

CONSULTING & ENGINEERING

58 DIC 30 PM 2: 4A

ENVIRONMENTAL SERVICES

12 May 1998

Mr. W. E. Berry Manager Store Planning & Real Estate Kelly-Moore Paint Company 987 Commercial Street, PO Box 3016 San Carlos, CA 94070



Re: Letter Report

Groundwater Sampling 969 San Pablo Avenue, Albany, California ProTech Project #248-OH98

Dear Mr. Berry:

We have prepared this letter report for the groundwater sampling that was performed at the subject site. The scope-of-work performed and the results of groundwater sample analyses are described below. Tables, Figures, and laboratory reports and chain-of-custody (COC) forms are attached.

Scope-of-Work

Well Development and Purging

On 21 April 1998, two groundwater monitor wells, MW-3 and MW-4, were developed and purged in advance of groundwater sampling. The two wells were developed using surge-block and bailing techniques. Between wells the surge-block and stainless steel bailer were steam cleaned to prevent cross-contamination between wells. The physical parameters: pH, Temperature (T), and Conductivity (Con) were measured at the beginning and end of the development process. The recorded measurements are presented in Table 1. Recovery rates which were measured for each well are presented in Table 2.

Monitoring well MW-4 was developed first. After parameter measurements, the well was surged for 30 minutes and bailed dry three times. It recovered to approximately 80% of its static water level (depth-to-water [DTW] of 7.52 feet below grade [fbg]) and then it was bailed dry three times. Physical parameters were again measured for comparison with the pre-development measurements. The well was then allowed to recover (never recovered more than 2 ft in 2 hours) as much as possible and then sampled. This well was a very low producer with a recovery rate of 0.0311 gallons/minute (gpm).

We attempted to find a third groundwater monitoring well, MW-2, that was reported to be present on-site, but we were unsuccessful.

initial waters

After parameters measurement, MW-3 was developed in the same manner, surge-block for 30 minutes and bailing dry three times. The well then recovered to its static water level (DTW of 7.33 fbg). The well was then purged of three wellbore volumes and the physical parameters were measured for comparison with pre-development measurements. The well recovered to its static water level and then it was sampled. The recovery rate for this well was 0.0832 gpm.

Groundwater Sampling and Analytical Results

The wells were sampled using 1 in diameter 3 ft long polyethylene bailers. A bailer was dedicated to each well to avoid decontamination steps between wells and to remove the possibility of cross-contamination. Groundwater samples were collected in the appropriate jars for specific analyses, sealed, labeled and placed in an ice chest pending their pickup by the analytical laboratory courier. The samples were delivered to ChromaLab, Inc., a state-certified laboratory (ChromaLab) for analysis. The groundwater samples were analyzed for: total petroleum hydrocarbons, characterized as gasoline (TPH-g); total extractable petroleum hydrocarbons, characterized as kerosene (TEPH-k), characterized as diesel (TEPH-d), and characterized as motor oil (TEPH-mo); the aromatic hydrocarbons benzene, toluene, ethyl-benzene, and total xylenes (BTEX); oil & grease (O&G); and volatile organic compounds (VOCs).

The results of analyses for MW-3 indicated that all compounds tested for were below method detection limits (MDLs). The MDLs were all within the expected tolerances for the analyses. Laboratory reports and COC forms are included in Attachment 1.

The results of analyses for MW-4 indicated that all compounds tested for, except for three VOCs were below method detection limits (MDLs). The MDLs were all within the expected tolerances for the analyses. 1,1-dichloroethane (1,1-DCA) was detected at 34 parts-per-billion (ppb), cis 1,2-dichloroethene (cis-1,2-DCE) was detected at 5.3 ppb, and tetrachloroethene (PCE) was detected at 3.6 ppb. Laboratory reports and COC forms are included in Attachment 1.

Conclusions

The results of this groundwater sampling event indicate that the waste oil tank removal performed back in 1990 was successful in removing the petroleum products source when soil was excavated and disposed of.

