PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713
Attention:	Richard Dillen
Phone Number:	727-328-7403
Fax Number:	727-328-7782
Project Name:	Processed Oil
Project Number:	Batch 3773, Batch 071 P.O. # 46581
Project Location:	St. Petersburg, FL
Sampled By:	R.D. / HES
Date Sampled:	02/08/11 09:00
Date Received:	02/08/11 14:45
Date Reported:	02/11/11
Lab. Report #:	020811-013

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: David Pomella
David Pomella, Laboratory Director

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	6
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**9**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 020811-013
Project Name: Processed Oil - Batch 3773, Batch 071

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 020811-013 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:	020811-33b	020811-34
Sample Description/Matrix:	Batch 3773 / Comp Oil	Batch 071 / Grab Oil
Sample Date:	02/08/11 09:00	02/08/11 09:00
Preparation Date:	02/09/11	02/09/11
Analysis starting Date/Time:	02/09/11 12:43	02/09/11 13:37
Method:	EPA 8082	EPA 8082
Batch:	020811	020811
Dilution:	0.2g/10 ml	0.2g/10 ml
Initials:	XH	XH

Analytes:	Cas No.	Results	Units	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits	% Recovery	Limits
TCMX	88	70-130	107	70-130
Decachlorobiphenyl	112	70-130	114	70-130

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:		020811-33a			020811-34a				
Sample Description/Matrix:		Batch 3773 / Comp Oil			Batch 071 / Grab Oil				
Sample Date:		02/08/11 09:00			02/08/11 09:00				
Preparation Date/Method:		02/11/11 3050A			02/11/11 3050A				
Analysis Date/Time:		02/11/11 14:58			02/11/11 14:58				
Method:		EPA 6010B			EPA 6010B				
Batch:		021111A-S628			021111A-S628				
Initials:		MS/SN			MS/SN				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.06 I**	mg/Kg	1x	0.04 U	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**6.42**	mg/Kg	1x	**4.83**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	02/08/11	21:34
Batch:	020811	
Initials:	XH	

		% Recovery		QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	116	119	124	70-130	4	
Aroclor-1260	122	120	126	70-130	5	

LAB BLANK

Analysis starting Date/Time:	02/08/11	20:40
Batch:	020811	
Initials:	XH	

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	124	70-130
Decachlorobiphenyl	125	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 6010B Metals

SPIKE DATA
Analysis Date/Time: 02/11/11 14:58
Batch: 021111A-S628
Initials: SN/MS

	mg/Kg Found				% Recovery			
Parameter	**Spike @**	**Spike**	**Spike Dup**	**RPD**	**Spike**	**Spike Dup**	**Range**	**Flag**
Arsenic (As)	50.0	47.0	48.4	3.0	94	97	80-120	
Cadmium (Cd)	50.0	48.6	49.7	2.2	97	99	80-120	
Chromium (Cr)	50.0	47.0	48.3	2.7	94	97	80-120	
Lead (Pb)	50.0	46.0	47.3	3.0	92	95	80-120	

LAB BLANK
Analysis Date/Time: 02/11/11 14:58
Batch: 021111A-S628
Initials: SN/MS

Analytes:	**Results**	**Units**
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
U = Compound analyzed but not detected to the level shown

DATA QUALIFIER CODES

SYMBOL MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

020811.013

Chain of Custody Record

Company: HOWCO

Address: 3701 Central Ave.
St. Petersburg, FL Zip: 33713

Phone: 727-437-4059 Fax:

Project Name: Processed Oil PO# 46581

Project #:

Project Manager:

Project Location:

Evidence Sample(s): YES: NO:

Page 1 of 1

Ref: DEP Form #: 62-770.900(2)

Form Title: Chain of Custody Record

Effective Date: 8//2004

FDEP Facility No.:

Project Name:

Sampling CompQAP No.:

Approval Date:

Sampled by [Print Name(s)] / Affiliation: Richard Dizzoni

Sampler(s) Signature(s):

Preservatives (see codes): — —

Analyses Requested: As, Cd, Cr, Pb; PCBs

REQUESTED DUE DATE: 2/10/11

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	Remarks	Lab. No.
	B#3773	2/8/11	09:00	Comp	OL	2	020811	33
	B#071	2/8/11	09:00	Comp	OL	1	ASTOR - FACILITY	34

Shipment Method

<= Total Number of Containers

Out: / / Via:

Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	PhosLab, Inc./Containers					
		2/8/11	10:30		2/8/11	10:30
		2.8.11	2:45		2.8.11	2:45

Cooler No.(s) / Temperature(s) (°C): °C

Sampling Kit No.:

Equipment ID No.:

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 020811 14:45

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	/		4°C				

Thermometer ID: TM-001 SL

Note: If the temperature of a cooler is above 6^0 C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes / No _____

4) Acid preserved: pH less than 2 Yes _____ No N/A pH Strip Lot: _____

Coolers Unpacked/Checked by: Dayna Date: 020811

Client: Hawa Project: Processed Oil B-3773 B-071

COC #: 020811-013

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713	
Attention:	Richard Dillen	
Phone Number:	727-328-7403	
Fax Number:	727-328-7782	
Project Name:	Processed Oil	
Project Number:	Batch 3781, Batch 074 AST	P.O. # 46589
Project Location:	St. Petersburg, FL	
Sampled By:	R.D. / HES	
Date Sampled:	02/25/11 10:00	
Date Received:	02/28/11 09:47	
Date Reported:	03/02/11	
Lab. Report #:	022811-003	

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: Megan Skeen
Megan Skeen, Quality Assurance officer

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	6
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**9**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 022811-003
Project Name: Processed Oil - Batch 3781, Batch 074 AST

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 022811-003 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:	022811-03a	022811-04a
Sample Description/Matrix:	Batch 3781 / Grab Oil	Batch 074-AST / Grab Oil
Sample Date:	02/25/11 10:00	02/25/11 09:47
Preparation Date:	02/28/11	02/28/11
Analysis starting Date/Time:	03/01/11 3:32	03/01/11 4:26
Method:	EPA 8082	EPA 8082
Batch:	022811	022811
Dilution:	0.2g/10 ml	0.2g/10 ml
Initials:	XH	XH

Analytes:	Cas No.	Results	Units	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits	% Recovery	Limits
TCMX	76	70-130	74	70-130
Decachlorobiphenyl	74	70-130	71	70-130

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:		022811-03b			022811-04b				
Sample Description/Matrix:		Batch 3781 / Grab Oil			Batch 074-AST / Grab Oil				
Sample Date:		02/25/11 10:00			02/25/11 09:47				
Preparation Date/Method:		03/01/11 3050A			03/01/11 3050A				
Analysis Date/Time:		03/01/11 15:10			03/01/11 15:10				
Method:		EPA 6010B			EPA 6010B				
Batch:		030111A-S638			030111A-S638				
Initials:		MS/SN			MS/SN				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.29**	mg/Kg	1x	**0.15 I**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**3.44**	mg/Kg	1x	**4.79**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	03/01/11	0:49
Batch:	022811	
Initials:	XH	

		% Recovery		QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	93	92	92	70-130	0	
Aroclor-1260	98	96	97	70-130	1	

LAB BLANK

Analysis starting Date/Time:	02/28/11	23:55
Batch:	022811	
Initials:	XH	

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	122	70-130
Decachlorobiphenyl	111	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 6010B Metals

SPIKE DATA
Analysis Date/Time: 03/01/11 15:10
Batch: 030111A-S638
Initials: SN/MS

	mg/Kg Found				% Recovery			
Parameter	**Spike @**	**Spike**	**Spike Dup**	**RPD**	**Spike**	**Spike Dup**	**Range**	**Flag**
Arsenic (As)	50.0	51.0	51.7	1.4	102	103	80-120	
Cadmium (Cd)	50.0	48.6	50.1	3.0	97	100	80-120	
Chromium (Cr)	50.0	42.4	43.0	1.4	85	86	80-120	
Lead (Pb)	50.0	42.0	42.8	1.8	84	86	80-120	

LAB BLANK
Analysis Date/Time: 03/01/11 15:10
Batch: 030111A-S638
Initials: SN/MS

Analytes:	**Results**	**Units**
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
U = Compound analyzed but not detected to the level shown

DATA QUALIFIER CODES

SYMBOL	MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently.. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

022811.003

Chain of Custody Record

Company: HOWCO ENV. SERV.	Project Name: PROCESSED O12 PO# 46589	Page 1 of 1
Address: 3701 CENTRAL AVE.	Project #:	Ref: DEP Form #: 62-770.900(2)
ST-PETERSBURG FL Zip: 33713	Project Manager:	Form Title: Chain of Custody Record
Phone: 727-437-4059 Fax: 320-7782	Project Location:	Effective Date: 8//2004
Sampled by [Print Name(s)] / Affiliation: RICHARD DICLEM	Evidence Sample(s): YES: NO:	FDEP Facility No.:
Sampler(s) Signature(s):	Preservatives (see codes): — —	Project Name:
	Analyses Requested: As, Cd Cr, Pb; PCB's	Sampling CompQAP No.:
		Approval Date:
		REQUESTED DUE DATE: 3 / 2 / 11

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	As, Cd Cr, Pb	PCB's	Remarks	Lab. No.
	B#3781	2/25/11	10:00	GRAB	O12	1	X	X	022811	03
									-	04
	B#074-AST	2/25/11	10:00	GRAB	O12	1	X	X		

Shipment Method | <= Total Number of Containers

Out: / /	Via:	Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
Returned: / /	Via:		PhosLab, Inc./Containers					
Additional Comments:				2/25/11	10:20		2/25/11	10:20
							3/25	11:10
				2/26	9:47		2/28	0947

Cooler No.(s) / Temperature(s) (°C)	Sampling Kit No.	Equipment ID No.
°C		

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 022811 09:47

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	✓		4°C				

Thermometer ID: TM-004 SL

Note: If the temperature of a cooler is above 6^0 C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes ✓ No _____

