2105, 26,001



ASTRO ENVIRONMENTAL SERVICES

AES IS WORLDS ABOVE THE REST

11700 Mary Avenue Anchorage, Alaska 99515 (907) 770-3942 Fax (907) 770-3943 astro@gci.net

October 26, 2003

RECEIVED

Mailed

Paul Horwath, P.E. Alaska Department of Environmental Conservation 43335 Kalifornsky Beach Road, Suite 11 Soldotna, Alaska 99669

OCT 2 8 2003

RE: Disposal of contaminated soil in 55-Gallon Drums
Shoreside Petroleum Bird Creek Station and Seward Bulk Plant
Mile 101 Seward Highway
ADEC Facility ID # 2715, Spill # 95210016701, File # L25.21

Dear Mr. Horwath:

In July of 2003, we received approval for disposal of contaminated soils containerized in eleven 55-gallon drums generated during operations at the Shoreside Petroleum, Inc. (SPI) Seward Bulk Facility (see attachment). In addition, at that time, I spoke with you about including 55-gallon drums generated during release investigation drilling of the above referenced Bird Creek facility (ADEC ID #2715) along with the drums from the Seward facility. We had previous approval from Robert Weimer of ADEC to dispose of three 55-gallon drums generated during RI activities at the Bird Creek site. Another 55-gallon drum was generated in October 2002 during continued drilling at Bird Creek for a total of 15 drums scheduled for remediation.

In our conversation, you indicated that you had no concerns with combining the soils and that from a discussion you had with Rich Sundet of ADEC that he was also not concerned with the combination of soil from both sites since they were from the same responsible party. At my request, you indicated that you would write an e-mail to Mr. Sundet and copy me outlining the verbal agreement we had to dispose of the drums together. Mr. Sundet was not the ADEC project manager for Bird Creek, but since the ADEC project manager, Robert Weimer, was out of the office for an extended period, you indicated that Mr. Sundet, made the decision to allow the combination of drums from both sites.

Based on the conversations I had with you, I notified SPI that they could proceed with the disposal following sampling of one the drums from the Seward Bulk Fuel Plant as outlined in the attached July 6, 2003 letter to you. On July 18, 2003, a sample was collected from one of the drums by Chris Hawe of Astro Environmental Services.

All drums were filled with highly contaminated soil. The headspace measurements for all drum screening samples were greater than the maximum measurable level with a Photovac 2020 photoionization detector. Therefore, the drum with the most notably contaminated soil was selected for sampling (see the attached analytical results).

Considerable time had passed without receipt of the e-mail you were to send on the approval of combining the soil. Therefore, on August 27, 2003, I contacted you and asked about the e-mail I was expecting. You indicated that you had forgot to send the e-mail and requested that I send an e-mail with the request so you could forward it on to Robert Weimer. I sent the e-mail that same day. Subsequently, I received the attached e-mail from Mr. Weimer. Unfortunately, the drums of soil from the Seward Bulk Facility and the Bird Creek facility we already combined and delivered to ASR for remediation and disposal on August 28, 2003. The soil was remediated on September 10, 2003, two days prior to the e-mail from Mr. Weimer indicating that combination of the soil was not acceptable.

We regret that this misunderstanding has occurred, but we proceeded with an understanding that we had approval to do so from ADEC. All the soil in 55-gallon drums from both mentioned projects has been remediated to acceptable levels (see the attached letter from ASR). Please advise us if we can do anything to help your finalization of this matter. You can be assured that we will not proceed with combining any soil in the future without documented approval to do so from ADEC.

Thank you for your assistance on this matter. If you have any questions regarding the information contained herein, please contact us at 770-3942.

Sincerely,

Christopher Hawe, P.E.

General Manager

Attachments:

ADEC approval of Seward Bulk Plant Soil Remediation (2 Pages)

ADEC approval of Bird Creek Soil Remediation (1 Page) September 12, 2003, E-mail from Robert Weimer (1 Page) Analytical Results of 55-gallon Drum Sample (14 Pages) ASR Post Treatment Analytical Results (10 Pages)

cc: Robert Weimer, ADEC Jim Rogers, ASR Bob Lechner, SPI SEP-27-00 02:49 PM ACT

907 770 3943

P. 01

ALASKA COMPLETE TANK

2700 Huffman Road Anchorage, Alaska 99516 (907) 345-8339 Fax (907) 345-8370

September 27, 2000

Sent via Facsimile to 269-7507

Robert Weimer
Environmental Specialist
UST Program
Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, Alaska 99501

RE:

Request for approval to dispose of contaminated soil

Shoreside Petroleum Bird Creek Texaco - Bird Creek, Alaska

ADEC Facility ID # 2715

ACT Project No. 2041

Dear Mr. Weimer

Alaska Complete Tank (ACT) is requesting approval from ADEC to transport diesel and gasoline contaminated soil to Alaska Soil Recycling (ASR) located at 2300 Spar Avenue, Anchorage, Alaska, for thermal remediation and disposal. ASR confirmation analytical testing will be for DRO, GRO, and BTEX. The contaminated soil to be treated is contained in three 55-gallon drums of contaminated soil generated during drilling of test borings at the site.

Please indicate your approval of this treatment method by signing below and faxing it back to us at 345-8370.

1821+ 9de = Date 9/27/00

Thank you for your assistance on this matter. If you have any questions regarding this request, please contact me at 770-3942.

Sincerely.

Christopher Hawe, P.E.

