OMEGA PROTEIN®
Healthy Products for a Healthy World®

RECEIVED PRO
NOV 30 2015

November 23, 2015

Ms. Laura Galli
Virginia Dept of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

Re: Revised VPDES Application

Dear Laura,

Attached is the revised VPDES application for your review. I will provide my comments under yours.

EPA Form 1:

As indicated in the Common Application Errors document submitted with the Reissuance Reminder letter, please provide a topographic map (and not an aerial image), that includes the following items: scale, North Arrow, USGS Quadrangle name, legal facility boundaries, discharge points identification with latitude and longitude.

Attached is the requested topographical map.

EPA Form 2C Part I:

You have indicated that Outfall 002 discharges to Cockrell Creek; however, based on our records, Outfall 002 discharges to an unnamed tributary to Cockrell Creek. Therefore, the form should be revised accordingly.

The discharge point was modified as requested however if you look at the attached map I think you will agree the discharge point is Cockrell Creek.

EPA Form 2C Part II:

Please verify the list of treatment codes provided in the form, as it appears that several of them are no longer applicable (for example, 3-B Aerated Lagoons; 2-H Disinfection, etc.).

Corrected

EPA Form 2C Part VIII:

It appears that three different laboratories were contracted for the analyses provided with the application, but only one laboratory is listed. Please include all laboratories used for the analyses.

We contract with one laboratory and Universal Labs contracts out analyses that they do not perform. The subcontracted laboratories are now on the form.

EPA Form 2C Part V.A:
Outfall 002

The unit for mass is reported as Kg/L. However, the maximum daily, maximum 30 day, and long term average values should be expressed in Kg/day as the Permit requires to report quantities expressed as Kg/day.

This typographical error was corrected.

You have indicated a maximum daily quantity of 40 Kg/L for Total Suspended Solids (TSS). Based on our records, it appears that the maximum daily quantity for TSS should be 32 Kg/day.

There was a transcription error in our spreadsheet that we compiled for the application. The application was changed to 32 Kg/D.

Based on our records, it appears that the maximum daily value and maximum 30 day value for ammonia should be 35 mg/L and 27.1 mg/L, respectively (data from October 2014 DMR).

We double checked our entry and it is correct. The maximum daily value for October 2014 is 11.5 mg/L and 30 day maximum value was 8.4 mg/L. The values entered in the application are from June 2015.

Outfall 995

Based on our records, the maximum 30 day value for temperature should be 37°C (data from August 2015 DMR).

Changed to 37° C

EPA Form 2C Part V.B:
Outfall 002

Please explain how of the nitrate + nitrite concentration and number of analysis were determined, as this compound is not required to be sampled by the permit.

Total N and nitrate/nitrite is a required parameter for our nutrient general permit. Total N is a calculated value and is the sum of TKN plus nitrite/nitrate. The reported values are from these analyses.

Please explain the origin of the fecal coliform concentration of 836 MPN/100 ml.

Not exactly sure what you are asking in this comment. The value is from the week of June 22, 2014 and the monthly average for that month was 9 MPN/100 ml. If you are asking what caused the value, my guess is that a seagull defecated into one of the many tanks that hold our effluent as we treat it The levels returned to normal for the three remaining weeks of the month . (<1, <1, 8, and 836)

Outfall 995

Please report the fecal coliform concentration expressed as MPN/100 ml.

Typographical error corrected

Attachment A:

An Attachment A – Water Quality Criteria Monitoring for each outfall was not submitted. Please fill out the Attachment A document that was submitted to you with the Reissuance Reminder email for each outfall. All results < QL should be reported as less than the actual quantitation limit used by the laboratory.

Forms for outfall 995 and 002 were completed. The laboratory omitted the analysis for nonylphenol from the scan however due to the nature of our discharges there is no likelihood that this is present in our two discharges (non-contact cooling water and evaporator condensate). The analyses for phenolics was also <QL which would also pick up nonylphenol.

Public Notice Billing Authorization Form:

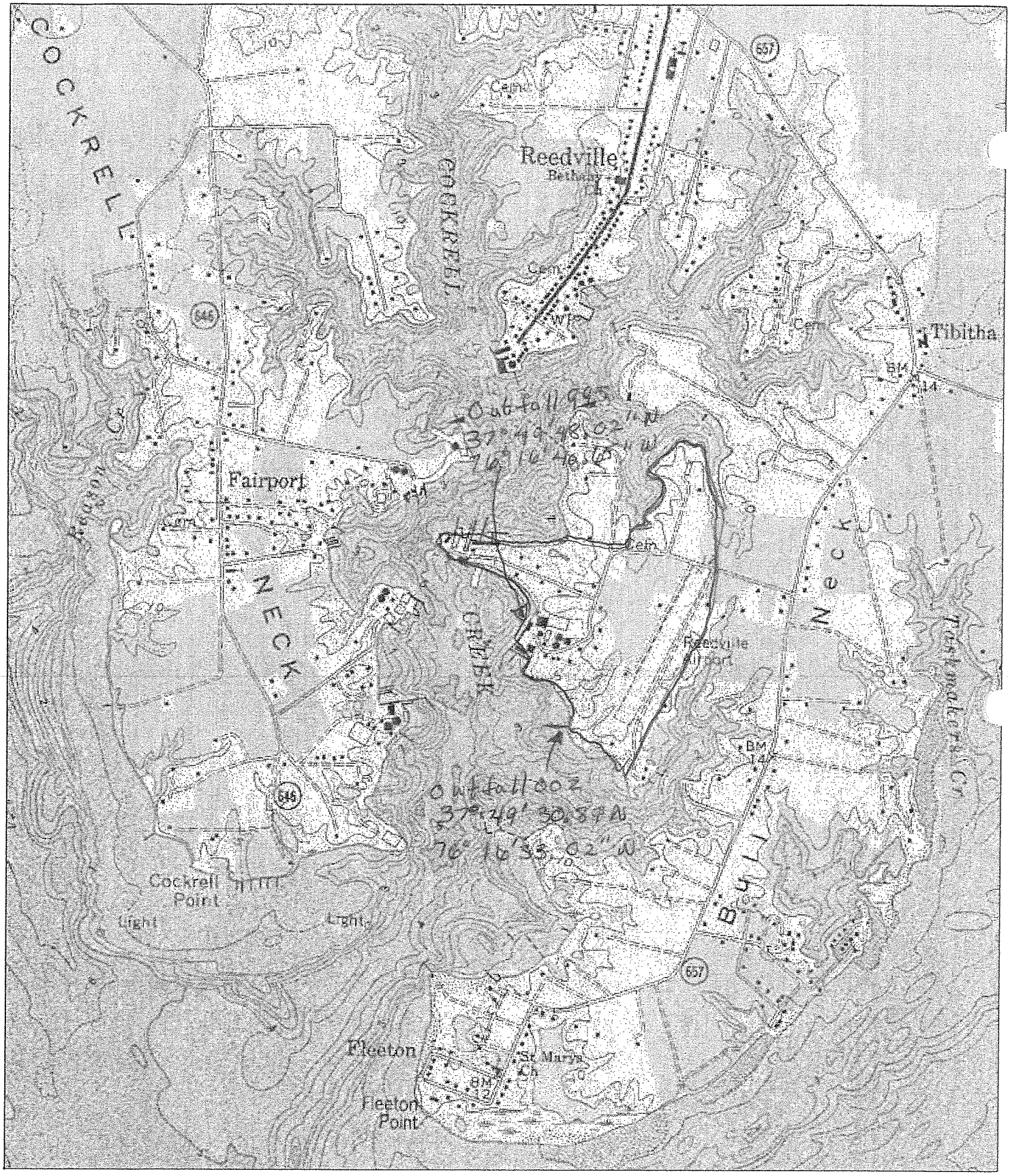
Please submit the enclosed form with a revised application.

Public Notice Billing form is attached.

Please contact me if you have any further questions.

Sincerely,

William Purcell
Environmental Manager
Omega Protein, Inc.



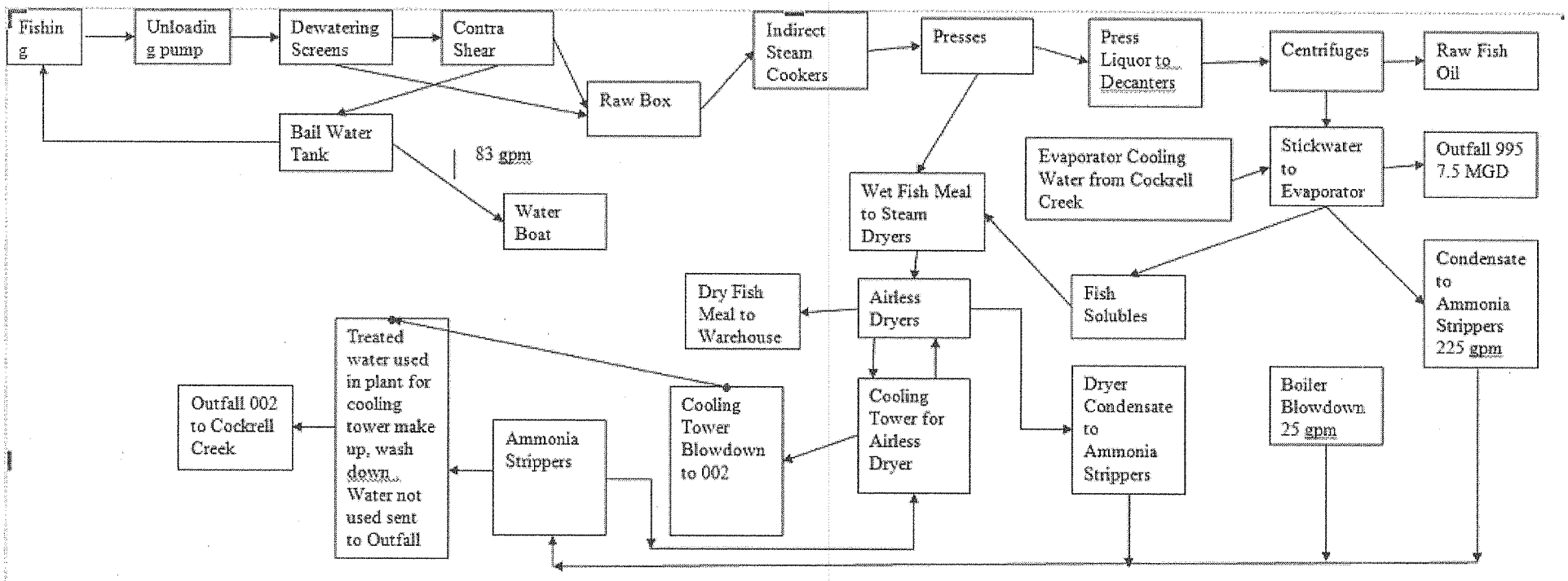
N

0 0.5 Mi

0 2000 Ft

Map provided by MyTopo.com

Reedville Topo


Fishin g
Unloadin g pump
Dewatering Screens
Contra Shear
Raw Box
Indirect Steam Cookers
Presses
Press Liquor to Decanters
Centrifuges
Raw Fish Oil
Bail Water Tank
83 gpm
Water Boat
Wet Fish Meal to Steam Dryers
Evaporator Cooling Water from Cockrell Creek
Stickwater to Evaporator
Outfall 995 7.5 MGD
Condensate to Ammonia Strippers 225 gpm
Dry Fish Meal to Warehouse
Airless Dryers
Fish Solubles
Treated water used in plant for cooling tower make up, wash down. Water not used sent to Outfall
Outfall 002 to Cockrell Creek
Ammonia Strippers
Cooling Tower Blowdown to 002
Cooling Tower for Airless Dryer
Dryer Condensate to Ammonia Strippers
Boiler Blowdown 25 gpm

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S		T/A	C
F	VA0003867		D
1	2 13	14	15

LABEL ITEMS	PLEASE PLACE LABEL IN THIS SPACE
I. EPA I.D. NUMBER	
III. FACILITY NAME	
V. FACILITY MAILING ADDRESS	
VI. FACILITY LOCATION	

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
	16	17	18		19	20	21
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	X		X	D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)		X	
	22	23	24		25	26	27
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
	28	29	30		31	32	33
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
	34	35	36		37	38	39
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	
	40	41	42		43	44	45

III. NAME OF FACILITY

C 1 SKIP Omega Protein, Inc.

15 16 - 29 30 69

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*: C 2 Andy Hall, General Manager (15 16 45)

B. PHONE *(area code & no.)*: (804) 453-4211 (46 48 49 51 52- 55)

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX: C 3 610 Menhaden Road (15 16 45)

B. CITY OR TOWN: C 4 Reedville (15 16 40)

C. STATE: VA (41 42)

D. ZIP CODE: 22539 (47 51)

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: C 5 610 Menhaden Road (15 16 45)

B. COUNTY NAME: Northumberland (46 70)

C. CITY OR TOWN: C 6 Reedville (15 16 40)

D. STATE: VA (41 42)

E. ZIP CODE: 22539 (47 51)

F. COUNTY CODE *(if known)* (52 -54)

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VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND	C. THIRD	D. FOURTH
2077	2077	2077	
(specify) Fish Meal	*(specify)* Fish Solubles	*(specify)* Fish Oil	*(specify)*

VIII. OPERATOR INFORMATION

A. NAME: Omega Protein, Inc.

B. Is the name listed in Item VIII-A also the owner? ☑ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

Answer: M *(specify)*

D. PHONE *(area code & no.)*: A (804) 453-4211

E. STREET OR P.O. BOX: 610 Menhaden Road

F. CITY OR TOWN: B Reedville

G. STATE: VA

H. ZIP CODE: 22539

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

	Code	Number	
A. NPDES *(Discharges to Surface Water)*	N	VA003867	
D. PSD *(Air Emissions from Proposed Sources)*	P		
B. UIC *(Underground Injection of Fluids)*	U		
E. OTHER *(specify)*	9	VAR051211 &VAR051221	*(specify)* Stormwater
C. RCRA *(Hazardous Wastes)*	R		
E. OTHER *(specify)*	9	VAN020037	*(specify)* Nutrient GP

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

Processing of menhaden fish into fish oil, fish solubles and fish meal for sale and use in animal feed and other applications.

XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
Andy Hall, General Manager	John A Hall	11-24-15

COMMENTS FOR OFFICIAL USE ONLY

C

Please type or print in the unshaded areas only	EPA ID Number *(Copy from Item 1 of Form 1)* **VA0003867**	*Form Approved* *OMB No. 2040-0086* *Approval expires 7-31-88*

Form **2C** NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY

APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICUTLRAL OPERATIONS

Consolidated Permits Program

I. Outfall Location

For this outfall, list the latitude and longitude, and name of the receiving water(s)

Outfall Number *(list)*	Latitude			Longitude			Receiving Water *(name)*
	Deg	Min	Sec	Deg	Min	Sec	
002	*37*	*49*	*30.89*	*76*	*16*	*32.02*	*Unnamed tributary of Cockrell Creek*
995	*37*	*49*	*46.59*	*76*	*16*	*41.73*	*Cockrell Creek*

II. Flows, Sources of Pollution, and Treatment Technologies

A. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

B. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

1. Outfall Number	2. Operations Contributing Flow		3. Treatment		
	a. OPERATION *(list)*	b. AVERAGE FLOW	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
002	*Evaporator & Dryer Condensate, Boiler blowdown, Cooling tower blowdown*	*0.114 MGD*		*1-A,4-C, 2-K*	
995	*Non-contact cooling water*	*5.0 MGD*		*None*	

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 CONTINUED ON REVERSE

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C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☒ YES *(complete the following table)* ☐ NO *(go to Section III)*

1. OUTFALL NUMBER (list)	2. OPERATION(s) CONTRIBUTING FLOW *(list)*	3. FREQUENCY a. DAYS PER WEEK *(specify average)*	3. FREQUENCY b. MONTHS PER YEAR *(specify average)*	4. FLOW a. FLOW RATE *(in mgd)* 1. LONG TERM AVERAGE	4. FLOW a. FLOW RATE *(in mgd)* 2. MAXIMUM DAILY	4. FLOW b. TOTAL VOLUME *(specify with units* 1. LONG TERM AVERAGE	4. FLOW b. TOTAL VOLUME *(specify with units* 2. MAXIMUM DAILY	4. FLOW c. DURATION *(in days)*
002	*Evaporator & dryer condensate, boiler blowdown, cooling tower blowdown*	*5*	*7*	*0.114*	*0.283*			*210*
995	*Non-contact cooling water*	*5*	*7*	*5.0*	*6.8*			*210*

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ YES *(complete Item III-B)* ☐ NO *(go to Section IV)*

B. Are the limitations in the applicable effluent guideline expressed in terms of production *(or other measure of operation)*?

☐ YES *(complete Item III-C)* ☒ NO *(go to Section IV)*

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*	2. AFFECTED OUTFALLS *(list outfall numbers)*
4.0 Million	*pounds*	*Processing menhaden fish into meal, oil and solubles*	*002, 995*

IV. IMPROVEMENTS

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES *(complete the following table)* ☒ NO *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS a. No	2. AFFECTED OUTFALLS b. SOURCE OF DISCHARGE	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE a. REQUIRED	4. FINAL COMPLIANCE DATE b. PROJECTED

 CONTINUED ON PAGE 3

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs *(or other environmental projects which may affect your discharges)* you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ **MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAM IS ATTACHED**

 CONTINUED ON PAGE 3

CONTINUED FROM PAGE 2

EPA ID Number *(Copy from Item 1 of Form 1)*
VA0003867

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding - Complete one set of tables or each outfall - Annotate the outfall number in the space provided. **NOTE:** Tables V-A, V-B, and V-C are included on separate sheets number V-1 through V-9.

D: Use the space below t list any of the pollutants listed in Tables 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ **YES** *(list all such pollutants below)* ☒ **NO** *(go to Item VI-B)*

 CONTINUED ON REVERSE

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ YES *(identify the test(s) and describe their purpose below)* ☐ NO *(go to Section VIII)*

Outfall 002 has had quarterly acute toxicity testing conducted for the past 3 permit cycles and all results have been satisfactory.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ YES *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☐ NO *(go to Section IX)*

A. NAME	B. ADDRESS	C. TELEPHONE *(area code & no.)*	D. POLLUTANTS ANALYZED *(list)*
		( )	
Universal Laboratories	*20 Research Dr., Hampton VA*	*(757) 865-0880*	*BOD5, COD, TOC, metals, Nutrients, cyanide, SO4,bacteriologicals Attachment A*
Lancaster Laboratories	*2425 New Holland Pike, Lancaster PA*	*(717) 656-2300*	*Free Cyanide*
James R. Reed & Asso.	*770 Pilot House Drive, Newport News, VA*	*(757) 873-4703*	*Pesticides*
Microbac	*158 Starlite Drive, Marietta, GA*	*(740) 373-4835*	*TOC, Hg*
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	

IX. CERTIFICATION

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

C. SIGNATURE	D. DATE SIGNED
[illegible]	10/25/15

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets *(use the same format)* instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*
VA0003867

V. INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)*

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE *(if available)* (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE *(if available)* (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSIS	3. UNITS *(specify if blank)* a. CONCEN-TRATION	b. MASS	4. INTAKE *(optional)* a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biochemical Oxygen Demand *(BOD)*	1185	657	581	459	434	187	24	mg/l	kg/d	NA		
b. Chemical Oxygen Demand *(COD)*	2586						1	mg/l				
c. Total Organic Carbon *(TOC)*	326						1	mg/l				
d. Total Suspended Solids *(TSS)*	69	32	52.5	26	38.5		24	mg/l	kg/d	NA		
e. Ammonia *(as N)*	34.6		28.9		16.4		24	mg/l		NA		
f. Flow	Value .283		Value 0.160		Value 0.114		208	mgd		Value		
g. Temperature *(winter)*	Value NA		Value		Value			°C		Value		
h. Temperature *(summer)*	Value 39		Value 36		Value 31.1		95	°C		Value		
i. pH	Minimum 6.61	Maximum 8.9	Minimum 7.9	Maximum 8.6			95	STANDARD UNTIS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X' a. BELIEVED PRESENT	b. BELIEVED ABSENT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE *(if available)* (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE *(if available)* (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSIS	3. UNITS *(specify if blank)* a. CONCEN-TRATION	b. MASS	4. INTAKE *(optional)* a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)	☒	☐	<QL						1	mg/L				
b. Chlorine, Total Residual	☐	☒	<QL						1	mg/L				
c. Color	☒	☐	35						1	CU				
d. Fecal Coliform	☒	☐	836		9		<1		28	MPN/100 ml		NA		
e. Fluoride (16984-48-8)	☒	☐	0.9						1	mg/L				
f. Nitrate-Nitrite *(as N)*	☒	☐	.9		.9		.075		24	mg/L				

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	☒	☐	56.8		45.2	822.2	29.3	373.9	24	mg/l	kg/d	NA		
h. Oil and Grease	☒	☐	9.0	5	9	5	<5		12	mg/l	kg/d	NA		
i. Phosphorus (as P), Total (7723-14-0)	☒	☐	3.08		1.1	0.77	0.66	0.4	44	mg/l	kg/d	NA		
j. Radioactivity														
(1) Alpha, Total	☐	☒												
(2) Bets, Total	☐	☒												
(3) Radium, Total	☐	☒												
(4) Radium 226, Total	☐	☒												
k. Sulfate (as SO_4) (14808-79-8)	☒	☐	32.8						1	mg/l				
l. Sulfide (as S)	☐	☒	<QL						1	mg/l				
m. Sulfite (as SO_3)(14265-45-3)	☐	☒												
n. Surfactants	☐	☒	<QL						1	mg/l				
o. Aluminum, Total (7429-90-5)	☐	☒	<QL						1	mg/l				
p. Barium, Total (7440-39-3)	☒	☐	0.008						1	mg/l				
q. Boron, Total (7440-42-8)	☐	☒	<QL						1	mg/l				
r. Cobalt, Total (7440-48-4)	☐	☒	<QL						1	mg/l				
s. Iron, Total (7439-89-4)	☒	☐	<QL						1	mg/l				
t. Magnesium, Total (7439-95-4)	☒	☐	0.139						1	mg/l				
u. Molybdenum, Total (7439-98-7)	☒	☐	0.042						1	mg/l				
v. Manganese, Total (7439-96-5)	☒	☐	0.008						1	mg/l				
w. Tin, Total (7440-31-5)	☐	☒	<QL						1	mg/l				
x. Titanium, Total (7440-32-6)	☐	☒	<QL						1	mg/l				

 CONTINUE ON PAGE V-3

CONTINUED FROM PAGE 3 OF FORM 2-C

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*	OUTFALL NUMBER
VA0003867	*002*

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a *(secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions)*, mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant. If you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table *(all 7 pages)* for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1m. Antimony, Total (7440-36-0)	☐	☐	☒	*<QL*						*1*	*mg/l*				
2M. Arsenic, Total (7440-38-2)	☐	☐	☒	*0.018*						*1*	*mg/l*				
3M. Beryllium, Total (7440-41-7)	☐	☐	☒	*<QL*						*1*	*mg/l*				
4M. Cadmium, Total (7440-43-9)	☐	☐	☒	*<QL*						*1*	*mg/l*				
5M Chromium, Total (7440-47-3)	☐	☐	☒	*<QL*						*1*	*mg/l*				
6M Copper, Total (7440-50-8)	☐	☒	☐	*.016*						*1*	*mg/l*				
7M lead, Total (7439-92-1)	☐	☐	☒	*0.005*						*1*	*mg/l*				
8M Mercury, Total (7439-97-6)	☐	☐	☒	*<QL*						*1*	*mg/l*				
9M Nickel, Total (7440-02-0)	☐	☐	☒	*<QL*						*1*	*mg/l*				
10M Selenium, Total (7782-49-2)	☐	☐	☒	*<QL*						*1*	*mg/l*				
11M Silver, Total (7440-22-4)	☐	☐	☒	*<QL*						*1*	*mg/l*				
12M Thallium, Total (7440-28-0)	☐	☐	☒	*<QL*						*1*	*mg/l*				
13M Zinc, Total (7440-66-6)	☐	☒	☐	*0.020*						*1*	*mg/l*				
14M Cyanide, Total (57-12-5)	☐	☐	☒	*<QL*						*1*	*mg/l*				
15M Phenols, Total	☐	☐	☒	*<QL*						*1*	*mg/l*				
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764--01-6)	☐	☐	☒	DESCRIBE RESULTS *Screen was negative*											

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS															
1V Acrolein (107-02-8)	☐	☐	☒	<QL						1	ug/l				
2V Acrylonitrile (107-13-1)	☐	☐	☒	<QL						1	ug/l				
3V Benzene (71-43-2)	☐	☐	☒	<QL						1	ug/l				
4V Bis (Chloromethyl) Ether (542-88-1)	☐	☐	☒	<QL						1	ug/l				
5V Bromoform (75-25-2)	☐	☐	☒	<QL						1	ug/l				
6V Carbon Tetrachloride (56-23-5)	☐	☐	☒	<QL						1	ug/l				
7V Chlorobenzene (108-90-7)	☐	☐	☒	<QL						1	ug/l				
8V Chlorodibromomethane (124-48-1)	☐	☐	☒	<QL						1	ug/l				
9V Chloroethane (75-00-3)	☐	☐	☒	<QL						1	ug/l				
10V 2-Chloroethylvinyl Ether (110-75-8)	☐	☐	☒	<QL						1	ug/l				
11V Chloroform (67-66-3)	☐	☐	☒	<QL						1	ug/l				
12V Dichlorobromoethane (75-71-8)	☐	☐	☒	<QL						1	ug/l				
13V Dichlorodifluoromethane (75-71-8)	☐	☐	☒	<QL						1	ug/l				
14V 1,1-Dichloroethane (75-34-3)	☐	☐	☒	<QL						1	ug/l				
15V 1,2-Dichloroethane (107-06-2)	☐	☐	☒	<QL						1	ug/l				
16V 1,1-Dichloroethylene (75335-4)	☐	☐	☒	<QL						1	ug/l				
17V 1,2-Dichloropropane (78-87-5)	☐	☐	☒	<QL						1	ug/l				
18V 1,3-Dichloropropylene (542-76-6)	☐	☐	☒	<QL						1	ug/l				
19V Ethylbenzene (100-41-4)	☐	☐	☒	<QL						1	ug/l				
20V Methyl Bromide (74-83-9)	☐	☐	☒	<QL						1	ug/l				
21V Methyl Chloride (74-87-3)	☐	☐	☒	<QL						1	ug/l				

