phone # (916) 372 4700
City State Zip: WEST SACRAMENTO CA 95691	Report attention: BRIAN GARBER

Sampled by: STEVEN STREM

Analyses required: BTEX/TPH-G; Hazardous sample / Special handling required

Remarks: G9604074

Lab Sample Number	Date sampled	Time sampled	Type* See key below	Sample description	Preservation ICE	Preservation HCL	Number of containers	BTEX/TPH-G							Hazardous sample Special handling required	Remarks
	4-2-96	1352	AQ	C-EFF	X	X	2	X							-1	
	4-2-96	1353	AQ	B-BT-1	X	X	2	X							-2	
	4-2-96	1355	AQ	A-INF	X	X	2	X							-3	
	4-2-96	1356	AQ	INF	X	X	2	X							-4	
	4-2-96	1343	AIR	AIR-INF			1	X								-5
	4-2-96	1342	AIR	AIR INF TO 2ND			1	X								-6
	4-2-96	1341	AIR	AIR EFF			1	X								-7 Cooler Temp: 4°C
				624881450												Sample Condition: good
				Alameda												
				FKEP1001L KEP												

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	STEVEN STREM	GROUNDWATER TECHNOLOGY	4-3-96	12:00
Received by	[signature]	Bill Lyons	B.C.A.	4-3-96	12:00
Relinquished by	[signature]	Bill Lyons	B.C.A.	4-3-96	3:50
Received by	Kimberly Eng	Kimberly Eng	BCA	4/3/96	3:50
Relinquished by	Kimberly Eng	Kimberly Eng	BCA	4/3/96	5:30
Received by Laboratory					

B C ANALYTICAL

[illegible] 325 3891

[illegible] 247 5737

[illegible]

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements ________________

*KEY: AQ Aqueous NA Nonaqueous SL Sludge GW Groundwater SO Soil PE Petroleum

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247 9797

ANALYTICAL REPORT

LOG NO: G96-03-433

Received: 14 MAR 96

Mailed: MAR 22 1996

Mr Brian Garber
Groundwater Technology, Inc.
1101 Halyard Drive, Suite 140
West Sacramento, California 95691

Purchase Order: 94-1446346+4370

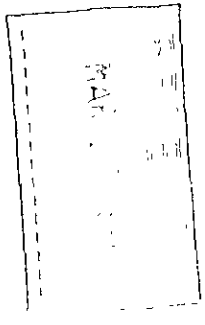
Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	0.5	
1*E Eff	03/13/96	03/19/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
2*B-BT 1	03/13/96	03/19/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
3*A Inf	03/13/96	03/19/96	1	71	12	3.3	0.60	4.8	C6-C12
4*Inf	03/13/96	03/19/96	1	1300	260	66	8.9	100	C6-C12

Karen Petryna
1127 Lincoln Ave., Alameda
Alameda County



Dick Swenson, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

: ORDER PLACED FOR CLIENT: Groundwater Technology, Inc. 9603433 :
: BC ANALYTICAL : GLEN LAB : 10:51:50 22 MAR 1996 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9603433*1	C-Eff	GAS.BTX.TESNC	03.19.96	8015M.TX	536-23	96545	8171
9603433*2	B-BT-1	GAS.BTX.TESNC	03.19.96	8015M.TX	536-23	96545	8171
9603433*3	A-Inf	GAS.BTX.TESNC	03.19.96	8015M.TX	536-23	96545	8171
9603433*4	Inf	GAS.BTX.TESNC	03.19.96	8015M.TX	536-23	96545	8171

***

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

ORDER QC REPORT FOR G9603433

DATE REPORTED : 03/22/96

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER		DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. BTEX/GRO	C6031928*1						
Date Analyzed		03.19.96	96545	03/19/96	03/19/96	Date	N/A
Benzene		03.19.96	96545	13.6	15.2	ug/L	89
Toluene		03.19.96	96545	80.8	97.4	ug/L	83
Ethylbenzene		03.19.96	96545	16.9	20.4	ug/L	83
Total Xylene Isomers		03.19.96	96545	100	119	ug/L	84
TPH (Gasoline Range)		03.19.96	96545	1100	1100	ug/L	100
a,a,a-Trifluorotoluene	Rep.	03.19.96	96545	54.5	50.0	ug/L	109
a,a,a-Trifluorotoluene	Th.	03.19.96	96545	50.0	50.0	ug/L	100