4) Acid preserved: pH less than 2 Yes _____ No N/A pH Strip Lot: _____

Coolers Unpacked/Checked by: Dayna Date: 022811

Client: Harvard Project: Processed Oil Batch 3781 Batch 074-A5

COC #: 022811-003

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713
Attention:	Richard Dillen
Phone Number:	727-328-7403
Fax Number:	727-328-7782
Project Name:	Processed Oil
Project Number:	Batch 3786, Batch 076 P.O. # 46593
Project Location:	St. Petersburg, FL
Sampled By:	R.D. / HES
Date Sampled:	03/10/11 09:30
Date Received:	03/10/11 12:00
Date Reported:	03/14/11
Lab. Report #:	031011-004

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: Megan Skeen
Megan Skeen, Quality Assurance officer

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	6
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**9**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 031011-004
Project Name: Processed Oil - Batch 3786, Batch 076

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 031011-004 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:		031011-04		031011-05			
Sample Description/Matrix:		Batch 3786 / Grab Oil		Batch 076 / Grab Oil			
Sample Date:		03/10/11	09:30	03/10/11	09:30		
Preparation Date:		03/10/11		03/10/11			
Analysis starting Date/Time:		03/10/11	20:00	03/10/11	20:54		
Method:		EPA 8082		EPA 8082			
Batch:		031011		031011			
Dilution:		0.2g/10 ml		0.2g/10 ml			
Initials:		XH		XH			
Analytes:	**Cas No.**	**Results**	**Units**	**Results**	**Units**	**MDL**	**PQL**
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Surrogate:		**% Recovery**	**Limits**	**% Recovery**	**Limits**		
TCMX		95	70-130	97	70-130		
Decachlorobiphenyl		89	70-130	88	70-130		

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:		031011-04			031011-05				
Sample Description/Matrix:		Batch 3786 / Grab Oil			Batch 076 / Grab Oil				
Sample Date:		03/10/11 09:30			03/10/11 09:30				
Preparation Date/Method:		03/11/11 3050A			03/11/11 3050A				
Analysis Date/Time:		03/14/11 13:09			03/14/11 13:09				
Method:		EPA 6010B			EPA 6010B				
Batch:		031411B-S643			031411B-S643				
Initials:		MS/SN			MS/SN				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.12 I**	mg/Kg	1x	**0.11 I**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**1.44**	mg/Kg	1x	**6.15**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	03/10/11	17:18
Batch:	031011	
Initials:	XH	

		% Recovery		QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	99	98	95	70-130	3	
Aroclor-1260	104	104	101	70-130	3	

LAB BLANK

Analysis starting Date/Time:	03/10/11	16:24
Batch:	031011	
Initials:	XH	

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	118	70-130
Decachlorobiphenyl	123	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 6010B Metals

SPIKE DATA
Analysis Date/Time: 03/14/11 13:09
Batch: 031411B-S643
Initials: SN/MS

	mg/Kg Found				% Recovery			
Parameter	**Spike @**	**Spike**	**Spike Dup**	**RPD**	**Spike**	**Spike Dup**	**Range**	**Flag**
Arsenic (As)	50.0	52.4	52.8	0.7	105	106	80-120	
Cadmium (Cd)	50.0	48.2	48.5	0.6	96	97	80-120	
Chromium (Cr)	50.0	53.3	53.8	0.9	107	108	80-120	
Lead (Pb)	50.0	53.7	54.2	0.9	107	108	80-120	

LAB BLANK
Analysis Date/Time: 03/14/11 13:09
Batch: 031411B-S643
Initials: SN/MS

Analytes:	**Results**	**Units**
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
U = Compound analyzed but not detected to the level shown

DATA QUALIFIER CODES

SYMBOL	MEANING
A	Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.
H	Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code: • No known quality control criteria exist for the component; • The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified); • The sample matrix interfered with the ability to make any accurate determination; • The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample). • The field calibration verification did not meet calibration acceptance criteria.
K	Off-scale low. Actual value is known to be less than the value given. This code shall be used if: 1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or 2. The value is known to be less than the reported value based on sample size, dilution. This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.
L	Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.
M	When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.
N	Presumptive evidence of presence of material. This qualifier shall be used if: 1. The component has been tentatively identified based on mass spectral library search; or 2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).
O	Sampled, but analysis lost or not performed.
Q	Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.
T	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
U	Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).
V	Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
*	Not currently accredited for this analyte.
!	Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

031011 .004

Chain of Custody Record

Company: HOWCO
Address: 3701 CENTRAL AVE.
ST. PETERSBURG, FL Zip: 33713
Phone: 727-437-4059 Fax: 328-7784

Project Name: PROCESSED OIL PO# 46593
Project #:
Project Manager:
Project Location:
Evidence Sample(s): YES: NO:

Page 1 of 1
Ref: DEP Form #: 62-770.900(2)
Form Title: Chain of Custody Record
Effective Date: 8//2004
FDEP Facility No.:
Project Name:
Sampling CompQAP No.:
Approval Date:

Sampled by [Print Name(s)] / Affiliation: RICHARD DICLEM

Sampler(s) Signature(s):

Preservatives (see codes)

Analyses Requested

REQUESTED DUE DATE: 3 / 14 / 11

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	As, Cd, Cr, Pb	PCB's	Remarks	Lab. No.
	B#3786	3/10/11	09:30	GRAB	OIL	1	X	X	03011-04	04
	B#076	3/10/11	09:30	GRAB	OIL	1	X	X		05

Shipment Method
<= Total Number of Containers

Out: / / Via:
Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	PhosLab, Inc./Containers					
		3/10/11	10:45		3/10/11	10:45
		3/10/11	12:00		3/10/11	12:00

Cooler No.(s) / Temperature(s) (°C): °C
Sampling Kit No.:
Equipment ID No.:

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 031011 12:00

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	✓		< 4°C				

Thermometer ID: TM-0015L

Note: If the temperature of a cooler is above 6° C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes ✓ No _____

4) Acid preserved: pH less than 2 Yes _____ No N/A pH Strip Lot: _____

Coolers Unpacked/Checked by: Dayne Date: 031011

Client: Flowco Project: Processed Oil B-3786 B-076

COC #: 031011-004

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

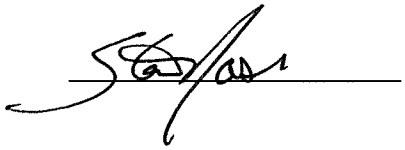
Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713
Attention:	Richard Dillen
Phone Number:	727-328-7403
Fax Number:	727-328-7782
Project Name:	Processed Oil
Project Number:	Batch 3798, 077-AST P.O. # 44846
Project Location:	St. Petersburg, FL
Sampled By:	R.D. / HES
Date Sampled:	04/05/11
Date Received:	04/05/11 14:00
Date Reported:	04/08/11
Lab. Report #:	040511-015

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: Steve Nasr
Steve Nasr, Projects Manager



If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	6
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**9**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 040511-015
Project Name: Processed Oil - Batch 3798, 077-AST

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 040511-015 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:	040511-48	040511-49
Sample Description/Matrix:	Batch 077-AST / Grab Oil	Batch 3798 / Grab Oil
Sample Date:	04/05/11 10:30	04/05/11 11:00
Preparation Date:	04/05/11	04/05/11
Analysis starting Date/Time:	04/06/11 4:01	04/06/11 4:55
Method:	EPA 8082	EPA 8082
Batch:	040511	040511
Dilution:	0.2g/10 ml	0.2g/10 ml
Initials:	XH	XH

Analytes:	Cas No.	Results	Units	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits	% Recovery	Limits
TCMX	89	70-130	88	70-130
Decachlorobiphenyl	72	70-130	71	70-130

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:		040511-48			040511-49				
Sample Description/Matrix:		Batch 077-AST / Grab Oil			Batch 3798 / Grab Oil				
Sample Date:		04/05/11 10:30			04/05/11 11:00				
Preparation Date/Method:		04/07/11 3050A			04/07/11 3050A				
Analysis Date/Time:		04/08/11 12:05			04/08/11 12:05				
Method:		EPA 6010B			EPA 6010B				
Batch:		040811A-S650			040811A-S650				
Initials:		MS/SN			MS/SN				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.19 I**	mg/Kg	1x	**0.38**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**3.24**	mg/Kg	1x	**14.9**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	04/06/11	1:18
Batch:	040511	
Initials:	XH	

	% Recovery			QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	86	86	85	70-130	1	
Aroclor-1260	94	95	92	70-130	3	

LAB BLANK

Analysis starting Date/Time:	04/06/11	0:24
Batch:	040511	
Initials:	XH	

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	103	70-130
Decachlorobiphenyl	108	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 6010B Metals

SPIKE DATA

Analysis Date/Time: 04/08/11 12:05
Batch: 040811A-S650
Initials: SN/MS

	mg/Kg Found				% Recovery			
Parameter	**Spike @**	**Spike**	**Spike Dup**	**RPD**	**Spike**	**Spike Dup**	**Range**	**Flag**
Arsenic (As)	50.0	52.2	50.1	4.0	104	100	80-120	
Cadmium (Cd)	50.0	53.6	51.6	3.8	107	103	80-120	
Chromium (Cr)	50.0	49.3	47.0	4.7	99	94	80-120	
Lead (Pb)	50.0	50.5	48.4	4.4	101	97	80-120	

LAB BLANK

Analysis Date/Time: 04/08/11 12:05
Batch: 040811A-S650
Initials: SN/MS

Analytes:	**Results**	**Units**
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
U = Compound analyzed but not detected to the level shown