 CONTINUE ON PAGE V-5

CONTINUED FROM PAGE V-4

EPA I.D. NUMBER *(copy from Item 1 of Form 1)* **VA0003867**

OUTFALL NUMBER

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS *(continued)*															
22V Methylene Chloride (75-09-2)	☐	☐	☒	<QL						1	ug/l				
23V 1,1,2,2-Tetra-Chloroethane (79-34-5)	☐	☐	☒	<QL						1	ug/l				
24V Tetrachloro-ethylene (127-18-4)	☐	☐	☒	<QL						1	ug/l				
25V Toluene (108-88-3)	☐	☐	☒	<QL						1	ug/l				
26V 1,2-Trans-Dichloroethylene (156-60-5)	☐	☐	☒	<QL						1	ug/l				
27V 1,1,1-Tri-chloroethane (71-55-6)	☐	☐	☒	<QL						1	ug/l				
28V 1,1,2-Tri-chloroethane (79-00-5)	☐	☐	☒	<QL						1	ug/l				
29V Trichloro-ethylene (79-01-6)	☐	☐	☒	<QL						1	ug/l				
30V Trichloro-fluoromethane (75-69-4)	☐	☐	☒	<QL						1	ug/l				
31V Vinyl Chloride (75-01-4)	☐	☐	☒	<QL						1	ug/l				
GC/MS FRACTION - ACID COMPOUNDS															
1A 2-Chlorophenol (95-57-8)	☐	☐	☒	<QL						1	ug/l				
2A 2,4-Dichloro-phenol (120-83-2)	☐	☐	☒	<QL						1	ug/l				
3A 2,4-Dimethyl-phenol (105-67-9)	☐	☐	☒	<QL						1	ug/l				
4A 4,6-Dinitro-O-cresol (534-52-1)	☐	☐	☒	<QL						1	ug/l				
5A 2,4-Dinitro-phenol (51-28-5)	☐	☐	☒	<QL						1	ug/l				
6A 2-Nitro-phenol (88-75-5)	☐	☐	☒	<QL						1	ug/l				
7A 4-Ntro-phenol (100-02-7)	☐	☐	☒	<QL						1	ug/l				
8A P-Chloro-M-Cresol (59-50-7)	☐	☐	☒	<QL						1	ug/l				
9A Penta-chlorophenol (87-86-5)	☐	☐	☒	<QL						1	ug/l				
10A Phenol (10/-95-2)	☐	☐	☒	<QL						1	ug/l				
11A 2,4,6-Tri-chlorophenol (88-06-2)	☐	☐	☒	<QL						1	ug/l				

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B Acenphthene (83-32-9)	☐	☐	☒	<QL						1	ug/l				
2B Acenaphtylene (208-96-8)	☐	☐	☒	<QL						1	ug/l				
3B Anthracene (120-12-7)	☐	☐	☒	<QL						1	ug/l				
4B Benzidine (92-87-5)	☐	☐	☒	<QL						1	ug/l				
5B Benzo (a) Anthracene (56-55-3)	☐	☐	☒	<QL						1	ug/l				
6B Benzo (a) Pyrene (50-32-8)	☐	☐	☒	<QL						1	ug/l				
7B 3,4-Benzo-fluoranthene (205-99-2)	☐	☐	☒	<QL						1	ug/l				
8B Benzo *(ghi)* Perylene (191-24-2)	☐	☐	☒	<QL						1	ug/l				
9B Benzo *(k)* Fluoranthene (207-08-9)	☐	☐	☒	<QL						1	ug/l				
10B Bis *(2-Chloroethoxy)* Methane (111-91-1)	☐	☐	☒	<QL						1	ug/l				
11B Bis *(2-Chloro-ethyl)* Ether (111-44-4)	☐	☐	☒	<QL						1	ug/l				
12B Bis *(2-Chloroisepropyl)* Ether (102-60-1	☐	☐	☒	<QL						1	ug/l				
13B Bis*(2-Ethyl-hexyl)* Phthalate (117-81-7)	☐	☐	☒	<QL						1	ug/l				
14 B 4-Bromo-phenyl Phenyl Ether (101-55-3)	☐	☐	☒	<QL						1	ug/l				
15B Butyl Benzyl Phthalate (85-68-7)	☐	☐	☒	<QL						1	ug/l				
16B 2-Chloro-naphthalene (91-68-7)	☐	☐	☒	<QL						1	ug/l				
17B 4-Chloro-phenyl Phenyl Ether (7005-72-3)	☐	☐	☒	<QL						1	ug/l				
18B Chrysene (218-01-9)	☐	☐	☒	<QL						1	ug/l				
19B Dibenzo *(a,h)* Anthracene (53-70-3)	☐	☐	☒	<QL						1	ug/l				
20B 1,2-Dichloro-benzene (95-50-1)	☐	☐	☒	<QL						1	ug/l				
21B 1,3-Dichloro-benzene (541-73-1)	☐	☐	☒	<QL						1	ug/l				

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CONTINUED FROM PAGE V-6

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*	OUTFALL NUMBER
VA0003867	

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - BASE/NEUTRAL COMPOUNDS *(continued)*															
22B 1,4-Dichlorobenzene (106-46-7)	☐	☐	☒	<QL						1	ug/l				
23B 3,3'-Dichlorobenzidine (91-94-1)	☐	☐	☒	<QL						1	ug/l				
24B Diethyl Phthalate (84-66-2)	☐	☐	☒	<QL						1	ug/l				
25B Dimethyl Phthalate (131-11-3)	☐	☐	☒	<QL						1	ug/l				
26B Di-N-Butyl Phthalate (131-11-3)	☐	☐	☒	<QL						1	ug/l				
27B 2,4-Dinitrotoluene (121-14-2)	☐	☐	☒	<QL						1	ug/l				
28B 2,6-Dinitrotoluene (606-20-2)	☐	☐	☒	<QL						1	ug/l				
29B Di-N-Octyl Phthalate (117-84-0)	☐	☐	☒	<QL						1	ug/l				
30B 1,2-Diphenylhydrazine *(as Azo-benzene)* (122-66-7)	☐	☐	☒	<QL						1	ug/l				
31B Fluoranthene (206-44-0)	☐	☐	☒	<QL						1	ug/l				
32B Fluorene (86-73-7)	☐	☐	☒	<QL						1	ug/l				
33B Hexachlorobenzene (118-74-1)	☐	☐	☒	<QL						1	ug/l				
34B Hexachlorobutadiene (87-68-3)	☐	☐	☒	<QL						1	ug/l				
35B Hexachlorocyclopentadiene (77-47-4)	☐	☐	☒	<QL						1	ug/l				
36B Hexachloroethane (67-72-1)	☐	☐	☒	<QL						1	ug/l				
37B Indeno *(1,2,3-cd)* Pyrene (193-39-5)	☐	☐	☒	<QL						1	ug/l				
38B Isophorone (78-59-1)	☐	☐	☒	<QL						1	ug/l				
39B Napthalene (91-20-3)	☐	☐	☒	<QL						1	ug/l				
40B Nitrobenzene (98-95-3)	☐	☐	☒	<QL						1	ug/l				
41B N-Nitrosodimethylamine (62-75-9)	☐	☐	☒	<QL						1	ug/l				
42B N-Nitrosdi-N-Propylamine (621-64-7)	☐	☐	☒	<QL						1	ug/l				

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS *(continued)*															
43B N-Nitrosodiphenylamine (86-30-6)	☐	☐	☒	<QL						1	ug/l				
44B Phenanthrene (85-01-/	☐	☐	☒	<QL						1	ug/l				
45B Pyrene (129-00-0)	☐	☐	☒	<QL						1	ug/l				
46B 1,2,4-Trichlorobenzene (120-82-1)	☐	☐	☒	<QL						1	ug/l				
GC/MS FRACTION - PESTICIDES															
1P Aldrin (309-00-2)	☐	☐	☒	<QL						1	ug/l				
2P β-Bhc (319-85-7)	☐	☐	☒	<QL						1	ug/l				
4P γ-BHC (58-89-9)	☐	☐	☒	<QL						1	ug/l				
5P δ-BHC (319-86-8)	☐	☐	☒	<QL						1	ug/l				
6P Chlordane (57-74-9)	☐	☐	☒	<QL						1	ug/l				
7P 4,4'-DDT (50-29-3)	☐	☐	☒	<QL						1	ug/l				
8P 4,4'-DDE (72-55-9)	☐	☐	☒	<QL						1	ug/l				
9P 4,4'-DDD (72-54-8)	☐	☐	☒	<QL						1	ug/l				
10P Dieldrin (60-57-1)	☐	☐	☒	<QL						1	ug/l				
11P α-Endosulfan (115-29-7)	☐	☐	☒	<QL						1	ug/l				
12P β-Endosulfan (115-29-7	☐	☐	☒	<QL						1	ug/l				
13P Endosulfan Sulfate (1031-07-8)	☐	☐	☒	<QL						1	ug/l				
14P Endrin (72-20-8)	☐	☐	☒	<QL						1	ug/l				
15P Endrin Aldehyde (7421-93-4)	☐	☐	☒	<QL						1	ug/l				
16P Heptachlor (76-44-8)	☐	☐	☒	<QL						1	ug/l				

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EPA I.D. NUMBER *(copy from Item 1 of Form 1)* **VA0003867**

OUTFALL NUMBER

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - PESTICIDES *(continued)*															
17P Heptachlor Expxide (1024-57-3)	☐	☐	☒	<QL						1	ug/l				
18P PCB-1242 (53469-21-9)	☐	☐	☒	<QL						1	ug/l				
19P PCB-1254 (11097-69-1)	☐	☐	☒	<QL						1	ug/l				
20P PCB-1221 (11104-28-2)	☐	☐	☒	<QL						1	ug/l				
21P PCB-1232 (11141-16-5)	☐	☐	☒	<QL						1	ug/l				
22P PCB-1248 (12672-29-6)	☐	☐	☒	<QL						1	ug/l				
23P PCB-1260 (11096-82-5)	☐	☐	☒	<QL						1	ug/l				
24P PCB-1016 (12674-11-2)	☐	☐	☒	<QL						1	ug/l				
25P Toxaphene (8001-35-2)	☐	☐	☒	<QL						1	ug/l				

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets *(use the same format)* instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*
VA0003867

Outfall 995

V. INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)*

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE *(if available)* (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE *(if available)* (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSIS	3. UNITS *(specify if blank)* a. CONCEN-TRATION	b. MASS	4. INTAKE *(optional)* a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biochemical Oxygen Demand *(BOD)*	2						1	mg/l	kg/d			
b. Chemical Oxygen Demand *(COD)*	457.9						1	mg/l	kg/d			
c. Total Organic Carbon *(TOC)*	1.79						1	mg/l	kg/d			
d. Total Suspended Solids *(TSS)*	12.9						1	mg/l	kg/d			
e. Ammonia *(as N)*	<QL						1	mg/l	kg/d			
f. Flow	Value 8.424		Value 6.821		Value 5.096		214	mgd		Value		
g. Temperature *(winter)*	Value NA		Value		Value			°C		Value		
h. Temperature *(summer)*	Value 44.0		Value 37.0		Value 31.1		95	°C		Value		
i. pH	Minimum 7.5	Maximum 8.7	Minimum 7.8	Maximum 8.3			95	STANDARD UNTIS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X' a. BELIEVED PRESENT	b. BELIEVED ABSENT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE *(if available)* (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE *(if available)* (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSIS	3. UNITS *(specify if blank)* a. CONCEN-TRATION	b. MASS	4. INTAKE *(optional)* a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)	☒	☐	36.0						1	mg/l				
b. Chlorine, Total Residual	☐	☒	<QL						1	mg/l				
c. Color	☒	☐	10						1	CU				
d. Fecal Coliform	☐	☒	5400	NA	642		236		25	MPN/100 ml	NA			
e. Fluoride (16984-48-8)	☒	☐	0.5						1	mg/l				
f. Nitrate-Nitrite *(as N)*	☐	☒	<QL						1	mg/l		BDL		1

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. BELIEVED PRESENT	B. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	☒	☐	1.1						1	mg/l				
h. Oil and Grease	☐	☒	<QL						1	mg/l				
i. Phosphorus (as P), Total (7723-14-0)	☒	☐	0.08						1	mg/l				
j. Radioactivity														
(1) Alpha, Total	☐	☒												
(2) Bets, Total	☐	☒												
(3) Radium, Total	☐	☒												
(4) Radium 226, Total	☐	☒												
k. Sulfate (as SO_4) (14808-79-8)	☒	☐	1300						1	mg/l				
l. Sulfide (as S)	☒	☐	0.6						1	mg/l				
m. Sulfite (as SO_3)(14265-45-3)	☐	☒												
n. Surfactants	☐	☒	<QL							mg/L				
o. Aluminum, Total (7429-90-5)	☒	☐	0.072						1	mg/l				
p. Barium, Total (7440-39-3)	☒	☐	0.027						1	mg/l				
q. Boron, Total (7440-42-8)	☒	☐	1.84						1	mg/l				
r. Cobalt, Total (7440-48-4)	☐	☒	<QL						1	mg/l				
s. Iron, Total (7439-89-4)	☒	☐	0.136						1	mg/l				
t. Magnesium, Total (7439-95-4)	☒	☐	1150						1	mg/l				
u. Molybdenum, Total (7439-98-7)	☒	☐	<QL						1	mg/l				
v. Manganese, Total (7439-96-5)	☐	☒	0.014						1	mg/l				
w. Tin, Total (7440-31-5)	☐	☒	<QL						1	mg/l				
x. Titanium, Total (7440-32-6)	☐	☒	<QL						1	mg/l				

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CONTINUED FROM PAGE 3 OF FORM 2-C

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*	OUTFALL NUMBER
VA0003867	*995*

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a *(secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions)*, mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant. If you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table *(all 7 pages)* for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1m. Antimony, Total (7440-36-0)	☐	☐	☒	<QL						1	mg/l				
2M. Arsenic, Total (7440-38-2)	☐	☐	☒	<QL						1	mg/l				
3M. Beryllium, Total (7440-41-7)	☐	☐	☒	<QL						1	mg/l				
4M. Cadmium, Total (7440-43-9)	☐	☐	☒	<QL						1	mg/l				
5M Chromium, Total (7440-47-3)	☐	☐	☒	<QL						1	mg/l				
6M Copper, Total (7440-50-8)	☐	☒	☐	.01						1	mg/l				
7M lead, Total (7439-92-1)	☐	☐	☒	<QL						1	mg/l				
8M Mercury, Total (7439-97-6)	☐	☐	☒	<QL						1	mg/l				
9M Nickel, Total (7440-02-0)	☐	☐	☒	<QL						1	mg/l				
10M Selenium, Total (7782-49-2)	☐	☐	☒	<QL						1	mg/l				
11M Silver, Total (7440-22-4)	☐	☐	☒	<QL						1	mg/l				
12M Thallium, Total (7440-28-0)	☐	☐	☒	<QL						1	mg/l				
13M Zinc, Total (7440-66-6)	☐	☒	☐	0.011						1	mg/L				
14M Cyanide, Total (57-12-5)	☐	☐	☒	<QL						1	mg/l				
15M Phenols, Total	☐	☐	☒	<QL						1	mg/l				
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764--01-6)	☐	☐	☒	DESCRIBE RESULTS <QL											