The presence of VOCs in MW-4 indicates that groundwater has been impacted and that the VOCs have moved from the former MW-1 location (in the tankpit) to MW-4. 1,1-DCA was found in MW-1 (1990) at 94 ppb which is approximately 3 times what was found in MW-4 during this sampling. cis-1,2-DCE was not found during the 1990 sampling, but 1,1-DCE was found at 12 ppb². Assuming they are the same compound, the 1990 result is 10 times greater than this sampling. PCE was also found in the 1990 sampling, but it was 20 times greater than what we found in this sampling. Other VOCs (1,1,1-TCA, and TCE) which were found in the 1990 sampling were not present in this

These two compounds are similar in structure and molecular weight and may not have been adequately differentiated in the 1990 sampling.

sampling.

While the VOCs are still present in the groundwater at the site, their number and concentration are greatly reduced from that of the 1990 sampling.

Please review this letter report and attached information and let me know if you have any questions and/or comments (650.569.4020). We look forward to continuing work on this project if the purchase is successful.

Sincerely,

PROTECH CONSULTING AND ENGINEERING

Sherwood Lovejoy, Jr.

Principal

Tables:

1 - Physical Parameters Testing

2 - Recovery Rates Calculations

Figure:

1 - Site Plan w/ Analytical Results

Attachment:

Laboratory Reports and COC Forms

TABLES

Well #	Time	рН	T	Con
MW-3	11:30	7.0	68	1341
and the second second second second	13:00	6.7	69.5	1312
MW-4	10:40	7.5	67.5	846
	14:00	5.75	71.5	773

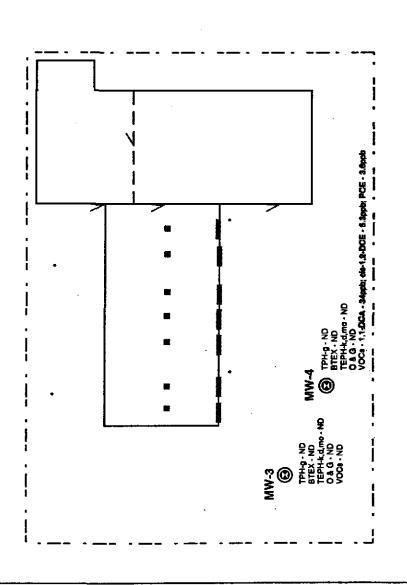
TABLE 2 - RECOVERY RATES MEASUREMENT								
Well#	SDTW (ft)	FDTW (ft)	Elapsed Time (mins)	Volume (gals)	gpm			
MW-3	14.0	13.0	7.85	0.6530	0.0832			
And some ministra	and the second s	en silver selection and	Bakara Marining and a second of the second o		· · · · · · · ·			
MW-4	14.0	13.0	21	0.6530	0.0311			

- DIW for both Wells MW-3 + MW-4 were waterly the same? Dawateweel down to 141bgs. The DIW was 7.3+

Orlowlag. 7.5,

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FIGURE 1 - SITE PLAN W/ ANALYTICAL RESULTS



San Pablo Avenue

Approx scale 178 (feet)

& Engineering
Consulting
ProTech

Property Boundary	Groundwater Monitoring Well w/analytical results	Doorway	Sewer Cleanout	Garage Doors	Hydraulic Lifts	
:	MW-3 TPH-0 - ND BIEX - ND TEPH-Kd,mo - ND OOS G - ND	7	•	İ	•	

Legend

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969 San Pablo Avenue, Albany, California

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WL Approd

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1

Figure

Project

Site Plan w/Analytical Results Groundwater Sampling Program Kelly-Moore Paint Company

Job No. Date

ATTACHMENT 1 - LABORATORY REPORTS & COC FORMS

Environmental Services (SDB)

April 23, 1998

Submission #: 9804318

TCG

Atten: Woody Lovejoy

Project: KELLY-MOORE

Project#: 980106

Received: April 21, 1998

re: 2 samples for TEPH analysis. Method: EPA 8015M

Sampled: April 21, 1998

Matrix: WATER

Extracted: April 22, 1998
Analyzed: April 22, 1998

Run#: 12326

Spl# CLIENT SPL ID	Kerosene (ug/L)	Diesel (ug/L)	Motor Oil (ug/L)
181900 MW-3 181901 MW-4	N.D. N.D.	N.D. N.D.	N.D. N.D.
Reporting Limits Blank Result Blank Spike Result (%)	50 N.D.	50 N.D. 104	500 N.D.