DATA QUALIFIER CODES

SYMBOL MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

040511-015

Chain of Custody Record

Company: HOWCO ENV. SERV	Project Name: PROCESSED OIL PO# 44846	Page 1 of 1
Address: 3701 CENTRAL AVE.	Project #:	Ref: DEP Form #: 62-770.900(2)
ST. PETERSBURG, FL Zip: 33713	Project Manager:	Form Title: Chain of Custody Record
Phone: 727-437-4059 Fax: 328-7782	Project Location:	Effective Date: 8//2004
	Evidence Sample(s): YES: NO:	FDEP Facility No.:
Sampled by [Print Name(s)] / Affiliation: RICHARD DILLEM	Preservatives (see codes)	Project Name:
Sampler(s) Signature(s):	Analyses Requested	Sampling CompQAP No.:
		Approval Date:
		REQUESTED DUE DATE: 4/7/11

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	As, Cd, Cr, Pb	PCBs	Remarks	Lab. No.
	B#077-AST	4/5/11	10:30	GRAB	OIL	2	Xa	Xb	040511	48
	B#3798	4/5/11	11:00	GRAB	OIL	2	Xa	Xb		
									L	49

Shipment Method | <= Total Number of Containers

Out: / / Via:
Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	PhosLab, Inc./Containers	4/5/11	12:00		4/5/11	12:00
		4-5-11	2:00		4/5/11	2:00

Cooler No.(s) / Temperature(s) (°C)	Sampling Kit No.	Equipment ID No.
°C		

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 040511 12:00

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	✓		< 4°C				

Thermometer ID: TM-0015L

Note: If the temperature of a cooler is above 6° C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes ✓ No _____

4) Acid preserved: pH less than 2 Yes _____ No N/A pH Strip Lot: _____

Coolers Unpacked/Checked by: Dayna Date: 040511

Client: Howco Project: Processed Oil B-077 AST B-3798

COC #: 040511-015

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713
Attention:	Richard Dillen
Phone Number:	727-328-7403
Fax Number:	727-328-7782
Project Name:	Processed Oil
Project Number:	Batch 083 P.O. # 62036
Project Location:	Astor - FL
Sampled By:	R.D. / HES
Date Sampled:	06/30/11 08:00
Date Received:	06/30/11 12:30
Date Reported:	07/05/11
Lab. Report #:	063011-011

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: David Pomella
David Pomella, Laboratory Director

Approved By: Megan Skeen
Megan Skeen, Quality Assurance officer

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	10
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**13**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 063011-011
Project Name: Processed Oil Batch 083

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 063011-011 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:	06301-26a	
Sample Description/Matrix:	Batch 083	Grab Oil
Sample Date:	06/30/11	08:00
Preparation Date/Method:	07/05/11	3050A
Analysis Date/Time:	07/05/11	12:07
Method:	EPA 6010B	
Batch No.	070511A-S801	
Initials:	MS/SN	

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.11 I**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**8.83**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:	06301-26b	
Sample Description/Matrix:	Batch 083	Grab Oil
Sample Date:	06/30/11	08:00
Preparation Date:	07/01/11	
Analysis starting Date/Time:	07/01/11	10:10
Method:	EPA 8082	
Batch:	063011	
Dilution:	0.2g/10 ml	
Initials:	XH	

Analytes:	Cas No.	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits
TCMX	90	70-130
Decachlorobiphenyl	84	70-130

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
TOTAL HALIDES by 9253/5050

Sample ID:	06301-26b	
Sample Description/Matrix:	Batch 083	Grab Oil
Sample Date:	06/30/11	08:00
Preparation Date/Method:	07/05/11	5050
Analysis Date/Time:	07/05/11	14:30
Method:	9253 / 5050 Bomb Prep	
Batch No.	TX-238	
Initials:	1x	
	MS	

Analytes:	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
TX	230 U	mg/Kg	1x	230	500

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279

TOLL FREE 1-888-682-5897

FDOH ID: E84925

CERTIFICATE OF ANALYSIS
General Analytes (Wet Chemistry)

Sample Date/Time:	06/30/11	08:00
Preparation Date:	07/01/11	
Analysis Date/Time:	07/01/11	12:35
Method:	EPA 1010	
Analytes:	Flash Point	
Batch:	089	
Initials:	XS	

Sample ID	Sample Description	Results	Units	Start /End Temp.
063011-26c	Batch 083	**160**	°F	80°F - 160F

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	06/30/11	23:51
Batch:	063011	
Initials:	XH	

		% Recovery		QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	78	73	74	70-130	1	
Aroclor-1260	88	84	85	70-130	1	

LAB BLANK

Analysis starting Date/Time:	06/30/11	22:57
Batch:	063011	
Initials:	XH	

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	107	70-130
Decachlorobiphenyl	126	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 6010B Metals

SPIKE DATA
Analysis Date/Time: 07/05/11 12:07
Batch: 070511A-S801
Initials: MS/SN

	mg/Kg Found				% Recovery		
Analytes:	**Spike @**	**Spike**	**Spike Dup**	**RPD**	**Spike**	**Spike Dup**	**Range**
Arsenic (As)	50.0	49.1	50.0	1.8	98	100	80 - 120
Cadmium (Cd)	50.0	47.4	48.3	2.0	95	97	80 - 120
Chromium (Cr)	50.0	50.8	51.7	1.8	102	103	80 - 120
Lead (Pb)	50.0	49.3	50.3	2.0	99	101	80 - 120

LAB BLANK
Analysis Date/Time: 07/05/11 12:07
Batch: 070511A-S801
Initials: MS/SN

Analytes:	**Results**	**Units**
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
TOTAL HALIDES by 9253/5050

SPIKE DATA

Analysis Date/Time:		07/05/11	14:30
Batch No.		TX-238	
Initals:		MS	

			mg/Kg Found	% Recovery		
Analyte		**Spike @**	**Spike**	**Spike % Recov**	**Limits**	**Flag**
Total Halides	MS	606	625	103	75-125	
Total Halides	MSD	606	584	96	75-125	

LAB BLANK

Analysis Date/Time:	07/05/11	14:30
Batch No.	TX-238	
Initals:	MS	

Analytes:	**Results**	**Units**
Total Halides	230 U	mg/Kg

LCS = Laboratory Control Standard

MS = Matrix Spike

U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 1010

Analysis Date/Time:	07/01/77
Batch:	FP = 089
Initials:	XS

Analytes:	**Standard**	**Results**	**Units**
Ignitiability (Flash Point)	169	160	Deg. F

DATA QUALIFIER CODES

SYMBOL MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

Chain of Custody Record 063011.011

Company: HOWCO Env. Serv.
Address: 3701 Central Ave.
St. Petersburg, FL Zip: 33713
Phone: 727-437-4059 Fax: 320-7702

Project Name: Processed Oil PO# 62036
Project #:
Project Manager:
Project Location: Astor - Florida
Evidence Sample(s): YES: NO:

Ref: DEP Form #: 62-770.900(2)
Form Title: Chain of Custody Record
Effective Date: 8//2004
FDEP Facility No.:
Project Name:
Sampling CompQAP No.:
Approval Date:
REQUESTED DUE DATE 7/5/11

Sampled by [Print Name(s)] / Affiliation: Richard Dillen
Sampler(s) Signature(s): [signature]

Preservatives (see codes): A: / B: / C: /

Analyses Requested: A = As, Cd, Cr, Pb; B = PCB's TX; C = Flashpoint

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	A	B	C						Remarks	Lab. No.
	B#083	6/30/11	08:00	GRAB	OIL	3	X	X	X						063011	26

<= Total Number of Containers

Shipment Method
Out: / / Via:
Returned: / / Via:
Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	/PhosLab, Inc./Containers					
	[signature]	6/30/11	11:00	[signature]	6/30/11	11:00
	[signature]	6/30/11	12:30	[signature]	6.30.11	12:30

Cooler No.(s) / Temperature(s) (°C): °C
Sampling Kit No.:
Equipment ID No.:

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)
PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 063011 12:30

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	✓		< 4°C				

Thermometer ID: TM-001SL

Note: If the temperature of a cooler is above 6^0 C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes ✓ No _____

4) Acid preserved: pH less than 2 Yes _____ No N/A pH Strip Lot: _____

Coolers Unpacked/Checked by: Owen Date: 063011

Client: Hawco Project: Processed Oil - B-083

COC #: 063011-01

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713
Attention:	Richard Dillen
Phone Number:	727-328-7403
Fax Number:	727-328-7782
Project Name:	Processed Oil
Project Number:	Batch 3845 and 086-Ast P.O. # 62076
Project Location:	Florida
Sampled By:	R.D. / HES
Date Sampled:	07/21/11 10:00
Date Received:	07/21/11 15:01
Date Reported:	08/10/11
Lab. Report #:	072111-011A **(Replaces Lab Report ID# 072111-011)**

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: David Pomella
David Pomella, Laboratory Director

Approved By: Megan Skeen
Megan Skeen, Quality Assurance officer

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	10
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**13**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 072111-011A
Project Name: Processed Oil Batch 3845 and 086-AST

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 072111-011 were received with containers intact, and at the proper temperature for the requested analyses.