BC ANALYTICAL

ORDER QC REPORT FOR G9603433

DATE REPORTED : 03/22/96

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
1. GRO	9603422*3						
Benzene		03.19.96	96545	90	91	15.2	ug/L
Toluene		03.19.96	96545	83	84	97.9	ug/L
Ethylbenzene		03.19.96	96545	82	84	20.4	ug/L
Total Xylene Isomers		03.19.96	96545	84	87	119	ug/L
TPH (Gasoline Range)		03.19.96	96545	101	100	1100	ug/L
a,a,a-Trifluorotoluene Rep.		03.19.96	96545	111	113	50.0	ug/L
a,a,a-Trifluorotoluene Th.		03.19.96	96545	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9603433

DATE REPORTED : 03/22/96

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. BTEX/GRO	9603422*3						
Date Analyzed		03.19.96	96545	03/19/96	03/19/96	Date	N/A
Benzene		03.19.96	96545	13.7	13.8	ug/L	1
Toluene		03.19.96	96545	81.4	82.1	ug/L	1
Ethylbenzene		03.19.96	96545	16.7	17.1	ug/L	2
Total Xylene Isomers		03.19.96	96545	100	103	ug/L	3
TPH (Gasoline Range)		03.19.96	96545	1110	1100	ug/L	1
a,a,a-Trifluorotoluene Rep.		03.19.96	96545	55.3	56.4	ug/L	2
a,a,a-Trifluorotoluene Th.		03.19.96	96545	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9603433

DATE REPORTED : 03/22/96

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
1. BTEX/GRO B6031029*1						
Date Analyzed	03.19.96	96545	03/19/96	NA	Date	8015M
Benzene	03.19.96	96545	0	0.3	ug/L	8015M
Toluene	03.19.96	96545	0	0.3	ug/L	8015M
Ethylbenzene	03.19.96	96545	0	0.3	ug/L	8015M
Total Xylene Isomers	03.19.96	96545	0	0.6	ug/L	8015M
TPH (Gasoline Range)	03.19.96	96545	0	100	ug/L	8015M
a,a,a-Trifluorotoluene Rep.	03.19.96	96545	50.4	0.5	ug/L	8015M
a,a,a-Trifluorotoluene Th.	03.19.96	96545	50.0	NA	ug/L	8015M

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 10:52:39 22 MAR 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9603433*1							
8015M.	TXa,a,a-Trifluorotoluene	Re96545	03/19/96	49.9	50.0	100	
9603433*2							
8015M.	TXa,a,a-Trifluorotoluene	Re96545	03/19/96	50.6	50.0	101	
9603433*3							
8015M.	TXa,a,a-Trifluorotoluene	Re96545	03/19/96	50.8	50.0	102	
9603433*4							
8015M.	TXa,a,a-Trifluorotoluene	Re96545	03/19/96	50.0	50.0	100	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 10:52:47 22 MAR 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9603422*3*R1							
8015M	a,a,a-Trifluorotoluene	Re96545	03/19/96	49.4	50.0	99	
9603422*3*S1							
8015M	a,a,a-Trifluorotoluene	Re96545	03/19/96	55.3	50.0	111	
9603422*3*S2							
8015M	a,a,a-Trifluorotoluene	Re96545	03/19/96	56.4	50.0	113	
9603422*3*T							
8015M	a,a,a-Trifluorotoluene	Re96545	03/19/96	50.0	50.0	100	
B6031029*1*MB							
8015M	a,a,a-Trifluorotoluene	Re96545	03/19/96	50.4	50.0	101	
C6031928*1*LC							
8015M	a,a,a-Trifluorotoluene	Re96545	03/19/96	54.5	50.0	109	
C6031928*1*LT							
8015M	a,a,a-Trifluorotoluene	Re96545	03/19/96	50.0	50.0	100	