Director of Engineering and Environmental

cc: Ron Johnson, ASR

Post-it® Fax Note 7671 Date 9/27/00 #of pages

To Chis Hawe From R. Wesner

Co./Dept. ACT Co. ADEC

Phone # 345-8339 Phone # 269-7525

Fax # 345-8370 Fax # 269-7507



ASTRO ENVIRONMENTAL SERVICES

AES IS WORLDS ABOVE THE REST

11700 Mary Avenue Anchorage, Alaska 99515 (907) 770-3942 Fax (907) 770-3943 satro@gci.net

July 6, 2003

Sent via Facsimile to 262-2294

Paul Horwath, P.E. Alaska Department of Environmental Conservation 43335 Kalifornsky Beach Road, Suite 11 Soldotna, Alaska 99669

RE: Request for approval to dispose of contaminated soil

Dear Mr. Horwath:

After discussions with you and Rich Sundet of the Alaska Department of Environmental Conservation (ADEC), we are requesting, on behalf of Shoreside Petroleum, Inc. (SPI), approval from ADEC to dispose of the contents of eleven 55-gallon drums generated during operations at the SPI Seward Facility. The drums will be transported to Alaska Soil Recycling (ASR) located at 2300 Spar Avenue, Anchorage, Alaska, for thermal remediation and disposal (see attached SPI letter). The drum with the absorbents will be disposed of at Emerald Alaska in Anchorage.

The drums will be screened using photoionization headspace screening to determine which drum appears to have the most contaminated soil. The soil from that drum will be sampled and analyzed for benzene using EPA extraction method 1311 (TCLP). Following receipt of the sample analytical results and confirmation that a hazardous waste is not present, the drums will be taken to ASR.

Please indicate your approval of this sampling and treatment method by signing below and faxing it back to us at 770-3943.

Approved, provided the contents of the drums are la soil matrix, and not a

Thank you for your assistance on this matter. If you have any questions regarding this request, please contact us at 770-3942.

Sincerely.

Christopher Hawe, P.E. Senior Project Manager

Attachment:

SPI Letter (1 page)

SPI Drum Disposal Letter



SHORESIDE PETROLEUM, INC

CORPORATE OFFICE
P.O. BOX 1189 700 PORT AVENUE
SEWARD, ALASKA 99864-1189
PHONE (907) 224-8040 FAX (907) 224-8047

To: Chris Hawe
Astro Environmental

From: Bob Lechner

Shoreside Petroleum

Subject: Drums for disposal

Chris.

Shoreside Petroleum is currently seeking to have 12 drums containing the following products disposed of.

5 drums of sediment generated from cleaning inside diesel tanks at Shoreside Petroleum's bulk plant located in Seward, AK.

4 drums of gravel with # 2 diesel fuel generated from plant maintenance at Shoreside Petroleum.

2 drums of gravel with # 6 oil generated from plant maintenance at Shoreside Petroleum.

1 drum of sorbent material/ rags used for cleaning inside diesel tanks located at Shoreside Petroleum.

There is no standing fuel in these drums. If there are any questions or comments please call me at (907) 224-8040. Thank you for your time on this.

Sincerely.

Bob Lechner

Shoreside Petroleum

Subject: RE: Shoreside Petroleum Drums

From: "Weimer, Robert" < Robert Weimer@dec.state.ak.us>

Date: Fri, 12 Sep 2003 16:26:56 -0800 **To:** "'astro@gci.net" <astro@gci.net>

CC: "Horwath, Paul" <Paul_Horwath@dec.state.ak.us>, "Sundet, Rich" <Rich_Sundet@dec.state.ak.us>, "Weimer, Robert" <Robert Weimer@dec.state.ak.us>

Chris,

Paul Horwath, Rich Sundet and I have discussed your request further and we have determined that in accordance the ASR's approved facility operation plan they are not currently approved to combine into one processing, soils from separate sites/locations, even if it is from the same RP. This is one of the facility issues that we are currently discussing internally, and hope to sometime in the future to develop a formal defined guidance/policy regarding this matter.

Thank you for your request, Robert Weimer - ADEC

----Original Message----

From: Horwath, Paul

Sent: Thursday, September 04, 2003 5:36 PM

To: Sundet, Rich; Weimer, Robert
Cc: 'astro@gci.net'; Horwath, Paul
Subject: FW: Shoreside Petroleum Drums

Gentlemen:

According to Chris Hawe, the fuel contaminants from both the Bird Creek and Seward Bulk Plant sites are the same; gas and diesel/heating oil. Since the contaminants from both sites are similar, the post-treatment testing will be the same (AK101, AK102, 8021B). Shoreside Petroleum, Inc. is the RP for both sites. The Seward Bulk Plant soils have no ADEC spill number since the soils are from tank bottoms and facility maintenance that have accumulated over the years.

I am agreeable to combining the soils so that ASR is only required to run post-treatment lab analyses on once, rather than twice (one for each separated batch of soils). But I don't want to impose my decision upon the Bird Creek project soils. So I leave this up to you guys. I approve of the Seward Bulk Plant soils being mixed with the Bird Creek soils. If you agree to the same mixing vica versa, then please send an e-mail approving this request to Chris Hawe and Jim Rogers @ ASR.

Since the Seward Bulk Plant soils have no spill number associated with them, only one ASR post-treatment sampling report will be generated and delivered to ADEC, for the Bird Creek soils.

Feel free to call if you have questions, concerns, issues.

Paul

----Original Message----

From: Chris Hawe [mailto:astro@gci.net]
Sent: Wednesday, August 27, 2003 8:31 AM

To: Paul Horwath@dec.state.ak.us
Cc: Rich Sundet@dec.state.ak.us
Subject: Shoreside Petroleum Drums

Paul:

As follow-up to our conversation yesterday afternoon, I have provided our request in this e-mail.

Shoreside Petroleum, Inc. (SPI) would like to combine the soils containerized in 55-gallon drums from two locations owned and operated by SPI. The first drums are tank bottom sediments from the Seward Bulk Plant (11 drums). The other drums are drill cuttings from monitoring well borings

at the Bird Creek gas station (3 drums). Robert Weimer has already approved the

disposal of the Bird Creek drums at ASR and we obtained your approval to dispose of the Seward Bulk Plant drums at ASR.