At client's request, Lab sample ID# 072111.22 was reanalyzed for TX.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:	072111-22a
Sample Description/Matrix:	Batch 3845 Grab Oil
Sample Date:	07/21/11 10:00
Preparation Date/Method:	07/27/11 3050A
Analysis Date/Time:	07/27/11 13:36
Method:	EPA 6010B
Batch No.	072711A-S807
Initials:	SN

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.07 I**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**19.0**	mg/Kg	1x	0.16	0.25

Sample ID:	072111-23a
Sample Description/Matrix:	Batch 086 Ast / Grab Oil
Sample Date:	07/21/11 10:00
Preparation Date/Method:	07/27/11 3050A
Analysis Date/Time:	07/27/11 13:36
Method:	EPA 6010B
Batch No.	072711A-S807
Initials:	SN

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	0.04 U	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**8.40**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:	072111-22a
Sample Description/Matrix:	Batch 3845 Grab Oil
Sample Date:	07/21/11 10:00
Preparation Date:	07/25/11
Analysis starting Date/Time:	07/25/11 15:02
Method:	EPA 8082
Batch:	072511
Dilution:	0.2g/10 ml
Initials:	XH

Analytes:	Cas No.	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits
TCMX	85	70-130
Decachlorobiphenyl	79	70-130

Sample ID:	072111-23a
Sample Description/Matrix:	Batch 086 Ast / Grab Oil
Sample Date:	07/21/11 10:00
Preparation Date:	07/25/11
Analysis starting Date/Time:	07/25/11 15:56
Method:	EPA 8082
Batch:	072511
Dilution:	0.2g/10 ml
Initials:	XH

Analytes:	Cas No.	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits
TCMX	77	70-130
Decachlorobiphenyl	71	70-130

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
TOTAL HALIDES by 9253/5050

Sample ID:	072111-22a
Sample Description/Matrix:	Batch 3845 Grab Oil
Sample Date:	07/21/11 10:00
Preparation Date/Method:	08/09/11 5050
Analysis Date/Time:	08/09/11 16:30
Method:	9253 / 5050 Bomb Prep
Batch No.	TX-241
Initials:	SN/MS

Analytes:	Results	Units	Dilution	MDL	PQL
TX	**855**	mg/Kg	1x	230	500

Sample ID:	072111-23a
Sample Description/Matrix:	Batch 086 Ast / Grab Oil
Sample Date:	07/21/11 10:00
Preparation Date/Method:	08/04/11 5050
Analysis Date/Time:	08/04/11 15:45
Method:	9253 / 5050 Bomb Prep
Batch No.	TX-240
Initials:	SN/MS

Analytes:	Results	Units	Dilution	MDL	PQL
TX	**579**	mg/Kg	1x	230	500

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
General Analytes (Wet Chemistry)

Sample Date/Time:	07/21/11	10:00
Preparation Date:	07/19/11	
Analysis Date/Time:	07/19/11	10:35
Method:	EPA 1010	
Analytes:	Flash Point	
Batch:	FP - 092	
Initials:	XS	

Sample ID	Sample Description	Results	Units	Start /End Temp.
072111-22b	Batch 3845	**>180**	°F	75°F - >180F

Sample Date/Time:	07/21/11	10:00
Preparation Date:	07/19/11	
Analysis Date/Time:	07/19/11	11:00
Method:	EPA 1010	
Analytes:	Flash Point	
Batch:	FP - 092	
Initials:	XS	

Sample ID	Sample Description	Results	Units	Start /End Temp.
072111-23b	Batch 086-Ast	**>185**	°F	75°F - >185F

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	07/25/11	12:20
Batch:	072511	
Initials:	XH	

		% Recovery		QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	99	110	110	70-130	0	
Aroclor-1260	94	102	107	70-130	5	

LAB BLANK

Analysis starting Date/Time:	07/25/11	11:28
Batch:	072511	
Initials:	XH	

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	124	70-130
Decachlorobiphenyl	124	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
Metals - EPA 6010B

SPIKE and LCS DATA

Analysis Date/Time: 07/27/11 13:36
Batch: 072711A-S807
Initials: SN
Parent Sample ID: 072611-03
Recovery Limits: (80%-120%)

Parameter	LCS Recovery: %	Parent Result: mg/L	Spike @ mg/L	Spike mg/L	Spike dup mg/L	RPD	MS Recovery: %	MSD Recovery: %
Arsenic (As)	97.0	0.19 U	50.0	48.3	48.4	0.1	96.6	96.7
Cadmium (Cd)	104	0.07 U	50.0	50.4	50.2	1.0	101	100
Chromium (Cr)	101	0.32	50.0	50.0	50.0	0.0	99.4	99.4
Lead (Pb)	102	2.72	50.0	51.1	51.1	0.0	96.8	96.8

LAB BLANK

Analysis Date/Time: 07/27/11 13:36
Batch: 072711A-S807
Initials: SN

Analytes:	Results	Units
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

U = Compound analyzed but not detected to the level shown
RPD = Relative Percent Difference
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
TOTAL HALIDES by 9253/5050

SPIKE DATA

Analysis Date/Time:	08/04/11	15:45
Batch No.	TX-240	
Initals:	MS/SN	

				% Recovery		
			mg/Kg Found	Spike		
Analyte		**Spike @**	**Spike**	**% Recov**	**Limits**	**Flag**
Total Halides	MS	606	616	102	75-125	
Total Halides	MSD	606	623	103	75-125	

LAB BLANK

Analysis Date/Time:	08/04/11	15:45
Batch No.	TX-240	
Initals:	MS/SN	

Analytes:	**Results**	**Units**
Total Halides	230 U	mg/Kg

SPIKE DATA

Analysis Date/Time:	08/09/11	16:30
Batch No.	TX-241	
Initals:	MS/SN	

				% Recovery		
			mg/Kg Found	Spike		
Analyte		**Spike @**	**Spike**	**% Recov**	**Limits**	**Flag**
Total Halides	MS	606	605	100	75-125	
Total Halides	MSD	606	636	105	75-125	

LAB BLANK

Analysis Date/Time:	08/09/11	16:30
Batch No.	TX-241	
Initals:	MS/SN	

Analytes:	**Results**	**Units**
Total Halides	230 U	mg/Kg

LCS = Laboratory Control Standard

MS = Matrix Spike

U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 1010

Analysis Date/Time:	07/19/11	10:00	
Batch:	FP - 092		
Initials:	XS		
Analytes:	**Standard**	**Results**	**Units**
Ignitiability (Flash Point)	169	167	Deg. F

DATA QUALIFIER CODES

SYMBOL MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

Chain of Custody Record 072111.011

Company: MOWCO ENV. SERV.
Address: 3701 CENTRAL AVE.
ST-PETERSBURG, FL Zip: 33713
Phone: 727-437-4054 Fax: 328-7782

Project Name: PROCESSED O.C PO# 62076
Project #:
Project Manager:
Project Location:
Evidence Sample(s): YES: NO:

Page 1 of 1
Ref: DEP Form #: 62-770.900(2)
Form Title: Chain of Custody Record
Effective Date: 8//2004
FDEP Facility No.:
Project Name:
Sampling CompQAP No.:
Approval Date:
REQUESTED DUE DATE
/ /

Sampled by [Print Name(s)] / Affiliation
RICHARD DICLEM

Sampler(s) Signature(s)

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	Preservatives (see codes): —	—	—	Analyses Requested: A	A	B	Remarks	Lab. No.
										As, Cd, Cr, Pb	PCBs, TX	Flashpoint		
	B#3845	7/21/11	10:00	GRAB	OIL	3				X	X	X	072111.22	
													23	
	B#086-AST	7/21/11	10:00	GRAB	OIL	3				X	X	X		

Shipment Method
<= Total Number of Containers

Out: / / Via:
Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	PhosLab, Inc./Containers					
		7/21/11	11:30		7/21/11	11:30
		7/21/11	14:01		7/21/11	15:07

Cooler No.(s) / Temperature(s) (°C) | Sampling Kit No. | Equipment ID No.
°C

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)
PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 072111-15:01

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	✓		< 4°C				

Thermometer ID: TH-eq1 SL

Note: If the temperature of a cooler is above 6° C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes ✓ No _____

4) Acid preserved: pH less than 2 Yes _____ No N/A pH Strip Lot: _____

Coolers Unpacked/Checked by: Owen Date: 072111

Client: Hoover Project: Processed Oil B-3845.086-AST

COC #: 072111-011

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

PES Phoslab Environmental Services, Inc.
806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713	
Attention:	Richard Dillen	
Phone Number:	727-328-7403	
Fax Number:	727-328-7782	
Project Name:	Processed Oil	
Project Number:	Batch 088	P.O. # 62112
Project Location:	Florida	
Sampled By:	R.D. / HES	
Date Sampled:	08/31/11 08:30	
Date Received:	08/31/11 10:20	
Date Reported:	09/09/11	
Lab. Report #:	083111-007	

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: David Pomella
David Pomella, Laboratory Director

Approved By: Megan Skeen
Megan Skeen, Quality Assurance officer

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	10
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**13**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 083111-007
Project Name: Processed Oil Batch 088

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 083111-007 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:	083111-13a	
Sample Description/Matrix:	Batch 088	Grab Oil
Sample Date:	08/31/11	08:30
Preparation Date/Method:	08/31/11	3050A
Analysis Date/Time:	09/02/11	15:11
Method:	EPA 6010B	
Batch No.	090211A-S820	
Initials:	SN	

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
Arsenic (As)	7440-38-2	**0.73**	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	0.04 U	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**6.23**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:	083111-13b	
Sample Description/Matrix:	Batch 088	Grab Oil
Sample Date:	08/31/11	08:30
Preparation Date:	08/31/11	
Analysis starting Date/Time:	08/31/11	20:52
Method:	EPA 8082	
Batch:	083111	
Dilution:	0.2g/10 ml	
Initials:	XH	

Analytes:	Cas No.	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits
TCMX	86	70-130
Decachlorobiphenyl	89	70-130

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
TOTAL HALIDES by 9253/5050

Sample ID:	083111-13b
Sample Description/Matrix:	Batch 088 Grab Oil
Sample Date:	08/31/11 08:30
Preparation Date/Method:	08/31/11 5050
Analysis Date/Time:	08/31/11
Method:	9253 / 5050 Bomb Prep
Batch No.	TX-244
Initials:	SN/MS

Analytes:	Results	Units	Dilution	MDL	PQL
TX	**332 I**	mg/Kg	1x	230	500

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
General Analytes (Wet Chemistry)

Sample Date/Time:	08/31/11	08:30
Preparation Date:	08/31/11	
Analysis Date/Time:	08/31/11	1:32
Method:	EPA 1010	
Analytes:	Flash Point	
Batch:	FP- 095	
Initials:	XS	

Sample ID	Sample Description	Results	Units	Start /End Temp.
083111-13c	Batch 088	**108**	°F	72° F - 108 F