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS															
1V Acrolein (107-02-8)	☐	☐	☒	<QL						1	ug/l				
2V Acrylonitrile (107-13-1)	☐	☐	☒	<QL						1	ug/l				
3V Benzene (71-43-2)	☐	☐	☒	<QL						1	ug/l				
4V Bis (Chloromethyl) Ether (542-88-1)	☐	☐	☒	<QL						1	ug/l				
5V Bromoform (75-25-2)	☐	☐	☒	<QL						1	ug/l				
6V Carbon Tetrachloride (56-23-5)	☐	☐	☒	<QL						1	ug/l				
7V Chlorobenzene (108-90-7)	☐	☐	☒	<QL						1	ug/l				
8V Chlorodibromomethane (124-48-1)	☐	☐	☒	<QL						1	ug/l				
9V Chloroethane (75-00-3)	☐	☐	☒	<QL						1	ug/l				
10V 2-Chloroethylvinyl Ether (110-75-8)	☐	☐	☒	<QL						1	ug/l				
11V Chloroform (67-66-3)	☐	☐	☒	<QL						1	ug/l				
12V Dichlorobromoethane (75-71-8)	☐	☐	☒	<QL						1	ug/l				
13V Dichlorodifluoromethane (75-71-8)	☐	☐	☒	<QL						1	ug/l				
14V 1,1-Dichloroethane (75-34-3)	☐	☐	☒	<QL						1	ug/l				
15V 1,2-Dichloroethane (107-06-2)	☐	☐	☒	<QL						1	ug/l				
16V 1,1-Dichloroethylene (75335-4)	☐	☐	☒	<QL						1	ug/l				
17V 1,2-Dichloropropane (78-87-5)	☐	☐	☒	<QL						1	ug/l				
18V 1,3-Dichloropropylene (542-76-6)	☐	☐	☒	<QL						1	ug/l				
19V Ethylbenzene (100-41-4)	☐	☐	☒	<QL						1	ug/l				
20V Methyl Bromide (74-83-9)	☐	☐	☒	<QL						1	ug/l				
21V Methyl Chloride (74-87-3)	☐	☐	☒	<QL						1	ug/l				

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CONTINUED FROM PAGE V-4

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*	OUTFALL NUMBER
VA0003867	*995*

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS *(continued)*															
22V Methylene Chloride (75-09-2)	☐	☐	☒	<QL						1	ug/l				
23V 1,1,2,2-Tetra-Chloroethane (79-34-5)	☐	☐	☒	<QL						1	ug/l				
24V Tetrachloro-ethylene (127-18-4)	☐	☐	☒	<QL						1	ug/l				
25V Toluene (108-88-3)	☐	☐	☒	<QL						1	ug/l				
26V 1,2-Trans-Dichloroethylene (156-60-5)	☐	☐	☒	<QL						1	ug/l				
27V 1,1,1-Tri-chloroethane (71-55-6)	☐	☐	☒	<QL						1	ug/l				
28V 1,1,2-Tri-chloroethane (79-00-5)	☐	☐	☒	<QL						1	ug/l				
29V Trichloro-ethylene (79-01-6)	☐	☐	☒	<QL						1	ug/l				
30V Trichloro-fluoromethane (75-69-4)	☐	☐	☒	<QL						1	ug/l				
31V Vinyl Chloride (75-01-4)	☐	☐	☒	<QL						1	ug/l				
GC/MS FRACTION - ACID COMPOUNDS															
1A 2-Chlorophenol (95-57-8)	☐	☐	☒	<QL						1	ug/l				
2A 2,4-Dichloro-phenol (120-83-2)	☐	☐	☒	<QL						1	ug/l				
3A 2,4-Dimethyl-phenol (105-67-9)	☐	☐	☒	<QL						1	ug/l				
4A 4,6-Dinitro-O-cresol (534-52-1)	☐	☐	☒	<QL						1	ug/l				
5A 2,4-Dinitro-phenol (51-28-5)	☐	☐	☒	<QL						1	ug/l				
6A 2-Nitro-phenol (88-75-5)	☐	☐	☒	<QL						1	ug/l				
7A 4-Ntro-phenol (100-02-7)	☐	☐	☒	<QL						1	ug/l				
8A P-Chloro-M-Cresol (59-50-7)	☐	☐	☒	<QL						1	ug/l				
9A Penta-chlorophenol (87-86-5)	☐	☐	☒	<QL						1	ug/l				
10A Phenol (10/-95-2)	☐	☐	☒	<QL						1	ug/l				
11A 2,4,6-Tri-chlorophenol (88-06-2)	☐	☐	☒	<QL						1	ug/l				

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B Acenphthene (83-32-9)	☐	☐	☒	<QL						1	ug/l				
2B Acenaphtylene (208-96-8)	☐	☐	☒	<QL						1	ug/l				
3B Anthracene (120-12-7)	☐	☐	☒	<QL						1	ug/l				
4B Benzidine (92-87-5)	☐	☐	☒	<QL						1	ug/l				
5B Benzo (a) Anthracene (56-55-3)	☐	☐	☒	<QL						1	ug/l				
6B Benzo (a) Pyrene (50-32-8)	☐	☐	☒	<QL						1	ug/l				
7B 3,4-Benzo-fluoranthene (205-99-2)	☐	☐	☒	<QL						1	ug/l				
8B Benzo *(ghi)* Perylene (191-24-2)	☐	☐	☒	<QL						1	ug/l				
9B Benzo *(k)* Fluoranthene (207-08-9)	☐	☐	☒	<QL						1	ug/l				
10B Bis *(2-Chloroethoxy)* Methane (111-91-1)	☐	☐	☒	<QL						1	ug/l				
11B Bis *(2-Chloro-ethyl)* Ether (111-44-4)	☐	☐	☒	<QL						1	ug/l				
12B Bis *(2-Chloroisepropyl)* Ether (102-60-1	☐	☐	☒	<QL						1	ug/l				
13B Bis*(2-Ethyl-hexyl)* Phthalate (117-81-7)	☐	☐	☒	<QL						1	ug/l				
14 B 4-Bromo-phenyl Phenyl Ether (101-55-3)	☐	☐	☒	<QL						1	ug/l				
15B Butyl Benzyl Phthalate (85-68-7)	☐	☐	☒	<QL						1	ug/l				
16B 2-Chloro-naphthalene (91-68-7)	☐	☐	☒	<QL						1	ug/l				
17B 4-Chloro-phenyl Phenyl Ether (7005-72-3)	☐	☐	☒	<QL						1	ug/l				
18B Chrysene (218-01-9)	☐	☐	☒	<QL						1	ug/l				
19B Dibenzo *(a,h)* Anthracene (53-70-3)	☐	☐	☒	<QL						1	ug/l				
20B 1,2-Dichloro-benzene (95-50-1)	☐	☐	☒	<QL						1	ug/l				
21B 1,3-Dichloro-benzene (541-73-1)	☐	☐	☒	<QL						1	ug/l				

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CONTINUED FROM PAGE V-6

EPA I.D. NUMBER *(copy from Item 1 of Form 1)* VA0003867

OUTFALL NUMBER 995

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - BASE/NEUTRAL COMPOUNDS *(continued)*															
22B 1,4-Dichlorobenzene (106-46-7)	☐	☐	☒	<QL						1	ug/l				
23B 3,3'-Dichlorobenzidine (91-94-1)	☐	☐	☒	<QL						1	ug/l				
24B Diethyl Phthalate (84-66-2)	☐	☐	☒	<QL						1	ug/l				
25B Dimethyl Phthalate (131-11-3)	☐	☐	☒	<QL						1	ug/l				
26B Di-N-Butyl Phthalate (131-11-3)	☐	☐	☒	<QL						1	ug/l				
27B 2,4-Dinitrotoluene (121-14-2)	☐	☐	☒	<QL						1	ug/l				
28B 2,6-Dinitrotoluene (606-20-2)	☐	☐	☒	<QL						1	ug/l				
29B Di-N-Octyl Phthalate (117-84-0)	☐	☐	☒	<QL						1	ug/l				
30B 1,2-Diphenylhydrazine *(as Azo-benzene)* (122-66-7)	☐	☐	☒	<QL						1	ug/l				
31B Fluoranthene (206-44-0)	☐	☐	☒	<QL						1	ug/l				
32B Fluorene (86-73-7)	☐	☐	☒	<QL						1	ug/l				
33B Hexachlorobenzene (118-74-1)	☐	☐	☒	<QL						1	ug/l				
34B Hexachlorobutadiene (87-68-3)	☐	☐	☒	<QL						1	ug/l				
35B Hexachlorocyclopentadiene (77-47-4)	☐	☐	☒	<QL						1	ug/l				
36B Hexachloroethane (67-72-1)	☐	☐	☒	<QL						1	ug/l				
37B Indeno *(1,2,3-cd)* Pyrene (193-39-5)	☐	☐	☒	<QL						1	ug/l				
38B Isophorone (78-59-1)	☐	☐	☒	<QL						1	ug/l				
39B Napthalene (91-20-3)	☐	☐	☒	<QL						1	ug/l				
40B Nitrobenzene (98-95-3)	☐	☐	☒	<QL						1	ug/l				
41B N-Nitrosodimethylamine (62-75-9)	☐	☐	☒	<QL						1	ug/l				
42B N-Nitrosdi-N-Propylamine (621-64-7)	☐	☐	☒	<QL						1	ug/l				

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS *(continued)*															
43B N-Nitrosodiphenylamine (86-30-6)	☐	☐	☒	<QL						1	ug/l				
44B Phenanthrene (85-01-/	☐	☐	☒	<QL						1	ug/l				
45B Pyrene (129-00-0)	☐	☐	☒	<QL						1	ug/l				
46B 1,2,4-Trichlorobenzene (120-82-1)	☐	☐	☒	<QL						1	ug/l				
GC/MS FRACTION - PESTICIDES															
1P Aldrin (309-00-2)	☐	☐	☒	<QL						1	ug/l				
2P β-Bhc (319-85-7)	☐	☐	☒	<QL						1	ug/l				
4P γ-BHC (58-89-9)	☐	☐	☒	<QL						1	ug/l				
5P δ-BHC (319-86-8)	☐	☐	☒	<QL						1	ug/l				
6P Chlordane (57-74-9)	☐	☐	☒	<QL						1	ug/l				
7P 4,4'-DDT (50-29-3)	☐	☐	☒	<QL						1	ug/l				
8P 4,4'-DDE (72-55-9)	☐	☐	☒	<QL						1	ug/l				
9P 4,4'-DDD (72-54-8)	☐	☐	☒	<QL						1	ug/l				
10P Dieldrin (60-57-1)	☐	☐	☒	<QL						1	ug/l				
11P α-Endosulfan (115-29-7)	☐	☐	☒	<QL						1	ug/l				
12P β-Endosulfan (115-29-7	☐	☐	☒	<QL						1	ug/l				
13P Endosulfan Sulfate (1031-07-8)	☐	☐	☒	<QL						1	ug/l				
14P Endrin (72-20-8)	☐	☐	☒	<QL						1	ug/l				
15P Endrin Aldehyde (7421-93-4)	☐	☐	☒	<QL						1	ug/l				
16P Heptachlor (76-44-8)	☐	☐	☒	<QL						1	ug/l				

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CONTINUED FROM PAGE V-6

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*	OUTFALL NUMBER
VA0003867	*995*

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - PESTICIDES *(continued)*															
17P Heptachlor Expxide (1024-57-3)	☐	☐	☒	<QL						1	ug/l				
18P PCB-1242 (53469-21-9)	☐	☐	☒	<QL						1	ug/l				
19P PCB-1254 (11097-69-1)	☐	☐	☒	<QL						1	ug/l				
20P PCB-1221 (11104-28-2)	☐	☐	☒	<QL						1	ug/l				
21P PCB-1232 (11141-16-5)	☐	☐	☒	<QL						1	ug/l				
22P PCB-1248 (12672-29-6)	☐	☐	☒	<QL						1	ug/l				
23P PCB-1260 (11096-82-5)	☐	☐	☒	<QL						1	ug/l				
24P PCB-1016 (12674-11-2)	☐	☐	☒	<QL						1	ug/l				
25P Toxaphene (8001-35-2)	☐	☐	☒	<QL						1	ug/l				

VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Omega Protein, Inc.

Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** Yes ☐ No ☒

3. **Provide the tax map parcel number for the land where the discharge is located.** DNF 45((3))-002 28798005.1

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** None

5. **What is the design average effluent flow of this facility?** 4.0 MGD

   For industrial facilities, provide the max. 30-day average production level, include units:

   120 million fish

   In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Yes ☐ No ☒

   If "Yes", please identify the other flow tiers (in MGD) or production levels:

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. **Nature of operations generating wastewater:**

   Processing of menhaden to obtain fish oil, fish meal and fish solubles

   0 % of flow from domestic connections/sources

   Number of private residences to be served by the treatment works: 0

   100 % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☐ Continuous ☒ Intermittent ☒ Seasonal

   Describe frequency and duration of intermittent or seasonal discharges:

   Season starts first Monday in May and ends around the first week in December. Intermittent flows are based on fish catch.

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

   X Permanent stream, never dry

   ___ Intermittent stream, usually flowing, sometimes dry

   ___ Ephemeral stream, wet-weather flow, often dry

   ___ Effluent-dependent stream, usually or always dry without effluent flow

   ___ Lake or pond at or below the discharge point

   ___ Other:

9. **Approval Date(s):**

   O & M Manual 4/30/2015 Cooling Tower operation

   Have there been any changes in your operations or procedures since the above approval dates? Yes ☒ No ☐

PUBLIC NOTICE BILLING AUTHORIZATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in Nor thumberland Echo in accordance with 9VAC25-31-290. C. 2.