Please respond with the Department's decision on this request to combine these drums into one processing at ASR.

Thank you.

Chris Hawe , P.E.
Astro Environmental Services.
(907) 770-3942
(907) 770-3943 Fax
astro@gci.net



Analytica Alaska Incorporated website: www.analyticagroup.com

8/11/2003

Astro Environmental Services 11700 Mary Ave Anchorage, AK 99515 Attn: Christopher Hawe Work Order #: A0307078 Date: 8/11/2003

Work ID: SPI-Drums
Date Received: 7/21/2003

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
A0307078-01	D-9		
for a discussion of ar	•	ed sample(s). Please review the C issues. Listings of data qualifiers e end of the report.	
		(
Sincerely,			
Joe Egry Project Manager			

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Alaska Inc. Work Order: A0307078

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, December

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN A summary of our review is shown below, organized by test:

SAMPLE RECEIPT:

One sample was received at a temperature of 5.9° C at Analytica-Anchorage on 7/21/2003. Samples were received in good condition and in order per chain of custody.

Samples were transferred for analysis at Analytica Environmental Laboratories (AEL); 12189 Pennsylvania St. Thornton, CO 80241 where they were received at a temperature of 2.9°C in good condition and in order per chain of custody.

Test Method: Aromatic VOCs by GC/FID via method 8021B (TCLP Extracted) - BTEX-TCLP - Solid

HOLDING TIMES:

Holding times were met for this test.

SAMPLE PREPARATION ISSUES AND OBSERVATIONS:

There were no unusual observations.

INSTRUMENT PERFORMANCE CHECKS:

Instrument checks were within method criteria.

INITIAL CALIBRATIONS:

Initial calibrations were within method criteria.

CONTINUING CALIBRATIONS:

The following target was recovered out of limits in the CCV shown on the date indicated. Any small bias is of no consequence since the associated sample is ND for the target recovered high.

RunDate Analyte 7/31/2003 1:21:00 PM Benzene

Recovery LCL UCL 118. 85 115

INTERNAL STANDARD AREAS:

There were no Internal Standard outliers.

SURROGATE RECOVERIES:

There were no surrogate outliers.

METHOD BLANK OUTLIERS:

There are no method blank outliers.

LCS OUTLIERS:

There are no LCS outliers.

MS/MSD and DUP OUTLIERS:

There are no MS/MSD or DUP outliers.

Analytica Alaska Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Matrix:

Prep Date:

Astro Environmental Services

Client Project Number:

Astro Environmental

Report Section:

Client Sample Report

Client Sample Name:

D-9

Soil

The following test was conducted by: Analytica - Thornton

Lab Sample Number: A0307078-01A

7/29/2003

Analytical Method ID: 8021 / BTEX-TCLP

Prep Method ID:

P&TWater

Prep Batch Number: Report Basis: As Received

Sample prep wt./vol:

5.00

T030806019

ml

Collection Date:

7/18/2003 2:30:00PM

7/31/2003 10:07:00PM

Analysis Date:

Instrument:

gc b

File Name:

03073023.D

Dilution Factor:

Prep Extract Vol:

Percent Moisture

Analyst Initials:

mu

5.00 ml

PQL MDL CASNo Result Flags Units Analyte ND 71-43-2 Benzene

Surrogate CASNo Result

ug/L

1.0 0.18

Rerun#: 1

PQL LCL UCL Rerun#: Flags Units MDL Spike % Recov p-Bromofluorobenzene 460-00-4 34 ug/L 0.50 0.12 30 113 120 1

Analytica Environmental Laboratories, Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Astro Environmental Services

Client Project Number:

Astro Environmental

Report Section:

Method Blank Report

Client Sample Name:

MB

Matrix:	Aqueous				Collection Date:	7/29/2003	12:00:00AM
The following test was	conducted by: Analytica	ı - Thornton					
Lab Sample Number:	T030806019-MB				Analysis Date:	7/31/200	3 2:19:00PM
Prep Date:	7/29/2003				Instrument:	gc_b	
Analytical Method ID:	8021 / BTEX-TCLP				File Name:	0307300	7.D
Prep Method ID:	P&TWater				Dilution Factor:	1	
Prep Batch Number:	T030806019						
Report Basis:	Dry Weight Basis				Analyst Initials:	mu	
Sample prep wt./vol:	5.00 ml				Prep Extract Vol:	5.00	ml
Analyte	CASNo	Result	Flags Units	PQL MI	<u>DL</u>		Rerun #:
Benzene	71-43-2	ND	ug/L	1.0 0	.18		1
Surrogate	CASNo	Result	Flags Units	<u>PQL</u>	MDL Spike % Reco	ov LCL	UCL Rerun#:
p-Bromofluorobenzene	460-00-4	33	ug/L	0.50 0	.12 30 112	80	120 1
Lab Sample Number:	T030807013-MB				Analysis Date:	8/5/2003	3:35:00PM
Prep Date:	8/6/2003				Instrument:	gc_b	
Analytical Method ID:	8021 / BTEX-TCLP				File Name:	0308050	7.D
Prep Method ID:	P&TWater				Dilution Factor:	1	
Prep Batch Number:	T030807013						
Report Basis:	Dry Weight Basis				Analyst Initials:	mu	
Sample prep wt./vol:	5.00 ml				Prep Extract Vol:	5.00	ml
Analyte	CASNo	Result	Flags Units	POL MI	<u>DL</u>		Rerun #:
Benzene	71-43-2	ND	ug/L	1.0 0	.18		1
Surrogate	CASNo	Result	Flags Units	PQL	MDL Spike % Reco	The second secon	UCL Rerun#:
p-Bromofluorobenzene	460-00-4	34	ug/L	0.50 0	.12 30 112	80	120 1

Analytica Environmental Laboratories, Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Astro Environmental Services

Client Project Number:

Astro Environmental

Tests Run at:

Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG):

A0307078

Project:

SPI-Drums

Project Number:

QUALITY CONTROL REPORT

Prep Batch:

T030806019

LCS REPORT

Analysis:

MB:

T030806019-MB

MB Anal. Date:

7/31/2003 2:19:00PM

Prep Date: Units:

7/29/2003 ug/L

LCS Anal. Date:

8/1/2003 12:04:00AM

Matrix:

Aqueous

Analyte Name

SampResult

SPLev

Recov.