Client name: GROUNDWATER TECHNOLOGY

Address: 11 HALYARD DR #140

City, State, Zip: SACRAMENTO CA

Project or PO# 020100006
1127 LINCOLN ALAMEDA

Phone # (916) 372-4700

Report attention: BRIAN GARBER

Sampled by: STEVEN STREM

Analyses required: BTEX/TPH-G; Hazardous sample / Special handling required

Remarks: waters only - G9603433

Date sampled	Time sampled	Type* See key below	Sample description	Perservation HCL	Perservation ICE	Number of containers	BTEX/TPH-G		Remarks
3-13-96	1525	AQ	C-EFF	X	X	2	X	-1	waters shipped
3-13-96	1526	AQ	B-BT-1	X	X	2	X	-2	3/15/96 jw
3-13-96	1528	AQ	A-INF	X	X	2	X	-3	
3-13-96	1530	AQ	INF	X	X	2	X	-4	
3-13-96	1551	AIR	INF-AIR			1	X	-1	
3-13-96	1549	AIR	INF 2ND			1	X	-2	G96·03 367
3-13-96	1547	AIR	EFF			1	X	-3	
			624881450						
			Alameda						
			KEP						
			FKEP100IL						

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	STEVEN STREM	GROUNDWATER TECHNOLOGY		
Received by	[signature]	Bill Lyons	BCA	3-14-96	4:[illegible]
Relinquished by	[signature]	Bill Lyons	BCA	3-14-96	5:05
Received by	[signature]	Mario Alvarez	BCA	3-14-96	5:[illegible]
Relinquished by	[signature]	Mario Alvarez	BCA	3-14-96	5:[illegible]
Received by Laboratory					

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements: ____

*KEY: AQ—Aqueous NA—Nonaqueous SL—Sludge GW—Groundwater SO—Soil PE—Petroleum WW—Wastewater

...G ANALYTICAL
...085 Shary Circle Concord CA 94518 (510) 825 3894
...01 Western Avenue Glendale CA 91201 (818) 247-5737
...00 Gene Autry Wy Anaheim CA 92805 (714) 978 0113

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247 5737
Fax: 818/247-9707

ANALYTICAL REPORT

LOG NO: G96-02-321

Received: 14 FEB 96

Mailed: FEB 22 1996

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

Mr. Brian Garber
Groundwater Technology, Inc.
1101 Halyard Drive, Suite 140
West Sacramento, California 95691

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020)								
		Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl- Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range .
RDL			1	50	0.5	0.5	0.5	0.5	
1*C Inf	02/14/96	02/20/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
3*A Inf	02/14/96	02/20/96	1	<50	5.3	1.4	<0.5	2.5	C6-C12
4*Inf	02/14/96	02/20/96	1	230	11	1.6	2.1	4.0	C6-C12

Karen Petryna
1127 Lincoln Ave , Alameda
Alameda County

B C Analytical

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

ANALYTICAL REPORT

LOG NO: G96-02-321

Received: 14 FEB 96

Mr. Brian Garber
Groundwater Technology, Inc.
1401 Halyard Drive, Suite 140
West Sacramento, California 95691

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	Sample Held Not Analyzed
RDI		
2*B BC 1	02/14/96	HOLD

Dick Swenson, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

: ORDER PLACED FOR CLIENT: Groundwater Technology, Inc. 9602321 :
: BC ANALYTICAL : GLEN LAB : 12:23:26 22 FEB 1996 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9602321*1	C-Eff	GAS.BTX.TESNC	02.20.96	8015M.TX	536-23	96526	8501
9602321*3	A-Inf	GAS.BTX.TESNC	02.20.96	8015M.TX	536-23	96526	8501
9602321*4	Inf	GAS.BTX.TESNC	02.20.96	8015M.TX	536-23	96526	8501
9602321*2	B-Bt-1	HOLD	02.20.96				7362

***

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

B C Analytical

BC ANALYTICAL

ORDER QC REPORT FOR G9602321

DATE REPORTED : 02/22/96

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER		DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. BTEX	C6022017*1						
Date Analyzed		02.20.96	96526	02/20/96	02/20/96	Date	N/A
Date Extracted		02.20.96	96526	02/20/96	02/20/96	Date	N/A
Benzene		02.20.96	96526	15.2	15.2	ug/L	100
Toluene		02.20.96	96526	91.0	97.4	ug/L	93
Ethylbenzene		02.20.96	96526	18.5	20.4	ug/L	91
Total Xylene Isomers		02.20.96	96526	111	119	ug/L	93
a,a,a-Trifluorotoluene Rep.		02.20.96	96526	61.7	50.0	ug/L	123 Q
a,a,a-Trifluorotoluene Th.		02.20.96	96526	50.0	50.0	ug/L	100