Bruce Havlik

Chemist

Environmental Services (SDB)

April 27, 1998

Submission #: 9804318

TCG

Atten: Woody Lovejoy

Project: KELLY-MOORE

Project#: 980106

Received: April 21, 1998

re: 2 samples for TEPH analysis.

Method: EPA 8015M

Matrix: WATER

Extracted: April 22, 1998

Sampled: April 21, 1998

Run#: 12326

Analyzed: April 22, 1998

Motor Oil Diesel Kerosene (uq/L) (ug/L)CLIENT SPL ID (ug/L) N.D. N.D. N.D. 181900 MW-3 N.D. N.D. N.D. 181901 MW-4 500 Reporting Limits 50 50 Blank Result N.D. N.D. N.D. Blank Spike Result (%) 104

Bruce Havlik

Chemist

Carolyn House

Chen(j/st

Environmental Services (SDB)

April 22, 1998

Submission #: 9804318

TCG

Atten: Woody Lovejoy

Project: KELLY-MOORE

Received: April 21, 1998

Project#: 980106

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-3

Sp1#: 181900

Sampled: April 21, 1998

Matrix: WATER

Run#:12343

Analyzed: April 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE BENZENE TOLUENE ETHYL BENZENE XYLENES	N.D. N.D. N.D. N.D. N.D.	50 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D.	93 95 96 108 103	1 1 1 1

Vincent Vancil

Chemist

Michael Verona

Environmental Services (SDB)

April 22, 1998

Submission #: 9804318

TCG

Atten: Woody Lovejoy

Project: KELLY-MOORE

Project#: 980106

Received: April 21, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-4

Matrix: WATER

Spl#: 181901 Sampled: April 21, 1998

Run#:12343

Analyzed: April 22, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK DILUTION SPIKE FACTOR (%)
GASOLINE BENZENE TOLUENE ETHYL BENZENE XYLENES	N.D. N.D. N.D. N.D. N.D.	50 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D.	93 1 95 1 96 1 108 1 103 1

Vincent Vancil

Chemist

Michael Verona

Environmental Services (SDB)

April 23, 1998

Submission #: 9804318

TCG

Atten: Woody Lovejoy

Project: KELLY-MOORE

980106 Project#:

Received: April 21, 1998

re: 2 samples for Oil and Grease analysis.

Method: 5520 B&F

Matrix: WATER

Extracted: April 23, 1998

Sampled: April 21, 1998

12366 Run#:

Analyzed: April 23, 1998

BLANK BLANK DILUTION REPORTING SPIKE FACTOR OIL & GREASE LIMIT RESULT (mg/L) (mg/L) (mq/L)102 Ň.D. 181900 MW-3 N.D. 1.0 N.D. 102 1 1.0 181901 MW-4 N.D.

Michael Verona

Environmental Services (SDB)

April 24, 1998

Submission #: 9804318

TCG

Atten: Woody Lovejoy Project: KELLY-MOORE

980106 Project#:

Received: April 21, 1998 re: One sample for Volatile Organics by GC/MS analysis.