Recov Lim RPDLim Flag

Benzene

ND

LCSRes. 11.0

10.0

110.0

80 - 120

MS/MSD REPORT

Analysis:

Parent:

A0307078-01A

Prep Date: Units:

Matrix:

7/29/2003

Samp. Anal. Date: 7/31/2003 10:07:00PM

MS Anal. Date:

Analyte Name

7/31/2003 10:36:00PM MSD Anal. Date:

7/31/2003 11:06:00PM

ug/L Soil

Benzene

SampResult ND

MSRes. 10.6

11.5 10.0

10.0

106.0 115.0

8.1

MSDRes SPLev SPDLev Recov. MSD Rec. RPD Recov Lim RPDLim 80 - 120 20

Flag

Prep Batch:

T030807013

LCS/LCSD REPORT

Analysis:

MB:

T030807013-MB

Prep Date:

8/6/2003

MB Anal. Date:

8/5/2003 3:35:00PM

Units: Matrix: ug/L

LCS Anal. Date:

8/5/2003 5:03:00PM

LCSD Anal. Date:

8/5/2003 5:30:00PM

Aqueous

Analyte Name

SampResult

LCSRes. SDRes.

SPLev SPDLev

Recov. SD Recov 102.0

RPD Recov Lim

RPDLim Flag

Benzene

ND

10.8

10.2

10.0

10.0

108.0

5.7

80 - 120

Analytica Environmental Laboratories, Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Astro Environmental Services

Client Project Number:

Astro Environmental

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Analytica Environmental Laboratories, Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Astro Environmental Services

Client Project Number:

Astro Environmental

SURROGATE RECOVERY SUMMARY REPORT

Analytica Environmental Laboratories, Inc.

Workorder (SDG): A0307078

SPI-Drums Project:

Client: **Astro Environmental Services**

Client Project Num	ber: Astro Environn	nental				
Test Method:	8021 / BTEX-TCLP					
Lab Sample #:	A0307078-01A		Di	lution:	1	
Analysis Date:	7/31/2003 10:07:00PM		Cl	ient Sample:	<u>D-9</u>	
Batch Number:	T030806019		Da	ata File:	03073023.D	
AnalyteName		SSRecov	<u>LCL</u>	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	113	80	120		Complete
Lab Sample #:	A0307078-01A		Di	lution:	5	
Analysis Date:	8/6/2003 8:52:00AM		Cl	ient Sample:	<u>D-9</u>	
Batch Number:	T030807013		Da	ata File:	03080542.D	
AnalyteName		SSRecov	<u>LCL</u>	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	108	80	120		Rrun
Lab Sample #:	T030806019-MB			lution:	1	
Analysis Date:	7/31/2003 2:19:00PM		Cl	ient Sample:	<u>MB</u>	
Batch Number:	T030806019		Da	ata File:	03073007.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	112	80	120		Complete
Lab Sample #:	T030807013-MB		Di	lution:	1	
Analysis Date:	8/5/2003 3:35:00PM			ient Sample:	<u>MB</u>	
Batch Number:	T030807013		Da	ata File:	03080507.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	112	80	120		Complete
Lab Sample #:	T030806019-LCS		Di	lution:	1	
Analysis Date:	8/1/2003 12:04:00AM		Cl	ient Sample:	<u>LCS</u>	
Batch Number:	T030806019		Da	ata File:	03073027.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	100	80	120		Complete
Lab Sample #:	T030807013-LCS		Di	ilution:	1	
Analysis Date:	8/5/2003 5:03:00PM		Cl	ient Sample:	<u>LCS</u>	
Batch Number:	T030807013		Da	ata File:	03080510.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	100	80	120		Complete
Lab Sample #:	T030807013-LCSD		Di	ilution:	1	
Analysis Date:	8/5/2003 5:30:00PM		Cl	ient Sample:	LCSD	
Batch Number:	T030807013		Da	ata File:	03080511.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	101	80	120		Complete
Lab Sample #:	A0307078-01A-MS		Di	ilution:	1	
Analysis Date:	7/31/2003 10:36:00PM		Cl	ient Sample:	<u>MS</u>	
Batch Number:	T030806019		Da	ata File:	03073024.D	
AnalyteName		SSRecov	LCL	<u>UCL</u>	SSFlag	Result Status
p-Bromofluoroben	zene	99	80	120		Complete
Lab Sample #:	A0307078-01A-MSD		Di	ilution:	1	
Analysis Date:	7/31/2003 11:06:00PM		Cl	ient Sample:	MSD	
Batch Number:	T030806019			ata File:	03073025.D	
AnalyteName		SSRecov	LCL	UCL	SSFlag	Result Status
					-	
Page 8 of 12						

Analytica Environmental Laboratories, Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Astro Environmental Services

Client Project Number:

p-Bromofluorobenzene

Astro Environmental

Test Method:

8021 / BTEX-TCLP

Lab Sample #:

A0307078-01A-MSD

7/31/2003 11:06:00PM

Dilution: Client Sample:

Analysis Date:

120

MSD

Batch Number:

T030806019

03073025.D

AnalyteName

SSRecov

101

Data File: **UCL**

LCL

80

SSFlag

Result Status

Complete

Analytica Environmental Laboratories, Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Astro Environmental Services