BC ANALYTICAL

ORDER QC REPORT FOR G9602321

DATE REPORTED : 02/22/96

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
1. GRO	9602393*1						
Benzene		02.20.96	96526	103	101	16.3	ug/L
Toluene		02.20.96	96526	97	91	97.9	ug/L
Ethylbenzene		02.20.96	96526	94	90	20.4	ug/L
Total Xylene Isomers		02.20.96	96526	98	93	119	ug/L
a,a,a-Trifluorotoluene Rep.		02.20.96	96526	117	115	50.0	ug/L
a,a,a-Trifluorotoluene Th.		02.20.96	96526	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9602321

DATE REPORTED : 02/22/96

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. BTEX	9602393*1						
Date Analyzed		02.20.96	96526	02/20/96	02/20/96	Date	N/A
Date Extracted		02.20.96	96526	02/20/96	02/20/96	Date	N/A
Benzene		02.20.96	96526	16.8	16.4	ug/L	2
Toluene		02.20.96	96526	94.8	89.5	ug/L	6
Ethylbenzene		02.20.96	96526	19.2	18.3	ug/L	5
Total Xylene Isomers		02.20.96	96526	117	111	ug/L	5
a,a,a-Trifluorotoluene Rep.		02.20.96	96526	58.6	57.6	ug/L	2
a,a,a-Trifluorotoluene Th.		02.20.96	96526	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9602321

DATE REPORTED : 02/22/96

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER		DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
1. BTEX	B6021048*1						
Date Analyzed		02.20.96	96526	02/20/96	NA	Date	8015M
Date Extracted		02.20.96	96526	02/20/96	NA	Date	8015M
Benzene		02.20.96	96526	0	0.3	ug/L	8015M
Toluene		02.20.96	96526	0	0.3	ug/L	8015M
Ethylbenzene		02.20.96	96526	0	0.3	ug/L	8015M
Total Xylene Isomers		02.20.96	96526	0	0.6	ug/L	8015M
a,a,a-Trifluorotoluene	Rep.	02.20.96	96526	52.2	0.5	ug/L	8015M
a,a,a-Trifluorotoluene	Th.	02.20.96	96526	50.0	NA	ug/L	8015M

: SURROGATE RECOVERIES :
:·BC ANALYTICAL : GLEN LAB : 12:24:30 22 FEB 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9602321*1							
8015M.TX	a,a,a-Trifluorotoluene	Re96526	02/20/96	51.5	50.0	103	
9602321*3							
8015M.TX	a,a,a-Trifluorotoluene	Re96526	02/20/96	54.6	50.0	109	
9602321*4							
8015M.TX	a,a,a-Trifluorotoluene	Re96526	02/20/96	49.6	50.0	99	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 12:24:37 22 FEB 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9602393*1*R1							
8015M	a,a,a-Trifluorotoluene	Re96526	02/20/96	53.7	50.0	107	
9602393*1*S1							
8015M	a,a,a-Trifluorotoluene	Re96526	02/20/96	58.6	50.0	117	
9602393*1*S2							
8015M	a,a,a-Trifluorotoluene	Re96526	02/20/96	57.6	50.0	115	
9602393*1*T							
8015M	a,a,a-Trifluorotoluene	Re96526	02/20/96	50.0	50.0	100	
B6021048*1*MB							
8015M	a,a,a-Trifluorotoluene	Re96526	02/20/96	52.2	50.0	104	
C6022017*1*LC							
8015M	a,a,a-Trifluorotoluene	Re96526	02/20/96	61.7	50.0	123	Q
C6022017*1*LT							
8015M	a,a,a-Trifluorotoluene	Re96526	02/20/96	50.0	50.0	100	

CHAIN OF CUSTODY RECORD

BCA Log Number 94602

Client name: GROUNDWATER TECHNOLOGY
Address: 4151 HOWARD DR #140
City, State, Zip: SACRAMENTO CA