Method: SW846 METHOD 8240A Nov 1990

Client Sample ID: MW-3

Spl#: 181900

Matrix: WATER

Sampled: April 21, 1998

Run#: 12391 Analyzed: April 22, 1998

	RESULT	REPORTING LIMIT	BLANK RESULT (ug/L)	BLANK DIL SPIKE FA (%)	UTION C TO R
ANALYTE	(ug/L)	(nd/r)	N.D.		1
ACETONE	N.D.	50	N.D.	102	ī
BENZENE	N.D.	2.0	N.D.		ī
BROMODI CHLOROMETHANE	N.D.	2.0 2.0	N.D.	- -	1
BROMOFORM	N.D.	. Z.U	N.D.		ī
BROMOMETHANE	N.D.	5.0 100	N.D.		- ī
BROMODICHLOROFETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE 2-CHLOROETHYLVINYLETHER CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,4-DICHLOROETHENE 1,2-DICHLOROETHENE 1,2-DICHLOROETHENE 1,2-DICHLOROETHENE 1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE	N.D.	. 2 0	N.D.		ī
CARBON TETRACHLORIDE	N.D.	2.0	N.D.	102	1
CHLOROBENZENE	N.D.	2.0	N.D.		ī
CHLOROETHANE	N.D.	10	N.D.		1 1
2-CHTOKOETHATATMATETHEK	M.D.	3 0	N.D.	·	1
CHLOROFORM	N.D.	5.0	N.D.		
CHLOROMETHANE	N.D.		N.D.		1
DIBROMOCHLOROMETHANE	N.D.	2.0	N.D.		1
1,1-DICHLOROETHANE	N.D.	2.0 34.0.00	N.D.		1 1 1 1
1,2-DICHLOROETHANK	N.D.	2.0	N.D.		1
1,2-DICHLORORENZENE	M.D.	2.0	N.D.		1
1,3-DICHLOROBENZENE	M D	2.0	N.D.		1
1,4-DICHLOROBENZENE	M D	2.0	N.D.	89.3	1 1
1,1-DICHLOROEINENE	M.D.	2.0	N.D.		1
1,2-DICHLOROBINENE (CIS)	M D	2.0	N.D.		1
1,2-DICHLOROEIDENE (IRANS)	N D	. 200	N.D.		1 1
T, Z-DICHLOROPROPANE	M D	2.0	N.D.		
TO A 1 2 DICTIONOPHOPENE	M D	2.0	N.D.	- -	1
TRANS-1, 3-DICHDOROPROPERE	и.р.	2.0	N.D.		1
S HEAVNONE	N D	50	N.D.		1
Z-REARIONE MEMISSIEME CUI ADIDE	N D	รัก	N.D.		1
MEINILENE CHLORIDE (MIDK)	M D	50	N.D.	, 	1
STYRENE	N.D.	2.0	N.D.	'	1
1 1 2 2 MEMBYCALVDVELANK .	N D	2.0	N.D.		1
	N D	2.0	N.D.	"	1
TETRACIDOROETHEME	N D	2 0	N.D.	117	1 1
	N D	2.0	N.D.		
1 1 2 TOT CUT ODOETHAND	ND	2.0	N.D.		1
T, I, Z - IKICHIOKOBIHAND	ND	2.0	N.D.	104	1
AD LOTT ODOET HODOWELHTANE	N D	2.0	N.D.		1
TRICHLOROF HOOKOMITHINE	N D	2.0	N.D.		1
VINVI. ACETATE	N.D.	5 20 T	N.D.		1
VINVI. CHIADIDE	N.D.	<u> 5.0</u>	N.D.		1
STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE TRICHLOROFLUOROMETHANE TRICHLOROFLUOROMETHANE TRICHLOROTRIFLUOROETHANE VINYL ACETATE VINYL CHLORIDE TOTAL XYLENES	N.D.	2.0	N.D.		1

Environmental Services (SDB)

April 24, 1998

Submission #: 9804318

page 2

TCG

Atten: Woody Lovejoy

Project: KELLY-MOORE

Project#: 980106

Received: April 21, 1998

re: One sample for Volatile Organics by GC/MS analysis, continued.

Method: SW846 METHOD 8240A Nov 1990

Client Sample ID: MW-3

Spl#: 181900

Matrix: WATER

Sampled: April 21, 1998

Run#: 12391

Analyzed: April 22, 1998

RESULT

REPORTING

BLANK RESULT BLANK DILUTION

(ug/L)

LIMIT (uq/L)

(ug/L)

SPIKE FACTOR

(%)

ANALYTE

Chemist

Oleg Nemtsov

Mul-KV-Michael Verona

Environmental Services (SDB)

April 24, 1998

Submission #: 9804318

TCG

Atten: Woody Lovejoy

Project: KELLY-MOORE

Received: April 21, 1998

980106 Project#:

re: One sample for Volatile Organics by GC/MS analysis.