Client Project Number:

Astro Environmental

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID:	18,273	Lab Project Number:	A0307078	
				Prep Date: 7/29/2003
Lab Method Blank Id:	T030806019-MB			
Prep Batch ID:	T030806019			
Method:	Aromatic VOCs by	GC/FID via method 8021B (ΓCLP Extracted) - B	
This Method blank and	sample preparation batch	are associated with the follow	ng samples, spikes, and	duplicates:
<u>SampleNum</u>	ClientSampleName	<u>Data F</u>	<u>'ile</u>	AnalysisDate
A0307078-01A	D-9	0307	3023.D	7/31/2003 10:07:00PM
A0307078-01A-MS	MS	0307	3024.D	7/31/2003 10:36:00PM
A0307078-01A-MSD	MSD	0307	3025.D	7/31/2003 11:06:00PM
T030806019-LCS	LCS	0307	3027.D	8/1/2003 12:04:00AM
	T020007012.14D			Prep Date: 8/6/2003
Lab Method Blank Id: Prep Batch ID:	T030807013-MB			
(A)	T030807013	CC/EID wis mothed 9021D (CCLD Extracted) D	
Method:		GC/FID via method 8021B (
This Method blank and	sample preparation batch	are associated with the follow	ng samples, spikes, and	duplicates:
SampleNum	ClientSampleName	Datal	<u>'ile</u>	<u>AnalysisDate</u>
T030807013-LCS	LCS	0308	0510.D	8/5/2003 5:03:00PM
T030807013-LCSD	LCSD	0308	0511.D	8/5/2003 5:30:00PM

Analytica Environmental Laboratories, Inc.

Workorder (SDG): A0307078

Project: SPI-Drums

Client: Astro Environmental Services

Client Project Number: Astro Environmental

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Other Flags may be applied. See Case Narrative for Description

Analytica Environmental Laboratories, Inc.

Workorder (SDG):

A0307078

Project:

SPI-Drums

Client:

Astro Environmental Services

Client Project Number:

Astro Environmental

REPORTING CONVENTIONS FOR THIS REPORT

A0307078

TestPkgName

Basis

Sig Figs

Reporting Limit

8021 / BTEX-TCLP

As Received

2

Report to PQL

811 W. 8th Ave. Anchorage, AK 99501 (907) 258-2155 FAX: (907) 258-6634

5438 Shaune Drive Juneau, AK 99801 (907) 780-6668 FAX: (907) 780-6670

12189 Pennsylvania Street Thornton, CO 80241 (303) 469-8868 FAX: (303) 469-5254

Onote:

LGN: 1-1030 Project ID #:

Reduest

Analysis

Chain of Custody Record

OI BY7 Highly Concentrated? # Business Days Preserved? 0 Whans of Delivery / Way Bill # (Prior Authorization Required.) asw/sw Cooler Receipt Information 0 □ 10 Business Days O other: # Temp Received: Temp Received: per halfmore 2-23-03 11:20 Coolers: Seals: RECEIVED BY: Printed Name: Signature: RELINQUISHED BY: BENZEME -0721 物があると Printed Name: / Work Date/ Time: # Containers Signature: LAME Invoice To: 1 215 - HAWE 2-4-0 43 - F SWAUCT-No st удхеју Report To: Phates VENABLE 25 Time collected Project Name: TO P.O. Number 118/33 Date/Time 221-ng: Dolla wreeler Date Collected RECEIVED BY Printed Name: www.analyticagroup.com LANGERD Firm: Signature: 25 TRO ENFITTONMENTAL SAUCE AK 99 YE RELINQUISHED BY SAMPLER: astroma a truet 030 Sample ID 770-3943 770-3942 Amph Alam 1 211 Japan Company Address: ANK NOW WE 7/21/03 Printed Name: O Company Name: Date/ Time: COMMENTS 5 relephone: Firm: Email: Fax:



Cooler Receipt Form

Client: Astro Environmental, Inc C Project: SPI-Drums	Client Code: 004360	Order #: A0307078
Cooler ID: 2		
A. <u>Preliminary Examination Phase</u> :	Date cooler opened: 7/23/2003 Cooler opened by: ra	Signature: RZA
1. Was airbill Attached? Yes	Airbill #: 790355293862	Carrier Name: FedEx
2. Custody Seals? Yes	How many? 1 Location: top	Seal Name: DW
3. Seals intact? Yes		
4. Screened for radiation? N/A		
5. COC Attached? Yes	Properly Completed? Yes	Signed by AEL employee? Yes
6. Project Identification from custody pape	r: SPI-Drums	
7. Preservative: BlueGel	Temperature: 2.9	
Designated person initial here to acknowled	ge receipt:	R22 Date: 2/24/03
COMMENTS:		
B. Log-In Phase: Samples Log-In Date	te: 7/24/2003 Log-in By: ra	Signature: RZa
1. Packing Type: Bu	ubblewrap	
2. Were samples in separate bags?	es	
3. Were containers intact?	es Labels agree with COC?	Yes
4. Number of bottles received: 1	Number of samples receive	ed: 1
5. Correct containers used? Ye	es Correct preservatives adde	ed? N/A
6. Sufficient sample volume? Yes	es	
7. Bubbles in VOA samples? N/	'A	
8. Was Project manager called and status	discussed? No	
9. Was anyone called? No Wi	ho was called? By wh	om? Date:
COMMENTS:		



ALASKA SOIL RECYCLING

A Division of Anchorage Sand & Gravel Co. Inc. 1040 O'Malley Road • Anchorage, Alaska 99515 Phone (907) 349-3333 • FAX (907) 344-2844

September 29, 2003

CYS Manangement Service Inc. P.O. Box 232821 Achorage, Alaska 99523-2821

Attn: Mr. Chris Hawe,

Re: Soil Disposal From Shoreside Petroleum Salvage Drums

Dear Mr. Hawe:

On August 28, 2003 Alaska Soil Recycling (ASR) received 15 drums of petroleum impacted soil from the above referenced site. On September 10, 2003 thermal treatment of this soil was completed at ASR's Spar Avenue facility in Anchorage, Alaska. Post remedial analysis reveals that this soil meets the Alaska Department of Environmental Conservation's most restrictive level (Level A). Attached is a copy of the analysis summary and laboratory results.