Project or PO# 02070000 GW 05,005 TES LINCOLN ALAMEDA
Phone # (916) 372 4700

Report attention: BRIAN GARBER

Sampled by: STEVEN STREM

Analyses required: BTEX / TPH-G; Hazardous sample / Special handling required

Lab sample number	Date sampled	Time sampled	Type* See key below	Sample description	Number of containers	BTEX / TPH-G							Hazardous sample / Special handling required	Remarks
	2-14-96	1201	AQ	C-EFF	2	X						–	1	
	2-14-96	1202	AQ	B-BT-1	2	X						–	2	*Sample broke lost due to breakage
	2-14-96	1203	AQ	A-INF	2	X						–	3	
	2-14-96	1204	AQ	INF	2	X						–	4	
	2-14-96	1216	AIR	EFF-AIR	1	X								KEP
	2-14-96	1218	AIR	INF-2ND-AIR	1	X								624881450
	2-14-96	1220	AIR	INF-AIR	1	X								1127 Lincoln Av
														Alameda
														Alameda
														FKEP1006L

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	STEVEN STREM	GROUNDWATER TECH	2-14-96	1350
Received by	A. Parekh	Ameeta Parekh	BCA	2-14-96	13.55
Relinquished by	A. Parekh	Ameeta Parekh	BCA	2-14-96	3.00pm
Received by					
Relinquished by					
Received by Laboratory					

BC ANALYTICAL

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements

*KEY: AQ—Aqueous NA—Nonaqueous SL—Sludge GW—Groundwater SO—Soil PE—Petroleum WW—Wastewater

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247 5737
Fax: 818/247-9797

ANALYTICAL REPORT

LOG NO: G96-01-054

Received: 03 JAN 96

Mailed: JAN 9 1996

Mr Brian Garber
Groundwater Technology, Inc.
1401 Halyard Drive, Suite 140
West Sacramento, California 95691

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	0.5	
1*C Eff	01/02/96	01/05/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
2*B-Bf 1	01/02/96	01/05/96	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
3*A Inf	01/02/96	01/05/96	1	55	5.1	1.2	0.84	2.9	C6-C12
4*Inf	01/02/96	01/05/96	1	360	19	2.4	6.5	15	C6-C12

Karen Petryna
1177 Lincoln Ave., Alameda
Alameda County

Jane Freemyer, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

ORDER PLACED FOR CLIENT: Groundwater Technology, Inc. 9601054 :
BC ANALYTICAL : GLEN LAB : 10:37:28 09 JAN 1996 - P. 1 :

AMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
)601054*1	C-Eff	GAS.BTX.TESNC	01.05.96	8015M.TX	536-35	9644	6843
)601054*2	B-BT-1	GAS.BTX.TESNC	01.05.96	8015M.TX	536-35	9644	6843
)601054*3	A-Inf	GAS.BTX.TESNC	01.05.96	8015M.TX	536-35	9644	6843
)601054*4	Inf	GAS.BTX.TESNC	01.05.96	8015M.TX	536-35	9644	6843

**

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

ORDER QC REPORT FOR G9601054

)ATE REPORTED : 01/09/96

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

)ARAMETER		DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
l. BTEX/GRO	C6011023*1						
Date Analyzed		01.04.96	9644	01/04/96	01/04/96	Date	N/A
Benzene		01.04.96	9644	17.1	15.2	ug/L	113
Toluene		01.04.96	9644	89.8	97.4	ug/L	92
Ethylbenzene		01.04.96	9644	18.6	20.4	ug/L	91
Total Xylene Isomers		01.04.96	9644	102	119	ug/L	86
TPH (Gasoline Range)		01.04.96	9644	1110	1100	ug/L	101
a,a,a-Trifluorotoluene	Rep.	01.04.96	9644	52.6	50.0	ug/L	105
a,a,a-Trifluorotoluene	Th.	01.04.96	9644	50.0	50.0	ug/L	100

BC ANALYTICAL

ORDER QC REPORT FOR G9601054

DATE REPORTED : 01/09/96

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
. GRO	9601034*2						
Benzene		01.05.96	9644	114	118	15.2	ug/L
Toluene		01.05.96	9644	92	94	97.4	ug/L
Ethylbenzene		01.05.96	9644	92	94	20.4	ug/L
Total Xylene Isomers		01.05.96	9644	87	88	119	ug/L
TPH (Gasoline Range)		01.05.96	9644	109	111	1100	ug/L
a,a,a-Trifluorotoluene Rep.		01.05.96	9644	101	104	50.0	ug/L
a,a,a-Trifluorotoluene Th.		01.05.96	9644	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9601054