Agent/Department to be billed: DAVID BROMLEY

Owner: OMEGA PROTEIN INC.

Applicant's Address: 610 MENHADEN ROAD
REEDVILLE VA 22539.

Agent's Telephone No: 804 453 4211

Authorizing Agent: _____
Signature

Facility Name: Omega Protein, Inc.
Permit No. VA0003867

Please return to:

Laura Galli
DEQ Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060
laura.galli@deq.virginia.gov

Outfall 002

ATTACHMENT A
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
	METALS					
7440-36-0	Antimony, dissolved	(3)	1.4 (1)	< 0.005 mg/L	G or C	1/5 YR
7440-38-2	Arsenic, dissolved	(3)	1.0 (1)	0.010 mg/L	G or C	1/5 YR
7440-43-9	Cadmium, dissolved	(3)	0.3 (1)	< 0.005 mg/L	G or C	1/5 YR
16065-83-1	Chromium III, dissolved [8]	(3)	3.6 (1)	< 5 µg/L ~~< 0.005 mg/L~~	G or C	1/5 YR
18540-29-9	Chromium VI, dissolved [8]	(3)	1.6 (1)	< 0.005 mg/L	G or C	1/5 YR
7440-50-8	Copper, dissolved	(3)	0.5 (1)	0.005 mg/L	G or C	1/5 YR
7439-92-1	Lead, dissolved	(3)	0.5 (1)	< 0.005 mg/L	G or C	1/5 YR
7439-97-6	Mercury, dissolved	(3)	1.0 (1)	< 0.00020 mg/L	G or C	1/5 YR
7440-02-0	Nickel, dissolved	(3)	0.94 (1)	< 0.005 mg/L	G or C	1/5 YR
7782-49-2	Selenium, dissolved	(3)	2.0 (1)	< 0.005 mg/L	G or C	1/5 YR
7440-22-4	Silver, dissolved	(3)	0.20 (1)	< 0.05 mg/L	G or C	1/5 YR
7440-28-0	Thallium, dissolved	(4)	(5)	< 0.005 mg/L	G or C	1/5 YR
7440-66-6	Zinc, dissolved	(3)	3.6 (1)	0.019 mg/L	G or C	1/5 YR
	PESTICIDES/PCB'S					
309-00-2	Aldrin	608	0.05	< 0.05 µg/L	G or C	1/5 YR
57-74-9	Chlordane	608	0.2	< 0.1 µg/L	G or C	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	(4)	(5)	< 0.2 µg/L	G or C	1/5 YR
72-54-8	DDD	608	0.1	< 0.1 µg/L	G or C	1/5 YR
72-55-9	DDE	608	0.1	< 0.1 µg/L	G or C	1/5 YR
50-29-3	DDT	608	0.1	< 0.1 µg/L	G or C	1/5 YR
8065-48-3	Demeton	(4)	(5)	< 1 µg/L	G or C	1/5 YR
333-41-5	Diazinon	(4)	(5)	< 1 µg/L	G or C	1/5 YR
60-57-1	Dieldrin	608	0.1	< 0.05 µg/L	G or C	1/5 YR
959-98-8	Alpha-Endosulfan	608	0.1	< 0.1 µg/L	G or C	1/5 YR
33213-65-9	Beta-Endosulfan	608	0.1	< 0.1 µg/L	G or C	1/5 YR
1031-07-8	Endosulfan Sulfate	608	0.1	< 0.1 µg/L	G or C	1/5 YR
72-20-8	Endrin	608	0.1	< 0.1 µg/L	G or C	1/5 YR
7421-93-4	Endrin Aldehyde	(4)	(5)	< ~~0.1~~ 0.05 µg/L	G or C	1/5 YR

Outfall 002

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
86-50-0	Guthion	(4)	(5)	< 1 µg/L	G or C	1/5 YR
76-44-8	Heptachlor	608	0.05	< 0.5 µg/L	G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	(4)	(5)	< 0.05 µg/L	G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608	(5)	< 0.5 µg/L	G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608	(5)	< 0.05 µg/L	G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC or Lindane	608	(5)	< 0.05 µg/L	G or C	1/5 YR
143-50-0	Kepone	(9)	(5)	< 5.56 µg/L	G or C	1/5 YR
121-75-5	Malathion	(4)	(5)	< 1 µg/L	G or C	1/5 YR
72-43-5	Methoxychlor	(4)	(5)	< 0.05 µg/L	G or C	1/5 YR
2385-85-5	Mirex	(4)	(5)	< 0.05 µg/L	G or C	1/5 YR
56-38-2	Parathion	(4)	(5)	< 1 µg/L	G or C	1/5 YR
1336-36-3	PCB Total	608	7.0	< 1 µg/L	G or C	1/5 YR
8001-35-2	Toxaphene	608	5.0	< 0.5 µg/L	G or C	1/5 YR
BASE NEUTRAL EXTRACTABLES						
83-32-9	Acenaphthene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
120-12-7	Anthracene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
92-87-5	Benzidine	(4)	(5)	< 11.1 µg/L	G or C	1/5 YR
56-55-3	Benzo (a) anthracene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
205-99-2	Benzo (b) fluoranthene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
50-32-8	Benzo (a) pyrene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
108-60-1	Bis 2-Chloroisopropyl Ether	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0	< 5.56 µg/L	G or C	1/5 YR
91-58-7	2-Chloronaphthalene	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
218-01-9	Chrysene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
53-70-3	Dibenz(a,h)anthracene	625	20.0	< 5.56 µg/L	G or C	1/5 YR
84-74-2	Dibutyl phthalate (synonym = Di-n-Butyl Phthalate)	625	10.0	< 5.56 µg/L	G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	624	10.0	< 5.56 µg/L	G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	624	10.0	< 5.56 µg/L	G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	624	10.0	< 5.56 µg/L	G or C	1/5 YR

Outfall 002

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
91-94-1	3,3-Dichlorobenzidine	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0	< 5.56 µg/L	G or C	1/5 YR
117-81-7	Bis-2-ethylhexyl phthalate	625	10.0	< 5.56 µg/L	G or C	1/5 YR
131-11-3	Dimethyl phthalate	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine AZOBENZENE	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
206-44-0	Fluoranthene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
86-73-7	Fluorene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
118-74-1	Hexachlorobenzene	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
87-68-3	Hexachlorobutadiene	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
67-72-1	Hexachloroethane	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	625	20.0	< 5.56 µg/L	G or C	1/5 YR
78-59-1	Isophorone	625	10.0	< 5.56 µg/L	G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
62-75-9	N-Nitrosodimethylamine	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
86-30-6	N-Nitrosodiphenylamine	(4)	(5)	< 5.56 µg/L	G or C	1/5 YR
129-00-0	Pyrene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0	< 5.56 µg/L	G or C	1/5 YR
	VOLATILES					
107-02-8	Acrolein	(4)	(5)	< 10 µg/L	G	1/5 YR
107-13-1	Acrylonitrile	(4)	(5)	< 10 µg/L	G	1/5 YR
71-43-2	Benzene	624	10.0	< 1 µg/L	G	1/5 YR
75-25-2	Bromoform	624	10.0	< 1 µg/L	G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0	< 1 µg/L	G	1/5 YR
108-90-7	Chlorobenzene (synonym = monochlorobenzene)	624	50.0	< 1 µg/L	G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0	< 1 µg/L	G	1/5 YR
67-66-3	Chloroform	624	10.0	< 1 µg/L	G	1/5 YR
75-09-2	Dichloromethane (synonym = methylene chloride)	624	20.0	< 10 µg/L	G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0	< 1 µg/L	G	1/5 YR

Outfall 002

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
107-06-2	1,2-Dichloroethane	624	10.0	<5 µg/L <1 µg/L	G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0	<5 µg/L	G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	(4)	(5)	<5 µg/L	G	1/5 YR
78-87-5	1,2-Dichloropropane	(4)	(5)	<1 µg/L	G	1/5 YR
542-75-6	1,3-Dichloropropene	(4)	(5)	<1 µg/L	G	1/5 YR
100-41-4	Ethylbenzene	624	10.0	<1 µg/L	G	1/5 YR
74-83-9	Methyl Bromide	(4)	(5)	<10 µg/L	G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	(4)	(5)	<5 µg/L	G	1/5 YR
127-18-4	Tetrachloroethylene	624	10.0	<1 µg/L	G	1/5 YR
10-88-3	Toluene	624	10.0	<1 µg/L	G	1/5 YR
79-00-5	1,1,2-Trichloroethane	(4)	(5)	<5 µg/L	G	1/5 YR
79-01-6	Trichloroethylene	624	10.0	<1 µg/L	G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0	<1 µg/L	G	1/5 YR
	ACID EXTRACTABLES [6]					
95-57-8	2-Chlorophenol	625	10.0	<5.5 µg/L	G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0	<5.56 µg/L	G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0	<5.56 µg/L	G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	(4)	(5)	<11.1 µg/L	G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	(4)	(5)	<11.1 µg/L	G or C	1/5 YR
25154-52-3	Nonylphenol	(4)	(5)		G or C	1/5 YR
87-86-5	Pentachlorophenol	625	50.0	<5.56 µg/L	G or C	1/5 YR
108-95-2	Phenol	625	10.0	<5.56 µg/L	G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0	<5.56 µg/L	G or C	1/5 YR
	MISCELLANEOUS					
776-41-7	Ammonia as NH3-N	350.1	200	17.9 mg/L	C	1/5 YR
7782-50-5	Chlorine Produced Oxidant	(4)	(5)	<0.1 mg/L	G	1/5 YR
7782-50-5	Chlorine, Total Residual	(4)	100	<0.1 mg/L	G	1/5 YR
57-12-5	Cyanide, Free	(4)	10.0	0.023 mg/L	G	1/5 YR
N/A	*E. coli / Enterococcus* (N/CML)	(4)	(5)	E coli <1 mpn/100 EC 17 mpn/100	G	1/5 YR
7783-06-4	Hydrogen Sulfide	(4)	(5)	<0.5 mg/L	G	1/5 YR
60-10-5	Tributyltin [7]	NBSR 85-3295	(5)	<0.03 µg/L	G or C	1/5 YR

Outfall 002

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
471-34-1	Hardness (mg/L as $CaCO_3$)	(4)	(5)	2 mg/L	G or C (10)	1/5 YR

William Purcell Env. Mgr.

Name of Principal Exec. Officer or Authorized Agent/Title

11/23/15

Signature of Principal Officer or Authorized Agent/Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information shall be submitted to document that the required quantification level has been attained.

Quantification Levels (ug/L)

CAS	Parameter	Outfall 002	Outfall 995	Refrigeration Water
7440-36-0	Antimony, dissolved	6400	3200	1.4
7440-38-2	Arsenic, dissolved	2200	55	1.0
7440-43-9	Cadmium, dissolved	530	32	0.3
16065-83-1	Chromium III, dissolved	3.6	3.6	3.6
18540-29-9	Chromium VI, dissolved	3000	880	1.6
7440-50-8	Copper, dissolved	360	7.4	0.50
7439-92-1	Lead, dissolved	560	190	0.50
7439-97-6	Mercury, dissolved	56	1.4	1.0
7440-02-0	Nickel, dissolved	490	59	0.94
7782-49-2	Selenium, dissolved	4300	230	2.0
7440-22-4	Silver, dissolved	76	1.5	0.20
7440-66-6	Zinc, dissolved	3600	72	3.6

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

REVISED
SS 12/11/15

Universal Laboratories
20 Research Drive
Hampton, VA 23666
Phone: 1-800-695-2162
Fax: **757-865-8014**

Client Report For:	**Omega Protein, Inc.**
Attention:	Mr. Bill Purcell
Client Address:	610 Menhaden Road Reedville, VA 22539
Project:	**OF-002 2C and Attachment A**
Order Number:	**1504405**
Report Date:	12/11/2015
Lab Receipt Date:	08/04/2015
Comment:	Composite Start: 08/03/2015 08:00, Composite Stop: 08/04/2015 08:00

This report contains the analytical results for the indicated Project and Order. The results contained in this report relate only to the samples identified in this Order. The analytical results meet all requirements of NELAC unless specifically stated. This report shall not be reproduced except in full.