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	08/31/11	18:10
Batch:	083111	
Initials:	XH	

		% Recovery		QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	80	83	92	70-130	10	
Aroclor-1260	76	75	85	70-130	13	

LAB BLANK

Analysis starting Date/Time:	08/31/11	17:16
Batch:	083111	
Initials:	XH	

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	109	70-130
Decachlorobiphenyl	128	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
Metals - EPA 6010B

SPIKE and LCS DATA

Analysis Date/Time: 09/02/11 15:11
Batch: 090211A-S820
Initials: SN
Parent Sample ID: 083111-S820
Recovery Limits: (80%-120%)

Parameter	LCS Recovery: %	Parent Result: mg/L	Spike @ mg/L	Spike mg/L	Spike dup mg/L	RPD	MS Recovery: %	MSD Recovery: %
Arsenic (As)	102	0.73	50.0	54.5	53.6	1.7	107	106
Cadmium (Cd)	106	0.07 U	50.0	53.0	52.3	1.3	106	105
Chromium (Cr)	98.0	0.04 U	50.0	49.5	48.9	1.3	99.1	97.8
Lead (Pb)	101	6.23	50.0	55.0	54.8	0.4	97.6	97.2

LAB BLANK

Analysis Date/Time: 09/02/11 15:11
Batch: 090211A-S820
Initials: SN

Analytes:	Results	Units
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

U = Compound analyzed but not detected to the level shown
RPD = Relative Percent Difference
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
TOTAL HALIDES by 9253/5050

SPIKE DATA

Analysis Date/Time:	08/30/11
Batch No.	TX-244
Initals:	MS/SN

			mg/Kg Found	% Recovery		
Analyte		**Spike @**	**Spike**	**Spike % Recov**	**Limits**	**Flag**
Total Halides	MS	606	567	94	75-125	
Total Halides	MSD	606	566	93	75-125	

LAB BLANK

Analysis Date/Time:	08/30/11
Batch No.	TX-244
Initals:	MS/SN

Analytes:	**Results**	**Units**
Total Halides	230 U	mg/Kg

LCS = Laboratory Control Standard

MS = Matrix Spike

U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 1010

Analysis Date/Time:	08/31/11	11:00
Batch:	FP - 095	
Initials:	XS	

Analytes:	**Standard**	**Results**	**Units**
Ignitiability (Flash Point)	169	168	Deg. F

DATA QUALIFIER CODES

SYMBOL	MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

Chain of Custody Record 083111.007

Company: HOWCO ENV. SERV.
Address: 3701 CENTRAL AVE.
ST. PETERSBURG, FL Zip: 33713
Phone: 727-437-4059 Fax: 323-7782

Project Name: PROCESSED OIL PO# 62112
Project #:
Project Manager:
Project Location: ASTOR
Evidence Sample(s): YES: NO:

Page 1 of 1
Ref: DEP Form #: 62-770.900(2)
Form Title: Chain of Custody Record
Effective Date: 8//2004
FDEP Facility No.:
Project Name:
Sampling CompQAP No.:
Approval Date:
REQUESTED DUE DATE 7 / 2 / 11

Sampled by [Print Name(s)] / Affiliation

Sampler(s) Signature(s)

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	Preservatives (see codes)			Analyses Requested: a As, Cd, Cr, Pb	b PCBs, TX	c Flashpoint	Remarks	Lab. No.
							-	-	/					
	B#088	8/31/11	08:30	GRAB	OIL	3				a X	b X	c X	083111.13	

Shipment Method
<= Total Number of Containers

Out: / / Via:
Returned: / / Via:
Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	PhosLab, Inc./Containers					
		8/31/11			8/31/11	10:20

Cooler No.(s) / Temperature(s) (°C)
°C

Sampling Kit No.

Equipment ID No.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 08.31.11 @ 10:20

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	✓		✓				

Thermometer ID: TNS1001

Note: If the temperature of a cooler is above 6^0 C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No ✓

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No ✓
Broken Containers Yes _____ No ✓

3) Chain of Custody included Yes ✓ No _____

4) Acid preserved: pH less than 2 Yes _____ No ✓ pH Strip Lot: _____

Coolers Unpacked/Checked by: Dayna Date: 08.31.11

Client: Haven Project: Processed Oil

COC #: 083111.007

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713
Attention:	Richard Dillen
Phone Number:	727-328-7403
Fax Number:	727-328-7782
Project Name:	Processed Oil
Project Number:	Batch 3861, Batch 091-Astor P.O. # 62121
Project Location:	Florida
Sampled By:	R.D. / HES
Date Sampled:	09/22/11
Date Received:	09/22/11 12:30
Date Reported:	**09/30/11 Final Report**
Lab. Report #:	092211-010

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: David Pomella
David Pomella, Laboratory Director

Approved By: Megan Skeen
Megan Skeen, Quality Assurance officer

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	10
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**13**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 092211-010
Project Name: Processed Oil Batch 3861, Batch 091-Astor

I. Sample Receiving Notes
Samples listed on the Chain of Custody # 092211-010 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:	092211-22a
Sample Description/Matrix:	Batch 3861 / Grab Oil
Sample Date:	09/22/11 09:00
Preparation Date/Method:	09/23/11 3050A
Analysis Date/Time:	09/23/11 15:04
Method:	EPA 6010B
Batch No.	092311A-S827
Initials:	SN

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.24 I**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**3.04**	mg/Kg	1x	0.16	0.25

Sample ID:	092211-23a
Sample Description/Matrix:	Batch 091-Astor / Grab Oil
Sample Date:	09/22/11 10:00
Preparation Date/Method:	09/23/11 3050A
Analysis Date/Time:	09/23/11 15:04
Method:	EPA 6010B
Batch No.	092311A-S827
Initials:	SN

Analytes:	Cas No.	Results	Units	Dilution	MDL	PQL
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	**0.04 U**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**6.63**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:	092211-22b
Sample Description/Matrix:	Batch 3861 / Grab Oil
Sample Date:	09/22/11 09:00
Preparation Date:	09/22/11
Analysis starting Date/Time:	09/24/11 5:55
Method:	EPA 8082
Batch:	092411
Dilution:	0.2g/10 ml
Initials:	XH

Analytes:	Cas No.	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits
TCMX	78	70-130
Decachlorobiphenyl	79	70-130

Sample ID:	092211-23b
Sample Description/Matrix:	Batch 091-Astor / Grab Oil
Sample Date:	09/22/11 10:00
Preparation Date:	09/22/11
Analysis starting Date/Time:	09/24/11 6:50
Method:	EPA 8082
Batch:	092411
Dilution:	0.2g/10 ml
Initials:	XH

Analytes:	Cas No.	Results	Units	MDL	PQL
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.00	5.00

Surrogate:	% Recovery	Limits
TCMX	87	70-130
Decachlorobiphenyl	76	70-130

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
TOTAL HALIDES by 9253/5050

Sample ID:	092211-22b
Sample Description/Matrix:	Batch 3861 / Grab Oil
Sample Date:	09/22/11 09:00
Preparation Date/Method:	09/26/11 5050
Analysis Date/Time:	09/29/11 16:30
Method:	9253 / 5050 Bomb Prep
Batch No.	TX-245
Initials:	DP

Analytes:	Results	Units	Dilution	MDL	PQL
TX	**356 I**	mg/Kg	1x	230	500

Sample ID:	092211-23b
Sample Description/Matrix:	Batch 091-Astor / Grab Oil
Sample Date:	09/22/11 10:00
Preparation Date/Method:	09/26/11 5050
Analysis Date/Time:	09/29/11 16:30
Method:	9253 / 5050 Bomb Prep
Batch No.	TX-245
Initials:	DP

Analytes:	Results	Units	Dilution	MDL	PQL
TX	**230 U**	mg/Kg	1x	230	500

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CERTIFICATE OF ANALYSIS
General Analytes (Wet Chemistry)

Sample Date/Time:	09/22/11	09:00	
Preparation Date:	09/22/11		
Analysis Date/Time:	09/22/11	2:30	
Method:	EPA 1010		
Analytes:	Flash Point		
Batch:	FP - 104		
Initials:	XS		

Sample ID	Sample Description	Results	Units	Start /End Temp.
092211-22c	Batch 3861	**>180**	°F	80° F - >180 F

Sample Date/Time:	09/22/11	10:00	
Preparation Date:	09/22/11		
Analysis Date/Time:	09/22/11	2:00	
Method:	EPA 1010		
Analytes:	Flash Point		
Batch:	FP-104		
Initials:	XS		

Sample ID	Sample Description	Results	Units	Start /End Temp.
092211-23c	Batch 091-Astor	**100**	°F	75° F - 100 F

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	09/24/11 3:13
Batch:	092411
Initials:	XH

		% Recovery		QA/QC	RPD	
Parameter	**LCS**	**MS**	**MSD**	**LIMITS**	**0-20**	**Flags**
Aroclor-1016	99	101	102	70-130	1	
Aroclor-1260	95	94	95	70-130	1	

LAB BLANK

Analysis starting Date/Time:	09/24/11 2:19
Batch:	092411
Initials:	XH

Analytes:	**Results**	**Units**
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	**% Recovery**	**Limits**
TCMX	103	70-130
Decachlorobiphenyl	113	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
Metals - EPA 6010B

SPIKE and LCS DATA

Analysis Date/Time: 09/23/11 15:04
Batch: 092311A-S827
Initials: SN
Parent Sample ID: 092111-02
Recovery Limits: (80%-120%)

Parameter	LCS Recovery %	Parent Result mg/Kg	Spike @ mg/Kg	Spike mg/Kg	Spike dup mg/L	RPD	MS Recovery %	MSD Recovery %
Arsenic (As)	98.3	0.19 U	50.0	48.1	48.7	1.2	96.2	97.3
Cadmium (Cd)	98.0	0.07 U	50.0	46.9	47.2	0.6	93.9	94.5
Chromium (Cr)	86.0	0.04 U	50.0	43.8	44.2	0.8	87.7	88.4
Lead (Pb)	100	0.82	50.0	51.2	51.6	0.8	101	102