DATE REPORTED : 01/09/96

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. BTEX/GRO	9601034*2						
Date Analyzed		01.05.96	9644	01/05/96	01/05/96	Date	N/A
Benzene		01.05.96	9644	17.3	17.9	ug/L	3
Toluene		01.05.96	9644	89.4	91.6	ug/L	2
Ethylbenzene		01.05.96	9644	18.7	19.1	ug/L	2
Total Xylene Isomers		01.05.96	9644	103	105	ug/L	2
TPH (Gasoline Range)		01.05.96	9644	1200	1220	ug/L	2
a,a,a-Trifluorotoluene Rep.		01.05.96	9644	50.5	52.1	ug/L	3
a,a,a-Trifluorotoluene Th.		01.05.96	9644	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9601054

)ATE REPORTED : 01/09/96

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

?ARAMETER		DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
I. BTEX/GRO	B601523*1						
Date Analyzed		01.04.96	9644	01/04/96	NA	Date	8015M
Benzene		01.04.96	9644	0	0.3	ug/L	8015M
Toluene		01.04.96	9644	0	0.3	ug/L	8015M
Ethylbenzene		01.04.96	9644	0	0.3	ug/L	8015M
Total Xylene Isomers		01.04.96	9644	0	0.6	ug/L	8015M
TPH (Gasoline Range)		01.04.96	9644	0	100	ug/L	8015M
a,a,a-Trifluorotoluene	Rep.	01.04.96	9644	48.1	0.5	ug/L	8015M
a,a,a-Trifluorotoluene	Th.	01.04.96	9644	50.0	NA	ug/L	8015M

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 10:38:07 09 JAN 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9601054*1							
8015M.TX	a,a,a-Trifluorotoluene	Re9644	01/05/96	47.2	50.0	94	
9601054*2							
8015M.TX	a,a,a-Trifluorotoluene	Re9644	01/05/96	48.5	50.0	97	
9601054*3							
8015M.TX	a,a,a-Trifluorotoluene	Re9644	01/05/96	45.8	50.0	92	
9601054*4							
8015M.TX	a,a,a-Trifluorotoluene	Re9644	01/05/96	47.1	50.0	94	

: SURROCATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 10:38:18 09 JAN 1996 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
J601034*2*R1							
8015M	a,a,a-Trifluorotoluene	Re9644	01/05/96	47.5	50.0	95	
J601034*2*S1							
8015M	a,a,a-Trifluorotoluene	Re9644	01/05/96	50.5	50.0	101	
J601034*2*S2							
8015M	a,a,a-Trifluorotoluene	Re9644	01/05/96	52.1	50.0	104	
J601034*2*T							
8015M	a,a,a-Trifluorotoluene	Re9644	01/05/96	50.0	50.0	100	
J601523*1*MB							
8015M	a,a,a-Trifluorotoluene	Re9644	01/04/96	48.1	50.0	96	
J6011023*1*LC							
8015M	a,a,a-Trifluorotoluene	Re9644	01/04/96	52.6	50.0	105	
J6011023*1*LT							
8015M	a,a,a-Trifluorotoluene	Re9644	01/04/96	50.0	50.0	100	

CHAIN OF CUSTODY RECORD

Client name: GROUNDWATER TECHNOLOGY

Address: 1401 HALYARD DR #140

City State Zip: W. SACRAMENTO CA

Project or PO# 020700006 TES 1127 LINCOLN, ALAMEDA

Phone # (916) 372 4700

Report attention: BRIAN GARBER

Sampled by: STEVEN STREM

Analyses required: BTEX / TPH-G

Lab Sample number	Date sampled	Time sampled	Type* See key below	Sample description	Preservative HCL	Preservative ICE	Number of containers	BTEX / TPH-G							Hazardous sample Special handling required	Remarks
	1-2-96	1443	AQ	C-EFF	X	X	2	X		-1						Waters: G9601054 Cooler Temp: [illegible]
	1-2-96	1445	AQ	B-BT-1	X	X	2	X		-2						Sample Condition
	1-2-96	1447	AQ	A-INF	X	X	2	X		-3						Good
	1-2-96	1449	AQ	INF	X	✓	2	X		-4						
	1-2-96	1457	AIR	EFF-AIR			1	X								Air only C9601001
	1-2-96	1458	AIR	INF TO 2ND -AIR			1	X								
	1-2-96	1500	AIR	INF-AIR			1	X								FKEP10016 624881450 KEP Alameda