This soil will be recycled for use in the construction industry.

Please contact me with any questions.

Sincerely,

ALASKA SOIL RECYCLING

James J. Rogers

Manager

JJR:rj

Attachments



The Environmental Cleanup Company

September 19, 2003

Mr. James J. Rogers Environmental Manager Alaska Soil Recycling 1040 O'Malley Road Anchorage, Alaska 99515

Subject: <u>Laboratory Results for Third Party Sampling - Account No. 2965</u>

Dear Mr. Rogers:

The results for our September 12, 2003, sampling for Account No. 2965 are attached. These results are summarized as follows:

Sample ID No.	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	DRO (mg/kg)	RRO (mg/kg)
2003-ASR-2965-266-SL	U	0.023	U	U	25	U
2003-ASR-2965-267-SLD	0.0087	0.026	U	U	24	U
ADEC Level "A" Cleanup Criteria	-	-	-	-	100	2,000
ADEC Method Two Cleanup Criteria	0.02	5.4	5.5	78	-	-

Notes: 1. U means undetected. 2. - means not applicable.

Please be advised that Account No. 2965 meets ADEC Level "A" Cleanup Criteria for DRO and RRO under Method One in 18 AAC 75.341. This account also meets ADEC Method Two Cleanup levels for benzene, toluene, ethylbenzene, and xylene (BTEX) in 18 AAC 75.341.

Samples 2003-ASR-2965-266-SL and 2003-ASR-2965-267-SLD are duplicates. The percentage difference for the DRO and toluene results for these samples is 4 and 11 percent, respectively. These results are acceptable under our quality control program and validates the laboratory results. All samples were collected following ADEC guidelines.

Sincerely,

Randy E. Easley

President

Attachments



SGS Ref.#

3033974001

Client Name Project Name/# Alaska Soil Recycling 2003-03 (1035869)

Client Sample ID Matrix 2003-ASR-2965-266-SL Solid

Location/Well ID

Printed Date/Time

Collected Date/Time

09/12/2003 11:24 09/16/2003 9:30

09/18/2003 16:33

Received Date/Time Technical Director

Stephen C. Ede

Released By

Denixe Heckler

Sample Remarks:

Sample analyzed at the Ludington, Michigan laboratory of SGS Environmental Services Inc.

DRO: Unknown hydrocarbon pattern present.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
PHYSICAL PROPERTY ANALY	sis							
Total Solids	92.6	0.10	%	SM19 2540G			09/17/03	SKP
DRO/RRO COMBINATION								
DRO/ RRO COMBINATION								
Diesel Range Organics	25	11	mg/Kg	AK102/103		09/16/03	09/18/03	DAJ
Residual Range Organics	17.8 U	17.8	mg/Kg	AK102/103		09/16/03	09/18/03	DAJ
Surrogates								
5a Androstane Surr	90.2		%	AK102/103	50-150	09/16/03	09/18/03	DAJ
d-Triacontane Surr	85		%	AK102/103	50-150	09/16/03	09/18/03	DAJ
GRO/8021 COMBINATION								
Benzene	0.0086 U	0.0086	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
Ethylbenzene	0.017 U	0.017	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
o-Xylene	0.017 U	0.017	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
P & M -Xylene	0.034 U	0.034	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
Toluene	0.023	0.017	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
g								
Surrogates	72.7				31.11.2	00/44/5	00/1-1	4
1,4-Difluorobenzene IS/Surr	101		%	AK-101 8021B	60-120	09/12/03	09/17/03	SPE
4-Bromofluorobenzene Surr	92.2		%	AK-101 8021B	50-150	09/12/03	09/17/03	SPE



SGS Ref.#

3033974002

Client Name Project Name/# Alaska Soil Recycling 2003-03 (1035869)

Client Sample ID

2003-ASR-2965-267-SLD

Matrix

Solid

Location/Well ID

Printed Date/Time

Collected Date/Time Received Date/Time 09/18/2003 16:33 09/12/2003 11:24 09/16/2003 9:30

Technical Director

Stephen C. Ede

Released By

Denise Heckler

Sample Remarks:

Sample analyzed at the Ludington, Michigan laboratory of SGS Environmental Services Inc.

DRO: Unknown hydrocarbon pattern present.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
PHYSICAL PROPERTY ANAL	LYSIS							
Total Solids	92.7	0.10	%	SM19 2540G			09/17/03	SKP
DRO/RRO COMBINATION					88			
Diesel Range Organics	24	11	mg/Kg	AK102/103		09/16/03	09/18/03	DAJ
Residual Range Organics	17.7 U	17.7	mg/Kg	AK102/103		09/16/03	09/18/03	DAJ
Surrogates								
5a Androstane Surr	91.6		%	AK102/103	50-150	09/16/03	09/18/03	DAJ
d-Triacontane Surr	87.2		%	AK102/103	50-150	09/16/03	09/18/03	DAJ
GRO/8021 COMBINATION								
Benzene	0.0087	0.0087	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
Ethylbenzene	0.017 U	0.017	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
o-Xylene	0.017 U	0.017	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
P & M -Xylene	0.035 U	0.035	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
Toluene	0.026	0.017	mg/Kg	AK-101 8021B		09/12/03	09/17/03	SPE
Surrogates								
1,4-Difluorobenzene IS/Surr	99.8		%	AK-101 8021B	60-120	09/12/03	09/17/03	SPE
4-Bromofluorobenzene Surr	94.2		%	AK-101 8021B	50-150	09/12/03	09/17/03	SPE



200 W. Potter Drive Anchorage, AK 99518-1605

Tel: (907) 562-2343 Fax: (907) 561-5301

Web: http://www.sgsenvironmental.com

Randy Easley Oil Spill Consultants, Inc.