LAB BLANK

Analysis Date/Time: 09/23/11 15:04
Batch: 092311A-S827
Initials: SN

Analytes:	Results	Units
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

U = Compound analyzed but not detected to the level shown
RPD = Relative Percent Difference
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
TOTAL HALIDES by 9253/5050

SPIKE DATA

Analysis Date/Time:		09/29/11	16:30
Batch No.		TX-245	
Initals:		DP	

				% Recovery		
			mg/Kg Found	Spike		
Analyte		**Spike @**	**Spike**	**% Recov**	**Limits**	**Flag**
Total Halides	MS	606	669	110	75-125	
Total Halides	MSD	606	701	116	75-125	

LAB BLANK

Analysis Date/Time:		09/29/11	16:30
Batch No.		TX-245	
Initals:		DP	

Analytes:	**Results**	**Units**
Total Halides	230 U	mg/Kg

LCS = Laboratory Control Standard

MS = Matrix Spike

U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
EPA 1010

Analysis Date/Time:	09/22/11	1:00
Batch:	FP - 104	
Initials:	XS	

Analytes:	**Standard**	**Results**	**Units**
Ignitiability (Flash Point)	169	166	Deg. F

DATA QUALIFIER CODES

SYMBOL MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

092211.010

Chain of Custody Record

Company: HOWCO ENV. SERV.
Address: 3701 CENTRAL AVE.
ST. PETERSBURG FL Zip: 33713
Phone: 727-437-4059 Fax: 328-7782

Project Name: PROCESSED OIL PO# 62121
Project #:
Project Manager:
Project Location:
Evidence Sample(s): YES: NO:

Page 1 of 1
Ref: DEP Form #: 62-770.900(2)
Form Title: Chain of Custody Record
Effective Date: 8//2004
FDEP Facility No.:
Project Name:
Sampling CompQAP No.:
Approval Date:
REQUESTED DUE DATE 9/27/11

Sampled by [Print Name(s)] / Affiliation: RICHARD DILLEN

Sampler(s) Signature(s):

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	Preservatives (see codes)	Analyses Requested: As, Cd, Cu, Pb	Analyses Requested: PCB's TX	Analyses Requested: Flashpoint	Remarks	Lab. No.
	B#3861	9/22/11	09:00	GRAB	OIL	3		X	X	X	092211	22
	B#091-ASH	9/22/11	10:00	GRAB	OIL	3		X	X	X	✓	23

Shipment Method
<= Total Number of Containers

Out: / / Via:
Returned: / / Via:

Additional Comments:

Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
	/PhosLab, Inc./Containers	9/22/11	10:30		9/22/11	10:30
		9.22.11	12:30		9-22-11	1230

Cooler No.(s) / Temperature(s) (°C): Cool Cond 4 C
Sampling Kit No.:
Equipment ID No.:

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 092211 12:30

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
	/		< 4°C				

Thermometer ID: TM-0015C

Note: If the temperature of a cooler is above 6^0 C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes / No _____

4) Acid preserved: pH less than 2 Yes _____ No N/A pH Strip Lot: _____

Coolers Unpacked/Checked by: Dayne Date: 092211

Client: Howco Project: Processed Oil

COC #: 092211-010

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
3310 Win Street
Cuyahoga Falls, Ohio 44223
800-278-0140

Analysis Request / COC

For Summit Environmental

Order ID: 1123224

Client Name	Project Identification
HOWCO Environmental Services	Processed Oil
Client Address	**Project Address**
3701 Central Avenue, St. Petersburg, FL 33713	843 43rd Street South, St. Petersburg, FL 33711
Client Phone	**Report To**
(727)-437-4059	RDILLEN@HOWCOUSA.COM
Client Fax No. √ to Receive Results by Fax ☐	**PO Number** 62141
Contact Person Richard Dillen	**Quote Number**
Sampled By Richard Dillen	☐ √ if Ohio VAP Samples

#	Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: S=Solid, L=Liquid, O=Oil SL=Sludge, A=Air	Preservative	Number of Containers	Analytical Parameters and Methods: As, Cd, Cr, Pb, TX	Analytical Parameters and Methods: Flashpoint, PCB's
	Batch# 3873	11/02/11	12:00	G		O	none	1	X	X
	Batch# 095/Astor	10/31/11	15:00	G		O	none	1	X	X

1123224-01-02

Relinquished by:	Date	Time	Received by:	Date	Time
	11/07/11	13:15			
Received in Lab by:	**Date**	**Time**	**Rush Requested:** _____ Day(s)		
	11/09/11	0940	Must be approved by Lab Manager		

Notes / Comments:
Please results on 11/10/11.

Summit Environmental Technologies, Inc.
Cooler Receipt Form

Order ID: 1123224 **COOLER**

Client: Howco Env. Ser Order ID: _____

Log in Initials: _____

Date Received: 11.9.11 Time Received: 0940 Date opened: 11/9/11

Number of Coolers/Boxes: 1 N/A Unpacked by: AC

Shipper: FED EX (UPS) DHL Airborne US Postal Walk-in Pickup Other: _____

Packaging: Peanuts Bubble Wrap (Paper) Foam None Other: _____

Tape on cooler/box:	(Y)	N	N/A
Custody Seals intact	Y	(N)	N/A
C-O-C in plastic	(Y)	N	N/A
Coolant: Ice___ Blue ice___ Water___ (None)___ Sample Temperature 16.6 °C			
C-O-C filled out properly	(Y)	N	N/A
Samples in separate bags	(Y)	N	N/A
Sample containers intact	(Y)	N	N/A

*If no, list broken sample(s): _____

Sample label(s) complete (ID, date, etc.)	(Y)	N	N/A
Label(s) agree with C-O-C	(Y)	N	N/A
Correct containers used	(Y)	N	N/A
Sufficient sample received	(Y)	N	N/A
Samples at correct pH? (list below)	Y	N	(NA)
Bubbles absent from 40 mL vials**	Y	N	(N/A)

** Samples with bubbles less than the size of a pea are acceptable.

Client contact: _____ Date/Time: _____

Comments: _____

Sample ID	pH	Sample ID	pH

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

November 10, 2011

Client: HOWCO Env. Services
Address: 3701 Central Ave.
St. Petersburg, FL 33713

Date Collected: 11/02/2011
Date Received: 11/09/2011
Project #: Processed Oil
Client ID #: #3873
Laboratory ID #: 1123224-01
Matrix: Liquid

Parameter	Method	Results	Date of Analysis
Arsenic	6010	<1.0ppm	11/10/2011
Cadmium	6010	<0.1ppm	11/10/2011
Chromium	6010	<4.0ppm	11/10/2011
Flash Point	1010	163°F	11/09/2011
Lead	6010	22ppm	11/10/2011
PCB	8082	<1.0ppm	11/09/2011
TX	9076	<200ppm	11/09/2011

QA Manager RJ Libas

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

November 10, 2011

Client: HOWCO Env. Services
Address: 3701 Central Ave.
St. Petersburg, FL 33713

Date Collected: 10/31/2011
Date Received: 11/09/2011
Project #: Processed Oil
Client ID #: #095/Astor
Laboratory ID #: 1123224-02
Matrix: Liquid

Parameter	Method	Results	Date of Analysis
Arsenic	6010	<1.0ppm	11/10/2011
Cadmium	6010	<0.1ppm	11/10/2011
Chromium	6010	<4.0ppm	11/10/2011
Flash Point	1010	147°F	11/09/2011
Lead	6010	27ppm	11/10/2011
PCB	8082	<1.0ppm	11/09/2011
TX	9076	<200ppm	11/09/2011

QA Manager _____

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
3310 Win Street
Cuyahoga Falls, Ohio 44223
800-278-0140

Analysis Request /

For Summit Environmental

 Order ID: 1124316 COC

Client Name	Project Identification
HOWCO Environmental Services	Processed Oil
Client Address	Project Address
3701 Central Avenue, St. Petersburg, FL 33713	843 43rd Street South, St. Petersburg, FL 33711
Client Phone	Report To
(727)-437-4059	RDILLEN@HOWCOUSA.COM
Client Fax No. √ to Receive Results by Fax ☐	PO Number 62149
Contact Person Richard Dillen	Quote Number
Sampled By Richard Dillen	☐ √ if Ohio VAP Samples

#	Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: S=Solid, L=Liquid, O=Oil SL=Sludge, A=Air	Preservative	Number of Containers	Analytical Parameters and Methods: As, Cd, Cr, Pb, TX	Flashpoint, PCB's
	Batch# 3877	11/22/11	13:30	G		O	none	1	X	X
	Batch# 097-Astor	11/22/11	13:30	G		O	none	1	X	X

1124316-01-02

Relinquished by:	Date	Time	Received by:	Date	Time
	11/22/11	14:00			
Received in Lab by:	**Date**	**Time**	**Rush Requested:** _____ Day(s)		
Jackie Rasile	11/23-V	1000	Must be approved by Lab Manager		

Notes / Comments:
Please results on 11/29/11.