The data in this report has been reviewed and validated by: Carol K Zeno Signature

Carol K Zeno Name

Pres / Tech Director Title

Universal Laboratories

Client:	Omega Protein, Inc.	**Client Sample ID:**	OF-002
Lab ID:	1504405-002	**Collection Date:**	08/04/2015 08:00
Permit ID	VA0003867	**Matrix:**	AQUEOUS

Analyses

Biochemical Oxygen Demand (BOD) 5 Day — *SM 5210 B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Biochemical Oxygen Demand	660	mg/L	2	08/05/2015 19:00	RB		460036

Chemical Oxygen Demand — *HACH 8000*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Chemical Oxygen Demand	2586	mg/L	20	08/11/2015 13:30	EK		460036

Solids, Total Suspended — *SM 2540D (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Solids, Total Suspended	34.5	mg/L	1	08/04/2015 18:21	RB		460036

Ammonia as N, Total — *EPA 350.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Ammonia as N	17.9	mg/L	0.6	08/05/2015 17:58	EK		460036

Bromide — *SM 4500 Br- B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Bromide	ND	mg/L	5	08/10/2015 17:30	LS	MI	

Color — *SM 2120B (2001)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Color	35	CU	1	8/4/15 18:38	LS		
Temperature	20.3	C	0.1	8/4/15 18:38	LS		
pH	8.6	pH Units	0.1	8/4/15 18:38	LS		

Fluoride — *SM 4500 F C (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Fluoride	0.9	mg/L	0.1	08/12/2015 18:51	EK		460036

Nitrate and Nitrite — *EPA 353.2*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Nitrate/Nitrite as N	ND	mg/L	0.1	08/07/2015 15:31	EK		460036

Oil and Grease (SGT-HEM) — *EPA 1664A*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Petroleum Oil Hydrocarbons (SGT-HEM)	ND	mg/L	5	8/6/15 12:08	LS		460036

Universal Laboratories

Client: Omega Protein, Inc. **Client Sample ID:** OF-002
Lab ID: 1504405-002 **Collection Date:** 08/04/2015 08:00
Permit ID VA0003867 **Matrix:** AQUEOUS

Analyses

Nitrogen, Organic — *EPA 351.2/ EPA 350.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Ammonia as N	17.9	mg/L	0.6	08/05/2015 17:58	EK		
Nitrogen, Total Kjeldahl	26.0	mg/L	0.6	08/05/2015 17:58	EK		
Nitrogen, Organic	8.13	mg/L	0.6	08/05/2015 17:58	EK		

Phosphorus, Total — *EPA 365.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Phosphorus, Total	0.13	mg/L	0.02	08/06/2015 18:27	EK		460036

Sulfate — *ASTM D516-07*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sulfate as SO4	32.8	mg/L	2.5	08/12/2015 11:57	EK		460036

Sulfide — *SM 4500-S2 F (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sulfide	ND	mg/L	0.5	8/6/15 19:18	LS		460036

Methylene Blue Active Substances — *SM 5540C (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Methylene Blue Active Substances	ND	mg/L	0.2	08/05/2015 18:18	LS	MS	

Phenolics, Total — *SM 5530 D (2005)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Phenolics	0.372	mg/L	0.05	08/12/2015 14:42	EK		460036

Cyanide, Total — *EPA 335.4*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Cyanide, Total	ND	mg/L	0.002	08/05/2015 13:57	EK		460036

Hardness as CaCO3 — *SM 2340C (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Hardness, Total	2	mg/L	2	8/6/15 11:53	EK		460036

Dioxin Screen AQ — *EPA 625*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
2,3,7,8-TCDD	Negative			08/05/2015 21:00	BD		

Volatile Organics AQ — *EPA 624*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
1,1,1-Trichloroethane	ND	ug/L	1	8/10/2015 23:8	BD		460036

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-002
Lab ID: 1504405-002	**Collection Date:** 08/04/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Volatile Organics AQ ***EPA 624***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
1,1,2,2-Tetrachloroethane	ND	ug/L	5	8/10/2015 23:8	BD		460036
1,1,2-Trichloroethane	ND	ug/L	5	8/10/2015 23:8	BD		460036
1,1-Dichloroethane	ND	ug/L	1	8/10/2015 23:8	BD		460036
1,1-Dichloroethene	ND	ug/L	5	8/10/2015 23:8	BD		460036
1,2-Dichloroethane	ND	ug/L	5	8/10/2015 23:8	BD		460036
1,2-Dichloropropane	ND	ug/L	1	8/10/2015 23:8	BD		460036
1,3-Dichlorobenzene	ND	ug/L	1	8/10/2015 23:8	BD		460036
1,4-Dichlorobenzene	ND	ug/L	5	8/10/2015 23:8	BD		460036
2-Chloroethylvinyl ether	ND	ug/L	1	8/10/2015 23:8	BD		460036
Acrolein	ND	ug/L	10	8/10/2015 23:8	BD		460036
Acrylonitrile	ND	ug/L	10	8/10/2015 23:8	BD		460036
Benzene	ND	ug/L	1	8/10/2015 23:8	BD		460036
Bromodichloromethane	ND	ug/L	1	8/10/2015 23:8	BD		460036
Bromoform	ND	ug/L	1	8/10/2015 23:8	BD		460036
Bromomethane	ND	ug/L	10	8/10/2015 23:8	BD		460036
Carbon tetrachloride	ND	ug/L	1	8/10/2015 23:8	BD		460036
Chlorobenzene	ND	ug/L	1	8/10/2015 23:8	BD		460036
Chloroethane	ND	ug/L	5	8/10/2015 23:8	BD		460036
Chloroform	ND	ug/L	1	8/10/2015 23:8	BD		460036
Chloromethane	ND	ug/L	1	8/10/2015 23:8	BD		460036
cis-1,3-Dichloropropene	ND	ug/L	1	8/10/2015 23:8	BD		460036
Dibromochloromethane	ND	ug/L	1	8/10/2015 23:8	BD		460036
Ethylbenzene	ND	ug/L	1	8/10/2015 23:8	BD		460036
Methylene chloride	ND	ug/L	10	8/10/2015 23:8	BD		460036
Tetrachloroethene	ND	ug/L	1	8/10/2015 23:8	BD		460036
Toluene	ND	ug/L	1	8/10/2015 23:8	BD		460036
trans-1,2-Dichloroethene	ND	ug/L	1	8/10/2015 23:8	BD		460036
trans-1,3-Dichloropropene	ND	ug/L	1	8/10/2015 23:8	BD		460036
Trichloroethene	ND	ug/L	1	8/10/2015 23:8	BD		460036
Vinyl chloride	ND	ug/L	1	8/10/2015 23:8	BD		460036
surrogate 1,2-Dichloroethane-d4 (% Recovery)	111	%	69.5-130.5	8/10/2015 23:8	BD		
surrogate 4-Bromofluorobenzene (% Recovery)	102	%	69.5-130.5	8/10/2015 23:8	BD		
surrogate Dibromofluoromethane (% Recovery)	111	%	69.5-130.5	8/10/2015 23:8	BD		
surrogate Toluene-d8 (% Recovery)	95	%	69.5-130.5	8/10/2015 23:8	BD		

Tributyltin AQ ***Analysis of Butyltins in Env. Samples***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Tributyltin	ND	ug/L	0.03	8-11-2015 06:41:20 PM	BD		460036
surrogate Tripentyltin (% Recovery)	136	%	49.5-150.5	8-11-2015 06:41:20 PM	BD		

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-002
Lab ID: 1504405-002	**Collection Date:** 08/04/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Metals by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Tin, Total	ND	mg/L	0.005	08/10/2015 15:49	LS		
Aluminum, Total	ND	mg/L	1	08/05/2015 13:35	LS		460036
Antimony, Total	ND	mg/L	1	08/05/2015 13:35	LS		460036
Arsenic, Total	0.018	mg/L	0.005	08/05/2015 13:35	LS		460036
Barium, Total	0.008	mg/L	0.005	08/05/2015 13:35	LS	B	460036
Beryllium, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Boron, Total	ND	mg/L	1	08/05/2015 13:35	LS		460036
Cadmium, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Chromium, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Cobalt, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Copper, Total	0.016	mg/L	0.001	08/05/2015 13:35	LS		460036
Iron, Total	ND	mg/L	1	08/05/2015 13:35	LS		460036
Lead, Total	0.005	mg/L	0.005	08/05/2015 13:35	LS	B	460036
Magnesium, Total	0.139	mg/L	0.05	08/05/2015 13:35	LS		460036
Manganese, Total	0.008	mg/L	0.001	08/05/2015 13:35	LS		460036
Molybdenum, Total	0.042	mg/L	0.003	08/05/2015 13:35	LS		460036
Nickel, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Selenium, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Thallium, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Titanium, Total	ND	mg/L	0.005	08/05/2015 13:35	LS		460036
Zinc, Total	0.020	mg/L	0.005	08/05/2015 13:35	LS		460036

Metals Dissolved by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Antimony, Dissolved	ND	mg/L	0.005	08/07/2015 18:03	LS		460036
Arsenic, Dissolved	0.010	mg/L	0.005	08/07/2015 18:03	LS		460036
Cadmium, Dissolved	ND	mg/L	0.005	08/07/2015 18:03	LS		460036
Copper, Dissolved	0.005	mg/L	0.001	08/07/2015 18:03	LS		460036
Lead, Dissolved	ND	mg/L	0.005	08/07/2015 18:03	LS		460036
Nickel, Dissolved	ND	mg/L	0.005	08/07/2015 18:03	LS		460036
Selenium, Dissolved	ND	mg/L	0.005	08/07/2015 18:03	LS		460036
Thallium, Dissolved	ND	mg/L	0.005	08/07/2015 18:03	LS		460036
Zinc, Dissolved	0.019	mg/L	0.005	08/07/2015 18:03	LS		460036

Pesticides AQ ***EPA 8081B***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
4,4'-DDD	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		460036
4,4'-DDE	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		460036
4,4'-DDT	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		460036
Aldrin	ND	ug/L	0.05	8-7-2015 08:12:30 AM	BD		460036
alpha-BHC	ND	ug/L	0.5	8-7-2015 08:12:30 AM	BD		460036
beta-BHC	ND	ug/L	0.05	8-7-2015 08:12:30 AM	BD		460036

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-002
Lab ID: 1504405-002	**Collection Date:** 08/04/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Pesticides AQ ***EPA 8081B***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Chlordane (tech)	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		
delta-BHC	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		460036
Dieldrin	ND	ug/L	0.05	8-7-2015 08:12:30 AM	BD		460036
Endosulfan I	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		460036
Endosulfan II	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		460036
Endosulfan sulfate	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD		460036
Endrin	ND	ug/L	0.1	8-7-2015 08:12:30 AM	BD	QC	460036
Endrin aldehyde	ND	ug/L	0.05	8-7-2015 08:12:30 AM	BD		460036
gamma-BHC (Lindane)	ND	ug/L	0.05	8-7-2015 08:12:30 AM	BD		460036
Heptachlor	ND	ug/L	0.5	8-7-2015 08:12:30 AM	BD		460036
Heptachlor epoxide	ND	ug/L	0.05	8-7-2015 08:12:30 AM	BD		460036
Methoxychlor	ND	ug/L	0.05	8-7-2015 08:12:30 AM	BD	QC	460036
Toxaphene (tech)	ND	ug/L	0.5	8-7-2015 08:12:30 AM	BD		
surrogate TCMX (% Recovery)	66	%	29.5-130.5	8-7-2015 08:12:30 AM	BD		
surrogate DCB (% Recovery)	68	%	29.5-130.5	8-7-2015 08:12:30 AM	BD		

Semi Volatile Organics AQ ***EPA 8270D***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
1,2,4-Trichlorobenzene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
1,2-Dichlorobenzene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
1,3-Dichlorobenzene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
1,4-Dichlorobenzene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2,4,6-Trichlorophenol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2,4-Dichlorophenol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2,4-Dimethylphenol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2,4-Dinitrophenol	ND	ug/L	11.1	5 Aug 2015 7:43 pm	BD		460036
2,4-Dinitrotoluene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2,6-Dinitrotoluene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2-Chloronaphthalene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2-Chlorophenol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
2-Methyl-4,6-dinitrophenol	ND	ug/L	11.1	5 Aug 2015 7:43 pm	BD		460036
2-Nitrophenol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
3,3'-Dichlorobenzidine	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
4-Bromophenyl phenyl ether	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
4-Chlorophenyl phenyl ether	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
4-Nitrophenol	ND	ug/L	11.1	5 Aug 2015 7:43 pm	BD		460036
Acenaphthene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Acenaphthylene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Anthracene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Azobenzene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Benzidine	ND	ug/L	11.1	5 Aug 2015 7:43 pm	BD		460036

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-002
Lab ID: 1504405-002	**Collection Date:** 08/04/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Semi Volatile Organics AQ ***EPA 8270D***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Benzo (a) anthracene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Benzo (a) pyrene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Benzo (b) fluoranthene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Benzo (g,h,i) perylene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Benzo (k) fluoranthene	ND	ug/L	11.1	5 Aug 2015 7:43 pm	BD		460036
Bis(2-chloroethoxy)methane	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Bis(2-chloroethyl)ether	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Bis(2-chloroisopropyl)ether	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Bis(2-ethylhexyl)phthalate	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Butyl benzyl phthalate	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Chrysene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Di-n-butyl phthalate	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Di-n-octyl phthalate	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Dibenz (a,h) anthracene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Diethyl phthalate	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Dimethyl phthalate	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Fluoranthene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Fluorene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Hexachlorobenzene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Hexachlorobutadiene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Hexachlorocyclopentadiene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Hexachloroethane	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Indeno (1,2,3-cd) pyrene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Isophorone	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Kepone	ND	ug/L	11.1	5 Aug 2015 7:43 pm	BD		460036
m,p-Cresols	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
N-Nitrosodi-n-propylamine	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
N-Nitrosodimethylamine	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
N-Nitrosodiphenylamine	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Naphthalene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Nitrobenzene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
o-Cresol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Pentachlorophenol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Phenanthrene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Phenol	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
Pyrene	ND	ug/L	5.56	5 Aug 2015 7:43 pm	BD		460036
surrogate 2,4,6-Tribromophenol (% Recovery)	119	%	9.5-123.4	5 Aug 2015 7:43 pm	BD		
surrogate 2-Fluorobiphenyl (% Recovery)	44	%	42.6-116.5	5 Aug 2015 7:43 pm	BD		
surrogate 2-Fluorophenol (% Recovery)	100	%	20.6-110.5	5 Aug 2015 7:43 pm	BD		
surrogate Nitrobenzene-d5 (% Recovery)	45	%	34.6-114.5	5 Aug 2015 7:43 pm	BD		
surrogate p-Terphenyl-d14 (% Recovery)	56	%	32.6-141.4	5 Aug 2015 7:43 pm	BD		

Universal Laboratories

Client:	Omega Protein, Inc.	**Client Sample ID:**	OF-002
Lab ID:	1504405-002	**Collection Date:**	08/04/2015 08:00
Permit ID	VA0003867	**Matrix:**	AQUEOUS

Analyses

Semi Volatile Organics AQ ***EPA 8270D***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
surrogate Phenol-d5 (% Recovery)	42	%	9.5-110.5	5 Aug 2015 7:43 pm	BD		