	Signature	Print Name	Company	Date
Relinquished by	[signature]	STEVEN STREM	GROUNDWATER TECH	1/3/96
Received by	Kimberly Eng	Kimberly Eng	BCA	1/3/96
Relinquished by (waters)	Kimberly Eng	Kimberly Eng	BCA	1/4/96
Received by				
Relinquished by				
Received by Laboratory				

B C ANALYTICAL

[illegible] Concord CA 94518 (510) 825 3894

[illegible] Glendale CA 91201 (818) 247 5737

[illegible] (714) 978 0113

Note. Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense

Disposal arrangements ______

*KEY: AQ—Aqueous NA—Nonaqueous GW—Groundwater SO—Soil PE- Petrol[eum] WW—Wastewater

B C Analytical

ANALYTICAL REPORT

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G95-12-103

Received: 06 DEC 95

Mailed: DEC 15 1995

Mr. [illegible]
Groundwater Technology, Inc.
[illegible] Drive, Suite 140
West Sacramento, California 95691

Purchase Order: 94-1446346+4370

Requisition: 624881450
Project: FKEP1001L

REPORT OF ANALYTICAL RESULTS

AQUEOUS

SAMPLE DESCRIPTION	DATE SAMPLED	TPH/BTEX (CADHS/8020) Date Analyzed Date	Dilution Factor Times	TPH-g ug/L	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylenes Isomers ug/L	Carbon Range
RDL			1	50	0.5	0.5	0.5	0.5	
[illegible] EFF	12/06/95	12/08/95	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
[illegible]	12/06/95	12/08/95	1	<50	<0.5	<0.5	<0.5	<0.5	C6-C12
[illegible]	12/06/95	12/08/95	1	63	7.2	1.9	0.72	5.3	C6-C12
[illegible]	12/06/95	12/08/95	1	820	100	22	4.5	57	C6-C12

Karen Petryna
1117 Lincoln, Alameda
ALAMEDA COUNTY

Janie Walker for:
Jane Kremmyer, Laboratory Director

The analytical results within this report relate only to the specific compounds and samples investigated and may not necessarily reflect other apparently similar material from the same or a similar location.

BCA

: BC ANALYTICAL : GLEN LAB : 14:56:36 15 DEC 1995 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9512103*1	C-EFF	GAS.BTX.TESNC	12.08.95	8015M.TX	536-23	955178	8171
9512103*2	B-BT-1	GAS.BTX.TESNC	12.08.95	8015M.TX	536-23	955178	8171
9512103*3	A-INF	GAS.BTX.TESNC	12.08.95	8015M.TX	536-23	955178	8171
9512103*4	INF	GAS.BTX.TESNC	12.08.95	8015M.TX	536-23	955178	8171

***

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst

BC ANALYTICAL

ORDER QC REPORT FOR G9512103

DATE REPORTED : 12/15/95

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER		DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. GRO	C512829*1						
Date Analyzed		12.08.95	955178	12/08/95	12/08/95	Date	N/A
Benzene		12.08.95	955178	14.9	15.2	ug/L	98
Toluene		12.08.95	955178	91.5	97.4	ug/L	94
Ethylbenzene		12.08.95	955178	18.9	20.4	ug/L	93
Total Xylene Isomers		12.08.95	955178	113	119	ug/L	95
TPH (Gasoline Range)		12.08.95	955178	1050	1100	ug/L	95
a,a,a-Trifluorotoluene	Rep.	12.08.95	955178	57.8	50.0	ug/L	116
a,a,a-Trifluorotoluene	Th.	12.08.95	955178	50.0	50.0	ug/L	100

BC ANALYTICAL

ORDER QC REPORT FOR G9512103

DATE REPORTED : 12/15/95

MATRIX QC ACCURACY (SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT
1. GRO	9512104*2						
Benzene		12.08.95	955178	96	92	15.2	ug/L
Toluene		12.08.95	955178	91	88	97.4	ug/L
Ethylbenzene		12.08.95	955178	89	86	20.4	ug/L
Total Xylene Isomers		12.08.95	955178	92	88	119	ug/L
TPH (Gasoline Range)		12.08.95	955178	103	100	1100	ug/L
a,a,a-Trifluorotoluene Rep.		12.08.95	955178	109	108	50.0	ug/L
a,a,a-Trifluorotoluene Th.		12.08.95	955178	100	100	50.0	ug/L