Work Order:

3033974

2003-03 (1035869)

Client:

Alaska Soil Recycling

Report Date:

September 18, 2003

Enclosed are the analytical results associated with the above workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintaned by SGS. A copy of our Quality Control Manual that outlines this program is available at your request.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth in our Quality Assurance Program Plan.

If you have any questions regarding this report or if we can be of any other assistance, please call your SGS Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

PQL Practical Quantitation Limit (reporting limit).

U Indicates the analyte was analyzed for but not detected.

F Indicates an estimated value that falls below PQL, but is greater than the MDL.

J Indicates an estimated value that falls below PQL, but is greater than the MDL.

B Indicates the analyte is found in the blank associated with the sample.

* The analyte has exceeded allowable limits.

GT Greater Than

D Secondary Dilution

LT Less Than

! Surrogate out of range



Page 1 of 1	110715	1035869		Required				Date / Time	/ /23	20%
CT&E Environmental Services Inc.		Easley Portades	Analysis/Required	A-75						Received Temp:
C&E Environme		Randy E. Easley Divina C. Portage	O-AK103	яя × ×				(pa	ary by	Condition of Containers Fair Poor
	Aı 167566	Sampler(s): (Signature) Witness: (Signature)	O-AK102 © #	++-				Received by: (Printed) (Signature) Received by: (Printed)	(Signature) Received at Landrapory by	Good Fair
Chain of Custo	2003-03	E CR	OIA	Reading Type OGrab				Ime Time	/ Time	9 War 9.30
		33974 age, AK 99878		Time R			(Autom)	Date 9-77-0	Date	1
	2965	36	- o	Date No. 9/12/03 \	却					ia Oil Spill Consultants
	ALA SKA SOIL RECYCLING Account Number:	Oil Spill Consultants, Inc. The Environmental Cleanup Company 7926 Old Seward Highway, Suite C2 Ar Tel: (907) 562-7169 Fax: (907) 562-7225		Sample Number 1 2003-ASR- 2965 - 266 - SL 9/ 2003-ASR- 2965 - 267 - SLD 9/				Relinquished by: (Printed) (Signature) (Signature) Relinquished by: (Printed)	(pa	Hand delivered v Edisgovista of by: Fronda Structur 9/15/
	Project:	Client:	_	NO - 2				Relinquishe (Signature) Relinquishe	(Signature) Dispatched (Signature)	Method of S

SAMPLE RECEIPT FORM

CT&E WO#:

Received Date: Received Temperature*: Thermometer ID: 2135280 Cooler ID Temp Blank Cooler Temp	en notified of problems? JSACE, Navy, AFCEE): Matrix of each Sample: e PWSID. project? project? project? (print):	nometer correction factors. Form F004r04 (Revised 12/28/01)
Are samples RUSH , priority, or <i>within 72 hrs</i> . of hold time ? If yes have you done e-mail notification? Are samples <i>within 24 hrs</i> . of hold time or due date ? If yes, have you <i>spoken with</i> Supervisor? Archiving bottles – if required, are they properly marked? Are there any problems (e.g., ids, analyses)? Were samples preserved correctly and pH verified?	Has Project Manager be Is this a DOD project? (If yes, compound a data package be If this is for PWS, provid Is there a quote for this Will courier charges applied of payment? A of payment?	7/05 *Temperature readings include thermometer correction factors.
ON ON	Completed by (sign): # of each Container Received: 950 ml amber unpres'd 950 ml amber w / HCI 500 ml amber w / HCI 500 ml amber w / HNO ₃ 1L cubitainers w / HNO ₃ 1L Cubitainers w / HNO ₃ 1L Cubitainers w / NaOH + ZnAc 250 mL Nalgene unpres'd 60 ml Nalgene unpres'd 60 ml Nalgene unpres'd 60 ml Nalgene unpres'd 60 ml Nalgene w / H ₂ SO ₄ 120 ml coli bottles 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄ 8 oz amber unpres'd 60 ml Nalgene w / H ₂ SO ₄	og-in proofed by: 00H 9/17

					Chain	Chain of Custody	tody							Pag	Page 1 of 1
Project:	ALASKA SOIL RECYCLING Account Number:	2965		Proj. No.	2003-03		Authorization Number:	ation Nr	ımber:	AS	R Pur	ASR Purchase Order No.	No.		110715
Client: 0	Oil Spill Consultants, Inc. The Environmental Cleanup Company 7926 Old Seward Highway, Suite C2 Ar Tel: (907) 562-7169 Fax: (907) 562-7225	1 8	Anchorage, AK	84 99874 10 A	(CR		Sampler(s): (Signature) Witness: (Signature)	(s):	E MA	Randy E.	Ш, Д	asley	0	035869	g
	Analysis Required by:						B		1-	1-	Analy	Analysis/Required			
ltem No.	Sample Number	Sample Date	Field Screen No.	Time	PID Reading	Туре	# of Cont.	1208-X3TB	DEO-AK102	KRO-AK103					QA / QC Required
1	2965 -	9/12/03	-	11: 24a	0	Grab	2	\vdash	H	×	V	2-3			
2	2003-ASR- 2965 - 267 - SLD	9/12/03	-	-whe: II		Grab	2	×	×	×	(S)	Ş		+++	
$\dagger \dagger$									+	+	+				
H											\coprod				
$\forall \uparrow$									++	+	+			\parallel	
										+				+	
H															
									H	H	H			H	
Linguis	Relinquished by: (Printed) Randy E. Easley	7.		0/-6	Date -	Time	Received by: (Printed)	d by: (F	rinted)	-	-			Date	/ Time
Relinquishe (Signature)	(Signature) Relinquished by: (Printed)					Time	Received by: (Printed)	d by: (F	Printed)					Date	/- Time
Dispatched (Signature)	(Signature) Dispatched by: (Printed) (Signature)				Date /	Time	Recei	untal la	Received at Laboratory by	10			0,	Date Date	/ Time
lethod c	Method of Shipment: Hand delivered via Oil Spill Consultants, Inc. truck.	d via Oil Spill Co	nsultants	s, Inc. truck.	2	\prod	N	Condition of		Containers		Receiv	Received Temp: 9	20	
						The state of the s	_								