Polychlorinated Biphenyls AQ ***EPA 8082A***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
PCBs, Total	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		
PCB-1016	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		460036
PCB-1260	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		460036
PCB-1221	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		460036
PCB-1232	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		460036
PCB-1242	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		460036
PCB-1248	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		460036
PCB-1254	ND	ug/L	1	8/07/2015 08:12:30 AM	BD		460036
surrogate TCMX (% Recovery)	69	%	29.5-150.5	8/07/2015 08:12:30 AM	BD		
surrogate DCB (% Recovery)	119	%	29.5-150.5	8/07/2015 08:12:30 AM	BD		

Chromium, Hexavalent ***SM 3500-CR B (2011)***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Chromium, Hexavalent	ND	mg/L	0.005	8/4/2015 16:05	EK		460036

Chromium, Trivalent by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Chromium, Trivalent	ND	ug/L	5	08/05/2015 13:35	LS		

Silver, Dissolved by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Silver, Dissolved	ND	mg/L	0.05	08/26/2015 16:58	LS		460036

Silver, Total by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Silver, Total	ND	mg/L	0.05	08/26/2015 16:58	LS		460036

Glossary of Terms and Abbreviations

ND	No Analyte Detected
NR	No Results available, analyte not in instrument calibration
RL	(Reporting Limit) The minimum levels, concentrations, or quantities of a target analyte that can be reported within a specified degree of confidence. Generally, this number is equal to or just above the lowest calibration standard run with the analytical batch.
B	Analyte was found in the method blank
D	RPD outside acceptable limits
H	Holding time exceeeded
IS	Internal standard outside acceptable limits
J	Result above calibration curve - results are approximate
L	LCS Outside acceptable limits
MI	Matrix interence
MS	Matrix spike recovery outside acceptable limits
QC	Method QC criteria not met
S	Surrogate outside acceptable limits
V	ICV/CCV/FCV outside acceptable limits
LCS	(Laboratory Control Sample) A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	Method Detection Limitis is an estimate of the minimum amount of a substance that an analytical process can reliably detect
RPD	(Relative Percent Difference) The difference between a set of duplicates or sample spike duplicates.
MS/MSD	(Matrix Spike or Matrix Spike Duplicate) A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analytes concentration is available. Matrix Spikes are used, for example, to determine the effect of the matrix on a method's recovery efficiency.
Calibration Verfication	(Initial, Continuing, or Final) A standard analyzed at different times to verify that the initial calibration curve is still valid.
Holding Time	The maximum time that samples may be held prior to analysis and still be considered valid or not compromised.
Internal Standard	A known amount of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method.
Method Blank	A sample of a matrix similar to the batch associated samples (when available) that is free from the analytes of interest and is processed simulatanously with and under the same conditions as samples.
Surrogate	A substance with properties that mimic the analyte of interest. It is unlikely to be found in environmental samples and is added to them for quality control purposes in Organics.
EPL	Exceeds Permit Limit. This is a qualifier to denote that the result exceeds the permit limit of the sample location.
Exceeds Benchmark Concentration	Result Exceeds Benchmark concentration listed in the General Permit. Benchmark Concentrations are primarily used to determine the overall effectivenss of the Stormwater pollution prevention plan. Excedence of Benchamrk concentrations does NOT constitute a violation of this permit and does NOT indicate that violation of a water quality standard has occured.

REPORT OF ANALYSIS

CLIENT: Universal Laboratories
ATTN: Dan Thornton
ADDRESS: 20 Research Drive
Hampton, VA 23666
PHONE: (757) 865-0880
FAX: e: d.thornton@universallaborato

Special Notes:

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 8/4/2015 Time: 0800
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: CLIENT
SAMPLE RECEIPT:
Date: 8/10/2015 Time: 0840
NUMBER OF CONTAINERS: 5
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)
REPORT NO: 15-11590 17:32

SAMPLE ID: 1504405-001 OF-002
SAMPLE NO: 15-11590

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Parathion	614	1	< 1	ug/L	JFS	08/12/15	0653
Malathion	614	1	< 1 CC	ug/L	JFS	08/12/15	0653
Demeton	614	1	< 1	ug/L	JFS	08/12/15	0653
Diazinon	614	1	< 1 CC	ug/L	JFS	08/12/15	0653
Guthion	622	1	< 1 CC	ug/L	JFS	08/12/15	0533
Chlorpyrifos	622	0.2	< 0.2	ug/L	JFS	08/12/15	0533
Mirex	8081B	0.05	< 0.05	ug/L	JFS	08/11/15	1825

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

Reproduction of this report is not permitted, except in full, without written approval from James R Reed & Associates.

The results on this report relate only to the sample(s) provided for analysis.

Results conform to NELAC standards, where applicable, unless otherwise indicated.

CC - Calibration check standard above QC acceptance range ,

analyte not detected in sample.

Method 614: K - Insufficient volume provided to perform matrix spike.

Method 622: S - Surrogate recovery outside acceptance range,

due to sample matrix interference.

Authorized By: Elaine Claiborne

Elaine Claiborne, Laboratory Director

Date: 13-Aug-15

James R. Reed & Associates
770 Pilot House Drive, Newport News, VA 23606
(757) 873-4703 ● Fax: (757) 873-1498

VELAP# 460013
EPA# VA00015

15-11590 A1-2

Universal Laboratories
Subcontract Chain of Custody

20 Research Drive Hampton, VA 23666
Phone: 757-865-0880
Fax: 757-865-8014
UL Contact: Dan Thornton

To: Sample Receiving
James R. Reed & Assoc.

SUB PO Number: 080715-012

Sample #	Sample Location	Test	Matrix	Sample Date	Sample Time
1504405-002	OF-002	Pesticides	Aqueous	08/04/2015	8:00AM
(FF,GG,HH)					
(Z,Y)					

Comments:	Report: Dursban, Demeton, Diazinon, Guthion, Malathion, Mirex, & Parathion by any VA certified 40 CFR Part 136 method	Cooler Temp:	
		Preservation:	

Relinquish By	Date/Time	Receive By:	Date/Time
[signature]	8/10/15 0835	[signature]	8-10-15 @840

ARRIVAL TEMP 5.5°C

Microbac

Laboratory Report Number: L15080506 *(Revised)*

Revised

Dan Thornton
Universal Labs
20 Research Drive
Hampton, VA 23666

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Emily Yoak – Client Services Specialist
(740) 373-4071
emily.yoak@microbac.com

I certify that all test results meet all of the requirements of the accrediting authority listed below. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on August 19 2015

David L. Vandenberg

David Vandenberg – Managing Director

State of Origin: VA
Accrediting Authority: Common Wealth of Virginia ID:460187
QAPP: Microbac OVD

Microbac

Lab Report #: L15080506
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

There were no discrepancies.

Discrepancy	Resolution

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #	Temp Required?
00112986	H	0.0		774247460315	X

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	Yes
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	NA

Microbac

Lab Report #: L15080506
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
1504405-002P	L15080506-01	08/04/2015 08:00	08/11/2015 09:52
1504405-002J	L15080506-02	08/04/2015 08:00	08/11/2015 09:52
1504405-002G	L15080506-03	08/04/2015 08:00	08/11/2015 09:52

Microbac Laboratories • Ohio Valley Division
158 Starlite Drive, Marietta, OH 45750 • T: (740)373-4071 F: (740)373-4835
www.microbac.com

Microbac

Lab Report #: L15080506
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Certificate of Analysis

Sample #:	L15080506-01	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	1504405-002P	**Prep Method:**	415.1	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	415.1	**Cal Date:**	05/27/2015 15:47
Workgroup #:	WG534484	**Analyst:**	EPT	**Run Date:**	08/11/2015 16:57
Collect Date:	08/04/2015 08:00	**Dilution:**	25	**File ID:**	TC08112015.016
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon	TOC	766		25.0	12.5

Sample #:	L15080506-02	**PrePrep Method:**	N/A	**Instrument:**	CVAA1
Client ID:	1504405-002J	**Prep Method:**	7470A	**Prep Date:**	08/12/2015 12:53
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	08/13/2015 13:19
Workgroup #:	WG534903	**Analyst:**	PDM	**Run Date:**	08/13/2015 14:07
Collect Date:	08/04/2015 08:00	**Dilution:**	1	**File ID:**	M7.081315.140718
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		ND	0.000200	0.000100
ND	Not detected at or above the reporting limit (RL)				

Sample #:	L15080506-03	**PrePrep Method:**	N/A	**Instrument:**	CVAA1
Client ID:	1504405-002G	**Prep Method:**	7470A	**Prep Date:**	08/12/2015 12:53
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	08/13/2015 13:19
Workgroup #:	WG534903	**Analyst:**	PDM	**Run Date:**	08/13/2015 14:12
Collect Date:	08/04/2015 08:00	**Dilution:**	1	**File ID:**	M7.081315.141219
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6		ND	0.000200	0.000100
ND	Not detected at or above the reporting limit (RL)				

Microbac

Lab Report #:	L15080506
Lab Project #:	3137.001
Project Name:	Universal Labs-VA
Lab Contact:	Emily Yoak

Certificate of Analysis

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
August 19, 2015

001 - BIO-CHEM TESTING WVDEP 220
002 - REIC Consultants, Inc. WVDEP 060
003 - Sturm Environmental
004 - MICROBAC PITTSBURGH
005 - ES LABORATORIES
006 - ALCOSAN LABORATORIES
007 - ALS LABORATORIES
008 - BENCHMARK LABORATORIES
010 - MICROBAC CHICAGOLAND
AC - AMBER R. CARMICHAEL
ADC - ANTHONY D. CANTER
ADG - APRIL D. GREENE
AED - ALLEN E. DAVIS
ALS - ADRIANE L. STEED
AWE - ANDREW W. ESSIG
AZH - AFTER HOURS
BJO - BRIAN J. OGDEN
BKT - BRENDAN TORRENCE
BLG - BRENDA L. GREENWALT
BRG - BRENDA R. GREGORY
CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS
CEB - CHAD E. BARNES
CJR - COURTNEY J. REXROAD
CLC - CHRYS L. CRAWFORD
CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS
CPD - CHAD P. DAVIS
CSH - CHRIS S. HILL
DAK - DEAN A. KETELSEN
DCM - DAVID C. MERCKLE
DEV - DAVID E. VANDENBERG
DIH - DEANNA I. HESSON
DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE
DLW - DIANA L. WRIGHT
DSM - DAVID S. MOSSOR
ECL - ERIC C. LAWSON
ENY - EMILY N. YOAK
EPT - ETHAN P. TIDD
ERP - ERIN R. PORTER
FJB - FRANCES J. BOLDEN
JBK - JEREMY B. KINNEY
JDH - JUSTIN D. HESSON
JDS - JARED D. SMITH
JJS - JOHN J. STE MARIE
JKP - JACQUELINE K. PARSONS
JLL - JOHN L. LENT
JMW - JEANA M. WHITE
JTP - JOSHUA T. PEMBERTON
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KAJ - KELLIE A. JOHNSON
KAT - KATHY A. TUCKER
KDW - KATHRYN D. WELCH
KEB - KATIE E. BARNES
KHR - KIM H. RHODES
KKB - KERRI K. BUCK
KRA - KATHY R. ALBERTSON
KRB - KAELY R. BECKER
KRP - KATHY R. PARSONS
LEC - LAURA E. CARPENTER
LKN - LINDA K. NEDEFF
LLS - LARRY L. STEPHENS
LSB - LESLIE S. BUCINA
MBK - MORGAN B. KNOWLTON
MDA - MIKE D. ALBERTSON
MDC - MIKE D. COCHRAN
MES - MARY E. SCHILLING
MLB - MEGAN L. BACHE
MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR
MSW - MATT S. WILSON
PDM - PIERCE D. MORRIS
PIT - MICROBAC WARRENDALE
PRL - PAIGE R. LAMB
PSW - PEGGY S. WEBB
QX - QIN XU
RAH - ROY A. HALSTEAD
REK - BOB E. KYER
RLB - BOB BUCHANAN
RM - RAYMOND MALEKE
RNP - RICK N. PETTY
RST - ROBIN S. TURNER
SAV - SARAH A. VANDENBERG
SCB - SARAH C. BOGOLIN
SDC - SHALYN D. CONLEY
SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF
TB - TODD BOYLE
TGF - TIM G. FELTON
TMB - TIFFANY M. BAILEY
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER
WJB - WILL J. BEASLEY
WRR - WESLEY R. RICHARDS
WTD - WADE T. DELONG
XXX - UNAVAILABLE OR SUBCONTRACT

Microbac Laboratories Inc.
List of Valid Qualifiers
August 19, 2015

Qualkey: STD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
B,H1	Analyte present in method blank. Sample analysis performed past holding time.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
CT1	The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
E,CT1	Estimated results. The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
F,CT1	Estimated value; the analyte concentration was less than the RL/LOQ. The cooler temperature at receipt exceeded regula
FL	Free Liquid
H1	Sample analysis performed past holding time.
H1,CT1	Sample analysis performed past holding time. The cooler temperature at receipt exceeded regulatory guidelines for reque
I	Semiquantitative result (out of instrument calibration range)
J	Estimated value; the analyte concentration was less than the RL/LOQ.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,CT1	Estimated value; the analyte concentration was less than the RL/LOQ.
J,CT1	Estimated value; the analyte concentration was less than the RL/LOQ. The cooler temperature at receipt exceeded regula
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL)
ND, B	Not detected at or above the reporting limit (RL). Analyte present in method blank.
ND, CT1	Analyte was not detected. The concentration is below the reported LOD. The cooler temperature at receipt exceeded reg
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
ND,H1	Not detected; Sample analysis performed past holding time.
ND,H1,CT1	Not detected; Sample analysis performed past holding time. The cooler temperature at receipt exceeded regulatory guide
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
TNTC, B	Too numerous to count. Analyte present in method blank.
TNTC,CT1	Too numerous to count. The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
TNTC,H1	Too numerous to count. Sample analysis performed past holding time.
U	Analyte was not detected. The concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)