Summit Environmental Technologies, Inc.
Cooler Receipt Form

Order ID: 1124316 **COOLER**

Client: HWCo

Order ID: _____

Log in Initials: _____

Date Received: 11-23-11 Time Received: 1000 Date opened: _____

Number of Coolers/Boxes: 1 N/A Unpacked by: _____

Shipper: FED EX (UPS) DHL Airborne US Postal Walk-in Pickup Other: _____

Packaging: Peanuts Bubble Wrap Paper Foam None Other: absorbent cloth

Tape on cooler/box:	(Y)	N	N/A
Custody Seals intact	(Y)	N	N/A
C-O-C in plastic	(Y)	N	N/A
Coolant: Ice___ Blue ice___Water___None X		Sample Temperature 7.2 °C	
C-O-C filled out properly	(Y)	N	N/A
Samples in separate bags	(Y)	N	N/A
Sample containers intact	(Y)	N	N/A

*If no, list broken sample(s): _____

Sample label(s) complete (ID, date, etc.)	(Y)	N	N/A
Label(s) agree with C-O-C	(Y)	N	N/A
Correct containers used	(Y)	N	N/A
Sufficient sample received	(Y)	N	N/A
Samples at correct pH? (list below)	Y	N	(NA)
Bubbles absent from 40 mL vials**	Y	N	(N/A)

** Samples with bubbles less than the size of a pea are acceptable.

Client contact: _____ Date/Time: _____

Comments: _____

Sample ID	pH	Sample ID	pH

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

Client: HOWCO Env. Services
Address: 3701 Central Ave.
St. Petersburg, FL 33713

Date Collected: 11/22/2011
Date Received: 11/23/2011
Project #: Processed Oil
Client ID #: Batch# 3877
Laboratory ID #: 1124316-01
Matrix: Liquid

Parameter	Method	Results	Date of Analysis
Arsenic	6010	<1.0ppm	11/23/2011
Cadmium	6010	<0.1ppm	11/23/2011
Chromium	6010	<4.0ppm	11/23/2011
Flash Point	1010	>200°F	11/23/2011
Lead	6010	14ppm	11/23/2011
PCB	8082	<1.0ppm	11/23/2011
TX	9076	<200ppm	11/23/2011

QA Manager: RS Gibas

SUMMIT
ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

LABORATORY REPORT

Client: HOWCO Env. Services
Address: 3701 Central Ave.
St. Petersburg, FL 33713

Date Collected: 11/22/2011
Date Received: 11/23/2011
Project #: Processed Oil
Client ID #: Batch# 097-Astor
Laboratory ID #: 1124316-02
Matrix: Liquid

Parameter	Method	Results	Date of Analysis
Arsenic	6010	<1.0ppm	11/23/2011
Cadmium	6010	0.26ppm	11/23/2011
Chromium	6010	<4.0ppm	11/23/2011
Flash Point	1010	147°F	11/23/2011
Lead	6010	49ppm	11/23/2011
PCB	8082	<1.0ppm	11/23/2011
TX	9076	<200ppm	11/23/2011

QA Manager: RJ Silva

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

CERTIFICATE OF ANALYSIS

Client:	**HOWCO Environmental Services** 3701 Central Ave. St. Petersburg, FL 33713	
Attention:	Richard Dillen	
Phone Number:	727-328-7403	
Fax Number:	727-328-7782	
Project Name:	Processed Oil	
Project Number:	Batch 3886, 3888, 098 Astor, 100 Astor	P.O. # 62178
Project Location:	Florida	
Sampled By:	R.D. / HES	
Date Sampled:	01/17/12 08:00	
Date Received:	01/17/12 08:50	
Date Reported:	01/20/12	
Lab. Report #:	011712-004	

Project Description

The analytical results for the samples identified in this report were submitted for analysis as outlined by the attached Chain of Custody. The results for the quality control samples were reviewed and found to meet the acceptance criteria for precision and accuracy or properly flagged. Unless noted in this report or a case narrative, all data in this analytical report is in compliance with NELAC standards.

Notes: Sample results reported at the Method Detection Limit.(MDL)

Approved By: David Pomella
David Pomella, Laboratory Director

Approved By: Megan Skeen
Megan Skeen, Quality Assurance officer

If you have any questions, the above name should be contacted at 863-682-5897 8:00 A.M. - 5:00 PM M-F

PES Report:	10
Data Qualifier:	1
COC:	1
Sample Log-In:	1
Total Pages:	**13**

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

CASE NARRATIVE

Lab. Report #: 011712-004
Project Name: Processed Oil Batch 3886, 3888, 098 Astor, 100 Astor

I. Sample Receiving Notes
Samples listed on Chain of Custody # 011712-004 were received with containers intact, and at the proper temperature for the requested analyses.

II. Analytical Data Notes
The analyses were performed in accordance with Phoslab Environmental Services SOP's and industry-standard methodologies in compliance with FDEP/NELAC criteria. There were no notable problems encountered in the analytical process.

III, Quality Control Notes
There were not significant quality control anomalies associated with this work order.

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

CERTIFICATE OF ANALYSIS
EPA 6010B Metals

Sample ID:		011712-14b			011712-15b				
Sample Description/Matrix:		Batch 3886 / Grab Oil			Batch 3888 / Grab Oil				
Sample Date:		01/17/12 08:00			01/17/12 08:00				
Preparation Date/Method:		01/18/12 3050A			01/18/12 3050A				
Analysis Date/Time:		01/19/12 13:49			01/19/12 13:49				
Method:		EPA 6010B			EPA 6010B				
Batch No.		011912A-S858			011912A-S858				
Initials:		SN			SN				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	0.04 U	mg/Kg	1x	0.04 U	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**3.41**	mg/Kg	1x	**6.11**	mg/Kg	1x	0.16	0.25

Sample ID:		011712-16b			011712-17b				
Sample Description/Matrix:		Batch 098 Astor / Grab Oil			Batch 100 Astor / Grab Oil				
Sample Date:		01/17/12 08:00			01/17/12 08:00				
Preparation Date/Method:		01/18/12 3050A			01/18/12 3050A				
Analysis Date/Time:		01/19/12 13:49			01/19/12 13:49				
Method:		EPA 6010B			EPA 6010B				
Batch No.		011912A-S858			011912A-S858				
Initials:		SN			SN				
Analytes:	**Cas No.**	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
Arsenic (As)	7440-38-2	0.19 U	mg/Kg	1x	0.19 U	mg/Kg	1x	0.19	0.25
Cadmium (Cd)	7440-43-9	0.07 U	mg/Kg	1x	0.07 U	mg/Kg	1x	0.07	0.25
Chromium (Cr)	7440-47-3	0.04 U	mg/Kg	1x	**0.93**	mg/Kg	1x	0.04	0.25
Lead (Pb)	7439-92-1	**18.0**	mg/Kg	1x	**7.25**	mg/Kg	1x	0.16	0.25

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

CERTIFICATE OF ANALYSIS
EPA 8082

Sample ID:		011712-14a		011712-15a			
Sample Description/Matrix:		Batch 3886 / Grab Oil		Batch 3888 / Grab Oil			
Sample Date:		01/17/12	08:00	01/17/12	08:00		
Preparation Date:		01/18/12		01/18/12			
Analysis starting Date/Time:		01/18/12	13:07	01/18/12	14:01		
Method:		EPA 8082		EPA 8082			
Batch:		011712		011712			
Dilution:		0.2g/10 ml		0.2g/10 ml			
Initials:		XH		XH			
Analytes:	**Cas No.**	**Results**	**Units**	**Results**	**Units**	**MDL**	**PQL**
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Surrogate:		**% Recovery**	**Limits**	**% Recovery**	**Limits**		
TCMX		80	70-130	82	70-130		
Decachlorobiphenyl		75	70-130	76	70-130		

Sample ID:		011712-16a		011712-17a			
Sample Description/Matrix:		Batch 098 Astor / Grab Oil		Batch 100 Astor / Grab Oil			
Sample Date:		01/17/12	08:00	01/17/12	08:00		
Preparation Date:		01/18/12		01/18/12			
Analysis starting Date/Time:		01/18/12	14:55	01/18/12	15:49		
Method:		EPA 8082		EPA 8082			
Batch:		011712		011712			
Dilution:		0.2g/10 ml		0.2g/10 ml			
Initials:		XH		XH			
Analytes:	**Cas No.**	**Results**	**Units**	**Results**	**Units**	**MDL**	**PQL**
Aroclor-1016	12674-11-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1221	11104-28-2	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1232	11141-16-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1242	53469-21-9	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1248	12672-29-6	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1254	11097-69-1	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Aroclor-1260	11096-82-5	2.0 U	mg/kg	2.0 U	mg/kg	2.00	5.00
Surrogate:		**% Recovery**	**Limits**	**% Recovery**	**Limits**		
TCMX		89	70-130	95	70-130		
Decachlorobiphenyl		78	70-130	78	70-130		

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

CERTIFICATE OF ANALYSIS
TOTAL HALIDES by 9253/5050

Sample ID:	011712-14b			011712-15b				
Sample Description/Matrix:	Batch 3886 / Grab Oil			Batch 3888 / Grab Oil				
Sample Date:	01/17/12 08:00			01/17/12 08:00				
Preparation Date/Method:	01/18/12 5050			01/18/12 5050				
Analysis Date/Time:	01/18/12 11:30			01/18/12 11:30				
Method:	9253 / 5050 Bomb Prep			9253 / 5050 Bomb Prep				
Batch No.	TX-251			TX-251				
Initials:	MS			MS				
Analytes:	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
TX	230 U	mg/Kg	1x	**331 I**	mg/Kg	1x	230	500

Sample ID:	011712-16b			011712-17b				
Sample Description/Matrix:	Batch 098 Astor / Grab Oil			Batch 100 Astor / Grab Oil				
Sample Date:	01/17/12 08:00			01/17/12 08:00				
Preparation Date/Method:	01/18/12 5050			01/18/12 5050				
Analysis Date/Time:	01/18/12 11:30			01/18/12 11:30				
Method:	9253 / 5050 Bomb Prep			9253 / 5050 Bomb Prep				
Batch No.	TX-251			TX-251				
Initials:	MS			MS				
Analytes:	**Results**	**Units**	**Dilution**	**Results**	**Units**	**Dilution**	**MDL**	**PQL**
TX	230 U	mg/Kg	1x	**333 I**	mg/Kg	1x	230	500

PES Phoslab Environmental Services, Inc.
806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

CERTIFICATE OF ANALYSIS
General Analytes (Wet Chemistry)