Method: SW846 METHOD 8240A Nov 1990

Client Sample ID: MW-4

Matrix: WATER

Spl#: 181901 Sampled: April 21, 1998

Run#: 12391

Analyzed: April 22, 1998

ANALYTE	RESULT	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK : SPIKE (%)	DILUTION FACTOR
ACETONE	N.D.	50	N.D.		1
BENZENE	N.D.	2.0	N.D.	102	1
BROMODICHLOROMETHANE	N.D.	2.0	N.D.		1
BROMOFORM	N.D.	2.0	N.D.		. 1 1 1
BROMOMETHANE	N.D.	5.0	N.D.		1
2-BUTANONE (MEK)	N.D.	100	N.D.		1
CARBON TETRACHLORIDE	N.D.	2.0	N.D.		1 1 1
CHLOROBENZENE	N.D.	2.0	N.D.	102	_ 1
CHLOROETHANE	N.D.	2.0	N.D.		1
2-CHLOROETHYLVINYLETHER	N.D.	10	N.D.		1
CHLOROFORM	N.D.	3.0	N.D.		. 1
CHLOROMETHANE	N.D.	5.0	N.D.		1
DIBROMOCHLOROMETHANE	N.D.	, 2.0	N.D.	- -	1
1,1-DICHLOROETHANE	34	5ppb 2.0	N.D.		1
1,2-DICHLOROETHANE	N.D.	2.0	N.D.	ر د ر ے ک ے میں	1 (1)
1,2-DICHLOROBENZENE	N.D.	2.0	N.D.	- 	1
1,3-DICHLOROBENZENE	N.D.	2.0	N.D.	, -	1
1,4-DICHLOROBENZENE	N.D.	2.0	N.D.	- -	ī
1,1-DICHLOROETHENE	N.D.	, , 2.0	N.D.	89.3	1 1
1,2-DICHLOROETHENE (CIS)	5.3	600h 2.0	N.D.		1
1,2-DICHLOROETHENE (TRANS)	N.D.	2.0	N.D.	- -	1
1,2-DICHLOROPROPANE	N.D.	2.0	N.D.	- -	1
CIS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	- -	1
TRANS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.		1
ETHYLBENZENE	N.D.	2.0	N.D.		1 1
2-HEXANONE	N.D.	50	N.D.		
METHYLENE CHLORIDE	N.D.	3.0	N.D.		. 1
4-METHYL-2-PENTANONE (MIBK)	N.D.	50	N.D.		. <u>1</u> 1
STYRENE	N.D.	2.0	N.D.		1
1,1,2,2-TETRACHLOROETHANE	N.D.	_ , 2.0	N.D.		1
TETRACHLOROETHENE	3.6	Sppb 2.0.	N.D.		. 1
TOLUENE	N.D.	// 2.0	N.D.	117	1 1
1,1,1-TRICHLOROETHANE	N.D.	2.0	N.D.		
1,1,2-TRICHLOROETHANE	N.D.	2.0	N.D.		1
TRICHLOROETHENE	N.D.	2.0	N.D.	104	1 1
TRICHLOROFLUOROMETHANE	N.D.	2.0	N.D.		
TRICHLOROTRIFLUOROETHANE	N.D.	2.0	N.D.		1
VINYL ACETATE	N.D.	20	N.D.		1
VINYL CHLORIDE	N.D.	5.0	N.D.		1
TOTAL XYLENES	N.D.	2.0	N.D.		1

Environmental Services (SDB)

April 24, 1998

Submission #: 9804318

page 2

TCG

Atten: Woody Lovejoy Project: KELLY-MOORE

Project#: 980106

Received: April 21, 1998

re: One sample for Volatile Organics by GC/MS analysis, continued.