SGS

ompleted by (sign):

ogin proof (check one): waived X

D C C SAMPLE RECEIPT FORM

1035869

CT&E WO#:

(print): Dane



Yes	No	NA	Are samples RUSH) priority, or within 72 hrs. of hold time?	Due Date: 9.18.03
			If yes have you done e-mail notification?	Received Date: 17/2-05
			Are samples within 24 hrs. of hold time or due date?	Received Time: 1230
	_	_	of you have you spoken with Supervisor?	Is date/time conversion necessary?
			Archiving bottles – if required, are they properly marked?	# of hours from AK Standard Time:
		_	Are there any problems? PM Notified?	Received Temperature*:°C
	_		Were samples preserved correctly and pH verified?	Thermometer ID: D-FC6
\angle			Were samples preserved correctly and per remised.	Cooler ID Temp Blank Cooler Temp
				1 - °C 4.6 °C
				°C °C
			TIMO : IL DINCID	°C °C
			If this is for PWS, provide PWSID	°C °C
	_		Will courier charges apply?	*Temperature readings include thermometer correction factors
			Method of payment?	Delivery method (circle all that apply): Client)
	_		Data package required? (Level: 1 / 2 / 3)	Alert Courier / UPS / FedEx / USPS /
			Notes: AECEE	AA Goldstreak / NAC / ERA / PenAir / Carlile
			Is this a DoD project? (USACE, Navy, AFCEE)	Lynden / SGS-CT&E / Other:
			· · · · · · · · · · · · · · · · · · ·	Airbill #
	This se	ction	must be filled out for DoD projects (USACE, Navy, AFCEE)	Additional Sample Remarks: (\(\sif\) if applicable)
Yes			개념 가장 맛째 집에 고부우를 잃었다는 마이트 하지만 그 사람들이 바꾸게 하는 아이를 하여 있다.	Extra Sample Volume?
1.00			Is received temperature 4 ± 2°C?	Limited Sample Volume?
1 - 1-1	Jan Carlo	<u></u>	Exceptions: Samples/Analyses Affected:	Field preserved for volatiles?
				Field-filtered for dissolved?
*				Lab-filtered for dissolved?
				Ref Lab required? whole werk ord
				Foreign Soil?
		16. 1. 10. 1	Rad Screen performed?	
	7. A. T.	7	Result	This section must be filled if problems are found.
			Was there an airbill? (Note # above in the right hand column).	Yes No
			Was cooler sealed with custody seals? Faxed to COE?	Was client notified of problems?
			# / where:	
		<u> </u>	Were seal(s) intact upon arrival?	Individual contacted:
		<u>.</u>	Was there a COC with cooler?	
			Was the COC filled out properly? Did the COC indicate ACOE / AFCEE project? (if applicable)	Phone/Fax:
	<u> </u>		Did the COC indicate ACOE / AI CEL project: (ii appreciate	Reason for contact:
			Did the COC and samples correspond?	
		<u> </u>	Were all sample packed to prevent breakage? Packing material:	
	:7:		Were all samples unbroken and clearly labeled?	
	<u> </u>		Were all samples unbloken and stearly lastic bags?	
			Were all bottles for volatiles free of headspace?	
	نــــک	<u>:</u>	Were correct container / sample sizes submitted?	
			Were correct container, sample sizes submitted.	SGS/CT&E Contact:
· <u>· · · ·</u>			Is sample condition good?	
•				
otes:				
oles.				
				<u></u>
	-			

_ performed by:

#

SAMPLE RECEIPT FORM (page 2)

CT&E WO#

1035869

																			_				-
	Other																						
Preservative	HOBN																						
	Na2S2D3	×																					
	HO9M																						
	⁵OS ^z H																						
	^E ONH							T															
	HCI																						
	None		×												7	-							
H																							
Container Type	Other																						1,
	Septa	V						-			-	-							-				
	Coli							-	-	-													
	əiduO	+				7			-														
	Nalgene							\vdash															
	НДЬЕ							-		-	-												
	DO					·			-														
	DA	X	v					-			<u></u>												
	ÐΨ		X					-	-	-	-								-	-			
Container Volume	Other																						
	4oz (125 mL)	2	7																				
	8oz (250 mL)																						
	√40 mL																						
	Jm 09																				_		L
	125 mL																_			7			L
	7m 022																	<u></u>					
	Jm 002																						L
	II			-																L			L
	TB																						
	бс																		_	_		_	-
		0	Q																1				
	Test	(I) X	RRO																				-
	Ĕ	F	3																				
		9	Ø				_											_	-	-	-	-	+
	xirteM	4																	_		-		-
	Container ID	A	\$)	,																		
		7		-			1							- 1									1

Completed by:

Date: 9-12-67

Form # F004r10: 05/16/03

\\Petra\Public\DOCUMENT\FORMS\\Working\SRF_F004r10.doc

Bottle Totals