Sample Date/Time:	01/17/12 08:00
Preparation Date:	01/18/12
Analysis Date/Time:	01/18/12
Method:	EPA 1010
Analytes:	Flash Point
Batch:	FP - 119
Initials:	XS

Sample ID	Description	Results	Units	Start /End Temp.
011712-14b	Batch 3886	**>200**	°F	76° F - >200 F
011712-15b	Batch 3888	**>200**	°F	85° F - >200 F
011712-16b	Batch 098 Astor	**120**	°F	70° F - 120 F
011712-17b	Batch 100 Astor	**122**	°F	75° F - 122 F

PES Phoslab Environmental Services, Inc.
806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

QUALITY CONTROL DATA
EPA 8082

SPIKE DATA

Analysis starting Date/Time:	01/17/12 20:59
Batch:	011712
Initials:	XH

Parameter	% Recovery LCS	% Recovery MS	% Recovery MSD	QA/QC LIMITS	RPD 0-20	Flags
Aroclor-1016	114	111	111	70-130	0	
Aroclor-1260	96	92	93	70-130	1	

LAB BLANK

Analysis starting Date/Time:	01/17/12 20:05
Batch:	011712
Initials:	XH

Analytes:	Results	Units
Aroclor-1016	2.0 U	mg/Kg
Aroclor-1221	2.0 U	mg/Kg
Aroclor-1232	2.0 U	mg/Kg
Aroclor-1242	2.0 U	mg/Kg
Aroclor-1248	2.0 U	mg/Kg
Aroclor-1254	2.0 U	mg/Kg
Aroclor-1260	2.0 U	mg/Kg

Surrogate:	% Recovery	Limits
TCMX	93	70-130
Decachlorobiphenyl	99	70-130

MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

QUALITY CONTROL DATA
Metals - EPA 6010B

SPIKE and LCS DATA

Analysis Date/Time: 01/19/12 13:49
Batch: 011912A-S858
Initials: SN
Parent Sample ID: 011712-09
Recovery Limits: (80%-120%)

Parameter	LCS Recovery %	Parent Result mg/Kg	Spike @ mg/Kg	Spike mg/Kg	Spike dup mg/L	RPD	MS Recovery %	MSD Recovery %
Arsenic (As)	96.1	0.19 U	50.0	50.0	48.7	2.6	100	97.4
Cadmium (Cd)	103	0.07 U	50.0	51.6	50.6	1.9	103	101
Chromium (Cr)	101	0.04 U	50.0	51.6	49.7	3.6	103	99.5
Lead (Pb)	104	2.47	50.0	54.8	53.2	3.0	105	102

LAB BLANK

Analysis Date/Time: 01/19/12 13:49
Batch: 011912A-S858
Initials: SN

Analytes:	Results	Units
Arsenic (As)	0.19 U	mg/Kg
Cadmium Cd)	0.07 U	mg/Kg
Chromium (Cr)	0.04 U	mg/Kg
Lead (Pb)	0.16 U	mg/Kg

U = Compound analyzed but not detected to the level shown
RPD = Relative Percent Difference
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

QUALITY CONTROL DATA
TOTAL HALIDES by 9253/5050

SPIKE DATA

Analysis Date/Time:		01/18/12	11:30			
Batch No.		TX-251				
Initals:		MS				
				% Recovery		
			mg/Kg Found	Spike		
Analyte		**Spike @**	**Spike**	**% Recov**	**Limits**	**Flag**
Total Halides	MS	606	658	109	75-125	
Total Halides	MSD	606	629	104	75-125	

LAB BLANK

Analysis Date/Time:	01/18/12	11:30	
Batch No.	TX-251		
Initals:	MS		
Analytes:	**Results**	**Units**	
Total Halides	230 U	mg/Kg	

LCS = Laboratory Control Standard

MS = Matrix Spike

U = Compound analyzed but not detected to the level shown

PES Phoslab Environmental Services, Inc.

806 West Beacon Road • Lakeland, Fl 33803 • (863) 682-5897 • Fax: (863) 683-3279
TOLL FREE 1-888-682-5897
FDOH ID: E84925

nelac

QUALITY CONTROL DATA
EPA 1010

Analysis Date/Time:	01/18/11	10:00	
Batch:	FP - 119		
Initials:	XS		

Analytes:	**Standard**	**Results**	**Units**
Ignitiability (Flash Point)	81	81	Deg. F

DATA QUALIFIER CODES

SYMBOL MEANING

A Value reported is the arithmetic mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.

H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:

- No known quality control criteria exist for the component;
- The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
- The sample matrix interfered with the ability to make any accurate determination;
- The data are questionable because of improper laboratory or field protocols (e.g., composite sample was collected instead of a grab sample).
- The field calibration verification did not meet calibration acceptance criteria.

K Off-scale low. Actual value is known to be less than the value given. This code shall be used if:

1. The value is less than the lowest calibration standard and the calibration curve is known to be non-linear; or
2. The value is known to be less than the reported value based on sample size, dilution.

This code shall not be used to report values that are less than the laboratory practical quantitation limit or laboratory method detection limit.

L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.

M When reporting chemical analyses: presence of material is verified but not quantified; the actual value is less than the value given. The reported value shall be the laboratory practical quantitation limit. This code shall be used if the level is too low to permit accurate quantification, but the estimated concentration is greater than the method detection limit. If the value is less than the method detection limit use "T" below.

N Presumptive evidence of presence of material. This qualifier shall be used if:

1. The component has been tentatively identified based on mass spectral library search; or
2. There is an indication that the analyte is present, but quality control requirements for confirmation were not met (i.e., presence of analyte was not confirmed by alternative procedures).

O Sampled, but analysis lost or not performed.

Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.

T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.

U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component **was not** detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).

V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.

Y The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

? Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.

* Not currently accredited for this analyte.

! Not within scope of method.

Phoslab
Environmental Services

806 West Beacon Road
Lakeland, Florida 33803-2847
Phone: 863-682-5897
Fax: 863-683-3279
FDEP CompQAP No: 870308G
FDOH ID#: E84925

011712.004

Chain of Custody Record

Company: HOWCO ENV. SERV.
Address: 3701 CENTRAL AVE.
ST. PETERSBURG, FL Zip: 33713
Phone: 727-437-4059 Fax: 328-7782

Project Name: PROCESSED OIL PO# 62178
Project #:
Project Manager:
Project Location:
Evidence Sample(s): YES: NO:

Ref: DEP Form #: 62-770.900(2)
Form Title: Chain of Custody Record
Effective Date: 8//2004
FDEP Facility No.:
Project Name:
Sampling CompQAP No.:
Approval Date:
REQUESTED DUE DATE 1/20/12

Sampled by [Print Name(s)] / Affiliation: RICHARD DICLEY
Sampler(s) Signature(s): [signature]

Preservatives (see codes): / /

Analyses Requested: As Cd Cr Pb; Flash Pt TX; PCB's

Item No.	Field ID No.	Sampled Date	Sampled Time	Grab or Composite	Matrix (see codes)	Number of Containers	As Cd Cr Pb	Flash Pt TX	PCB's						Remarks	Lab. No.
	B#3886	1/17/12	08:00	GRAB	OIL	2	X	X	X						011712	14
	B#3888	1/17/12	08:00	GRAB	OIL	2	X	X	X							15
	B#098 ASTOR	1/17/12	08:00	GRAB	OIL	2	X	X	X							16
	B#100 ASTOR	1/17/12	08:00	GRAB	OIL	2	X	X	X							17

<= Total Number of Containers

Shipment Method		Item No.	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
Out: / /	Via:		[signature] /PhosLab, Inc./Containers	1/17/12	850	[signature]	1/17/12	8:50
Returned: / /	Via:							

Additional Comments:

Cooler No.(s) / Temperature(s) (°C): Good Cond amb °C
Sampling Kit No.:
Equipment ID No.:

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: H = Hydrochloric acid + ice I = Ice only N = Nitric acid + ice S = Sulfuric acid + ice O = Other (specify)

PES Phoslab Environmental Services, Inc.

Sample Log-in Checklist

Shipping Method: PES Date/Time of Receipt: 01.17.12 @ 8:50

Cooler Check

	Ice in cooler			Custody Seal			
Cooler #	Yes	No	If No Temp.	Yes	No	Intact	Not Intact
			amb				

Thermometer ID: amb

Note: If the temperature of a cooler is above 6^0 C or a custody seal is damaged then identify the bottles in the affected cooler and note on "**Improper Sample List**"

1) Custody Seal on Bottles present Yes _____ No X

2) Condition of Sample containers
Headspace (Volatiles) N/A
Bubble > 5mm N/A
Loose caps Yes _____ No X
Broken Containers Yes _____ No X

3) Chain of Custody included Yes X No _____

4) Acid preserved: pH less than 2 Yes _____ No X pH Strip Lot: _____

Coolers Unpacked/Checked by: Dayna Date: 01.17.12

Client: Howco Project: Processed Oil

COC #: 011712.004

Improper Sample List

Bottle #	Out of Hold	Improper Containers	Seal Intact	Loose Cap	Damaged Bottle	Damaged Cap	pH>2	Sample Volume	Action

HOWCO Environmental Services

Analytical data -Astor Facility

Batch#	Date	Flashpoint, in F HOWCO-Lab	Flashpoint, in F P.E.S.	Total Halogens, in ppm HOWCO-Lab (EPA-9075)
071	01/18/11	100	n/a	127
074	02/24/11	105	n/a	300
076	03/09/11	125	n/a	574
077	04/04/11	> 140	n/a	400
083	06/29/11	145	160	550
086	07/20/11	100	> 185	579
088	08/13/11	100	108	302
091	09/15/11	105	100	688
095	10/27/11	118	147	923
097	11/17/11	115	147	728
098	12/08/11	110	120	269

Total Halogens, in ppm

P.E.S. (EPA-9253)
n/a
n/a
n/a
n/a
< 230
400
332
< 230
< 200
< 200
< 230