Method: SW846 METHOD 8240A Nov 1990

Client Sample ID: MW-4

Spl#: 181901

Matrix: WATER

Sampled: April 21, 1998

12391

Analyzed: April 22, 1998

RESULT

Run#:

REPORTING LIMIT BLANK RESULT BLANK DILUTION SPIKE FACTOR

ANALYTE (ug/L)

(uq/L)

(uq/L)

(%)

(%)

.

100 L Y L

mul ev

Michael Verona Operations Manager

Oleg Nemtsov Chemist नक्तिनाथ । वास्तात निर्मा

CHROMALAB, INC.

SUBM #: 9804318 REP: GU

CLIENT: TCG

DUE: 04/24/98

REF #:39437

39437 Chain of Custody

Environmental Services (SDB) (DOHS 1094) DATE 21 April 98 PAGE ___ OF MARGERS AREPORT PURCEABLE HALOCARBONS ž Š PURCEABLE AROMATICS BTEX (EPA 602, 8020) BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525) TPH - Diesel, TEPH (EPA 3510/3550, 8015) TOTAL RECOVERABLE
HYDROCARBONS (EPA NUMBER OF CONTAINERS PRIORITY POLLUTANT METALS (13) VOLATILE ORGANICS TOTAL OIL & GREASE (EPA 5520, B+F, E+F) LUFT METALS: Cd, Cr, Pb, CAM METALS (17) SAMPLERS (SIGNATURE) [EPA 601, 8010) (EPA 608, 8080) (EPA 608, 8080) (PHONE NO.) EXTRACTION (TCLP, STLC) TOTAL LEAD PESTICIDES (FAX NO.) DATES TIME MATRIX PRESERV. Water 9 21901 Witz PROJECT INFORMATION SAMPLE RECEIPT RELINQUISHED BY RELINQUISHED BY RELINQUISHED BY PROJECT NUMBER 980106 TOTAL NO. OF CONTAINERS HEAD SPACE (TIME) REC'D GOOD CONDITION/COLD 980106.1 (PRINTED NAME) CONFORMS TO RECORD STANDARD 5-DAY OTHER RECEIVED BY SPECIAL INSTRUCTIONS/COMMENTS: RECEIVED BY Results De Fréan 24 Apr. 198 (SIGNATURE) IPPINTED NAME (COMPANY)

1220 Quarry Lane • Pleasanton, California 94566-4756 510/484-1919 • Facsimile 510/484-1096 Chain of Custody

DATE 220 95 PAGE OF Environmental Services (SDB) (DOHS 1094) **ANALYSIS REPORT** PROJ. MGR PURGEABLE HALOCARBONS TPH - Gasoline (5030, 8015) ž S PURGEABLE AROMATICS BTEX (EPA 602, 8020) NUMBER OF CONTAINERS TPH - Diesel, TEPH (EPA 3510/3550, 8015) PRIORITY POLLUTANT METALS (13) VOLATILE ORGANICS [EPA 624, 8240, 524.2) TOTAL OIL & GREASE (EPA 5520, 8+F, E+F) TOTAL RECOVERABLE HYDROCARBONS (EP METALS: Cd, Cr, Pb, CAM METALS (17) (EPA 5030, 8015) SAMPLERS (SIGNATURE) (PHONE NO.) EXTRACTION (TCLP, STLC) (FAX NO.) DATE MATRIX PRESERV. Cloc PROJECT INFORMATION SAMPLE RECEIPT RELINQUISHED BY RELINQUISHED BY RELINQUISHED BY PROJECT NAME: TOTAL NO. OF CONTAINERS PROJECT NUMBER HEAD SPACE (SIGNATURE) Sharway REC'D GOOD CONDITION/COLD PRINTED NAME (PRINTED NAME) P.O. # CONFORMS TO RECORD STANDARD COMPANT OTHER 5-DAY RECEIVED BY RECEIVED BY SPECIAL INSTRUCTIONS/COMMENTS: (SIGNATURE) See Other (OC PRINTED NAME