BC ANALYTICAL

ORDER QC REPORT FOR G9512103

DATE REPORTED : 12/15/95

MATRIX QC PRECISION (DUPLICATE SPIKES)
BATCH QC REPORT

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. GRO	9512104*2						
Date Analyzed		12.08.95	955178	12/08/95	12/08/95	Date	N/A
Benzene		12.08.95	955178	14.6	14.0	ug/L	4
Toluene		12.08.95	955178	88.9	85.4	ug/L	4
Ethylbenzene		12.08.95	955178	18.2	17.5	ug/L	4
Total Xylene Isomers		12.08.95	955178	109	105	ug/L	4
TPH (Gasoline Range)		12.08.95	955178	1130	1100	ug/L	3
a,a,a-Trifluorotoluene Rep.		12.08.95	955178	54.5	54.2	ug/L	1
a,a,a-Trifluorotoluene Th.		12.08.95	955178	50.0	50.0	ug/L	0

BC ANALYTICAL

ORDER QC REPORT FOR G9512103

DATE REPORTED : 12/15/95

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
1. GRO B512434*1						
Date Analyzed	12.08.95	955178	12/08/95	NA	Date	8015M.TX
Benzene	12.08.95	955178	0	0.5	ug/L	8015M.TX
Toluene	12.08.95	955178	0	0.5	ug/L	8015M.TX
Ethylbenzene	12.08.95	955178	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	12.08.95	955178	0	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	12.08.95	955178	0	50	ug/L	8015M.TX
a,a,a-Trifluorotoluene Rep.	12.08.95	955178	48.1	NA	ug/L	8015M.TX
a,a,a-Trifluorotoluene Th.	12.08.95	955178	50.0	NA	ug/L	8015M.TX

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 15:16:11 15 DEC 1995 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9512103*1							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	47.6	50.0	95	
9512103*2							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	50.1	50.0	100	
9512103*3							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	49.3	50.0	99	
9512103*4							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	50.4	50.0	101	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 15:16:14 15 DEC 1995 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9512104*2*R1							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	54.2	50.0	108	
9512104*2*S1							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	54.5	50.0	109	
9512104*2*S2							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	54.2	50.0	108	
9512104*2*T							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	50.0	50.0	100	
B512434*1*MB							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	48.1	50.0	96	
C512829*1*LC							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	57.8	50.0	116	
C512829*1*LT							
8015M.TX	a,a,a-Trifluorotoluene	Re955178	12/08/95	50.0	50.0	100	

CHAIN OF CUSTODY RECORD

BILL TEXACO DIRECT

BCA Log Number G9512105

Client name: GROUNDWATER TECHNOLOGY

Address: 1401 HALYARD DR #140

City, State, Zip: W. SACRAMENTO CA 95691

Project or PO# 020700006

TES/1127 LINCOLN, ALAMEDA

Phone # (916) 372 4700

Report attention: BRIAN GARBER

Sampled by: STEVEN STREM

Lab sample number	Date sampled	Time sampled	Type* See key below	Sample description	Preservative ICE	Preservative HCL	Number of containers	Analyses required: BTEX/TPH-G	Hazardous sample Special handling required	Remarks
	12-6-95	1220	AQ	C-EFF	X	X	2	X		Cooler Temp: on ice
	12-6-95	1222	AQ	B-BT-1	X	X	2	X		
	12-6-95	1224	AQ	A-INF	X	X	2	X		Sample Condition:
	12-6-95	1226	AQ	INF	X	X	2	X		Good
										C 95 12 008
	12-6 95	1243	AIR	EFF - AIR			1	X		62 488 1450
	12-6-95	1245	AIR	INF TO 2ND - AIR			1	X		Alameda
	12-6-95	1247	AIR	INF - AIR			1	X		KEP
										FKEP 1001C

	Signature	Print Name	Company	Date	Time
Relinquished by		STEVEN STREM	GROUNDWATER TECH	12-6-95	1348
Received by		Jan Winter	BCA	12/6/95	1345
Relinquished by		Jan Winter	BCA	12/6/95	1700
Received by					
Relinquished by					
Received by Laboratory					

BC ANALYTICAL

2085 Shary Circle Concord CA 94518 (510) 825-3894

1801 Western Avenue Glendale CA 91201 (818) 247-5737

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements: _____

*KEY: AQ—Aqueous NA—Nonaqueous SL—Sludge GW—Groundwater SO—Soil PE—Petroleum WW—Wastewater