Z	Cannot be resolved from isomer - see below

Universal Laboratories

Subcontract Chain of Custody

20 Research Drive Hampton, VA 23666
Phone: 757-865-0880
Fax: 757-865-8014
UL Contact: Dan Thornton

To: Sample Receiving
Microbac OVD

SUB PO Number: 081015-009

Sample #	Sample Location	Test	Matrix	Sample Date	Sample Time
1504405-002 P	OF-002	Organic Carbon, Total	Aqueous	08/04/2015 8:00AM	
1504405-002 5	OF-002	Mercury, Dissolved	Aqueous	08/04/2015 8:00AM	
1504405-002 6	OF-002	Mercury, Total	Aqueous	08/04/2015 8:00AM	
1508042-001	CCT3 Grab	Mercury, Total	Aqueous	08/06/2015 9:15AM	

Microbac OVD
Received: 08/11/2015 09:52
By: BRENDA GREENWALT
221000073745

Brenda Greenwalt

Comments:	VA Certification	Please report separately	Cooler Temp:	
			Preservation:	

Relinquish By	Date/Time	Receive By:	Date/Time
[signature]	8-10-15/1400		

NELAP Addendum - July 27, 2015

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
Total Halide by Bomb Combustion (TX)
Particle Sizing - 200 Mesh (PS200)
Specific Gravity/Density (SPGRAV)
Total Residual Chlorine (CL-TRL)
Total Volatile Solids (all forms) (TVS)
Total Coliform Bacteria (all methods)
Fecal Coliform Bacteria (all methods)
Sulfite (SO3)
Propionaldehyde (HPLC-UV)

SOLID AND HAZARDOUS CHEMICALS
Nitrogen, Ammonia by Method 350.1
Chromium, Hexavalent, Leachable by SM3500 Cr-B 2009
Phenolics, Total by Method 420.1
ASTM D3987-06

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
Acetic acid
Butyric acid
Lactic acid
Propionic acid
Pyruvic acid

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene
1,4-Dioxane
Atrazine
Benzaldehyde
Biphenyl
Caprolactam
Hexamethylphosphoramide (HMPA)
Pentachlorobenzene
Pentachloroethane

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

OVL HPLC12/HPLC/UV

Acetate
Formate

OVL RSK01/GC-FID

Acetylene
Propane

OVL K9305/ISE

Fluoroborate

SOLID AND HAZARDOUS CHEMICALS

OVL MSS0I/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

OVL MSV0I/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Universal Laboratories
20 Research Drive
Hampton VA 23666-1396

August 24, 2015

Project: Water

Submittal Date: 08/18/2015
Group Number: 1585571
PO Number: 081715-006
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
1504405-002N OF-002 Water	8010989

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO Universal Laboratories Attn: Dan Thornton

Respectfully Submitted,

Stacy L. Butt
Specialist

(717) 556-7236

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: 1504405-002N OF-002 Water

Project Name: Water

Collected: 08/04/2015 08:00

Submitted: 08/18/2015 09:20
Reported: 08/24/2015 12:18

LL Sample # WW 8010989
LL Group # 1585571
Account # 02171

Universal Laboratories
20 Research Drive
Hampton VA 23666-1396

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Wet Chemistry		SM 4500-CN E-1999	mg/l	mg/l	mg/l	
00241	Cyanide (Free)	n.a.	0.023	0.0040	0.010	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00241	Cyanide (Free)	SM 4500-CN E-1999	1	15230114101A	08/18/2015 14:43	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Universal Laboratories
Reported: 08/24/2015 12:18

Group Number: 1585571

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 15230114101A	Sample number(s): 8010989								
Cyanide (Free)	N.D.	0.0040	0.010	mg/l	99		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 15230114101A	Sample number(s): 8010989 UNSPK: P010990 BKG: P010990								
Cyanide (Free)	22*		90-110			N.D.	N.D.	0 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

A - 2171 G-1585571 S - 8010989-990

Universal Laboratories
Subcontract Chain of Custody

20 Research Drive Hampton, VA 23666
Phone: 757-865-0880
Fax: 757-865-8014
UL Contact: Dan Thornton

To: Sample Receiving
Eurofins Lancaster Laboratories

SUB PO Number: 081715-006

	Sample #	Sample Location	Test	Matrix	Sample Date	Sample Time
1.	1504405-002 N	OF-002	Cyanide, Free	Aqueous	08/04/2015 8:00AM	
2.	1508097-001 N	OF-995	Cyanide, Free	Aqueous	08/11/2015 8:00AM	

Comments:	Please report separately	Cooler Temp:	2.8
		Preservation:	

Relinquish By	Date/Time	Receive By:	Date/Time
[signature]	8-17-15/1350		
		[signature]	8.18.15 920

eurofins | Lancaster Laboratories Environmental

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference...

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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Universal Laboratories

CHAIN OF CUSTODY

ID: 1504405

OF-002 and 995 2C and Attachment A

Omega Protein, Inc.
610 Menhaden Road
Reedville,VA,22539

Contact:Becky Robertson,804-453-3830,rrobertson@omegaproteininc.com

20 Research Drive
Hampton, VA 23666
1-800-695-2162
http://www.universallaboratories.net

Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
OF-995	1504405-001		8/3 - 8/4/15 8:00AM - 8:00AM WEP DBT	001A	2/HDPE	<6°C	BOD, COD, TSS, NH3, BR-, COLOR, FLUORIDE, NN, OGN, ORGNIT, T.PHOS, SULFATE, SULFIDE, MBAS, PHENOL, CN, HARD, Dioxin, 624, TBT, METALS, METALSDISS, TOC, CNfree, HGD, HG, PESTsub, 8081, 8270, PCB, AGDISS, AG, FECAL MF, CR6, Cr3, FILTER, E.COLI MPN, ENTERO
				01AA	1/Glass/Solvent Rinsed	<6°C	
				001B	1/HDPE	<6°C	
				01BB	1/Glass/Solvent Rinsed	<6°C	
				001C	1/HDPE	<6°C	
				01CC	1/Glass/Solvent Rinsed	<6°C	
				001D	1/HDPE	H2SO4/<6°C	
				01DD	1/Glass/Solvent Rinsed	<6°C	
				001E	1/HDPE	H2SO4/<6°C	
				01EE	1/Glass/Solvent Rinsed	<6°C	
				001F	1/HDPE	HNO3/<6°C	
				01FF	1/Glass/Solvent Rinsed	<6°C	
				001G	250/HDPE	HNO3/<6°C	
				01GG	1/Glass/Solvent Rinsed	<6°C	
				001H	250/HDPE	HNO3/<6°C	
				01HH	1/Glass/Solvent Rinsed	<6°C	
				001I	500/Polysterene/ dissolved	HNO3/<6°C	
				01II	125/Sterile	Na2S2O3/<6°C	
				001J	500/Polysterene/ dissolved	HNO3/<6°C	

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Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
			8/3 - 8/4/15 800am 800am WEP DBT	01JJ	125/Sterile	Na2S2O3/<6°C	
				001K	500/Polysterene/ dissolved	<6°C	
				01KK	125/Sterile	Na2S2O3/<6°C	
				001L	500/HDPE/Amber	ZnAcetate/NaOH/ <6°C	
				001M	1/HDPE/Amber	NaOH/<6°C	
				001N	1/HDPE/Amber	NaOH/<6°C	
				001O	2/Polycarbonate	HCl/<6°C	
				001P	150/HDPE	H2SO4/<6°C	
				001Q	40/Glass	HCl/<6°C	
				001R	40/Glass	HCl/<6°C	
				001S	40/Glass	HCl/<6°C	
				001T	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001U	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001V	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001W	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001X	1/Glass/Solvent Rinsed	<6°C	
				001Y	1/Glass/Solvent Rinsed	<6°C	
				001Z	1/Glass/Solvent Rinsed	<6°C	
OF-002	1504405-002		8/3 - 8/4/15 800am-900am WEP	002A	2/HDPE	<6°C	BOD, COD, TSS, NH3, BR-, COLOR, FLUORIDE, NN, OGN, ORGNIT, T.PHOS, SULFATE, SULFIDE, MBAS, PHENOL, CN, HARD, Dioxin, 624, TBT, METALS, METALSDISS, TOC, CNfree, HGD, HG, PESTsub, 8081, 8270, PCB, FECAL MF, CR6, Cr3, FILTER, ~~E.COLI MPN, ENTERO~~

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Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
			8/3 - 8/14/15 800am - 8am WEP	02AA	1/Glass/Solvent Rinsed	<6°C	
			–	002B	1/HDPE	<6°C	
			–	02BB	1/Glass/Solvent Rinsed	<6°C	
			–	002C	1/HDPE	<6°C	
			–	02CC	1/Glass/Solvent Rinsed	<6°C	
			–	002D	1/HDPE	H2SO4/<6°C	
			–	02DD	1/Glass/Solvent Rinsed	<6°C	
			–	002E	1/HDPE	H2SO4/<6°C	
			–	02EE	1/Glass/Solvent Rinsed	<6°C	
			–	002F	1/HDPE	HNO3/<6°C	
			–	02FF	1/Glass/Solvent Rinsed	<6°C	
			–	002G	250/HDPE	HNO3/<6°C	
			–	02GG	1/Glass/Solvent Rinsed	<6°C	
			–	002H	250/HDPE	HNO3/<6°C	
			–	02HH	1/Glass/Solvent Rinsed	<6°C	
			–	002I	500/Polysterene/ dissolved	HNO3/<6°C	
			–	~~02II~~	~~125/Sterile~~	~~Na2S2O3/<6°C~~	
			–	002J	500/Polysterene/ dissolved	HNO3/<6°C	
			–	~~02JJ~~	~~125/Sterile~~	~~Na2S2O3/<6°C~~	
			–	002K	500/Polysterene/ dissolved	<6°C	
			–	~~02KK~~	~~125/Sterile~~	~~Na2S2O3/<6°C~~	
			–	002L	500/HDPE/Amber	ZnAcetate/NaOH/ <6°C	
			–	002M	1/HDPE/Amber	NaOH/<6°C	
			–	002N	1/HDPE/Amber	NaOH/<6°C	

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Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
			8/3 - 8/4/15 800am-800am WEP	002O	2/Polycarbonate	HCl/<6°C	
			–	002P	150/HDPE	H2SO4/<6°C	
			–	002Q	40/Glass	HCl/<6°C	
			–	002R	40/Glass	HCl/<6°C	
			–	002S	40/Glass	HCl/<6°C	
			–	002T	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002U	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002V	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002W	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002X	1/Glass/Solvent Rinsed	<6°C	
			–	002Y	1/Glass/Solvent Rinsed	<6°C	
			–	002Z	1/Glass/Solvent Rinsed	<6°C	

NOTES: No Fecals were sampled, only 002 was sampled. CoolerTemp 2.2 C

Phenol int check_____ CN int check_____ BOD int check_____ NH3 int check_____

TRANSFER	SIGNATURE	DATE/TIME	TRANSFER	SIGNATURE	DATE/TIME
Relinquished by	Brittany Thrift	8-4-15/1240	Received by	[illegible]	8-4-15/1240
Relinquished by			Received by		
Relinquished by			Received by		
Relinquished by			Received by		

Outfall 995

ATTACHMENT A
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
	METALS					
7440-36-0	Antimony, dissolved	(3)	(1)	<0.005 mg/L	G or C	1/5 YR
7440-38-2	Arsenic, dissolved	(3)	(1)	<0.005 mg/L	G or C	1/5 YR
7440-43-9	Cadmium, dissolved	(3)	(1)	<0.005 mg/L	G or C	1/5 YR
16065-83-1	Chromium III, dissolved [8]	(3)	(1)	< 5 µg/L	G or C	1/5 YR
18540-29-9	Chromium VI, dissolved [8]	(3)	(1)	< 5 µg/L	G or C	1/5 YR
7440-50-8	Copper, dissolved	(3)	(1)	0.009 mg/L	G or C	1/5 YR
7439-92-1	Lead, dissolved	(3)	(1)	<0.005 mg/L	G or C	1/5 YR
7439-97-6	Mercury, dissolved	(3)	(1)	<0.000200 mg/L	G or C	1/5 YR
7440-02-0	Nickel, dissolved	(3)	(1)	< 0.005 mg/L	G or C	1/5 YR
7782-49-2	Selenium, dissolved	(3)	(1)	<0.005 mg/L	G or C	1/5 YR
7440-22-4	Silver, dissolved	(3)	(1)	<0.05 mg/L	G or C	1/5 YR
7440-28-0	Thallium, dissolved	(4)	(5)	<0.005 mg/L	G or C	1/5 YR
7440-66-6	Zinc, dissolved	(3)	(1)	0.011 mg/L	G or C	1/5 YR
	PESTICIDES/PCB'S					
309-00-2	Aldrin	608	0.05	<0.05 µg/L	G or C	1/5 YR
57-74-9	Chlordane	608	0.2	<0.1 µg/L	G or C	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	(4)	(5)	<0.2 µg/L	G or C	1/5 YR
72-54-8	DDD	608	0.1	<0.1 µg/L	G or C	1/5 YR
72-55-9	DDE	608	0.1	<0.1 µg/L	G or C	1/5 YR
50-29-3	DDT	608	0.1	<0.1 µg/L	G or C	1/5 YR
8065-48-3	Demeton	(4)	(5)	<1 µg/L	G or C	1/5 YR
333-41-5	Diazinon	(4)	(5)	<1 µg/L	G or C	1/5 YR
60-57-1	Dieldrin	608	0.1	<0.05 µg/L	G or C	1/5 YR
959-98-8	Alpha-Endosulfan	608	0.1	<0.1 µg/L	G or C	1/5 YR
33213-65-9	Beta-Endosulfan	608	0.1	<0.1 µg/L	G or C	1/5 YR
1031-07-8	Endosulfan Sulfate	608	0.1	<0.1 µg/L	G or C	1/5 YR
72-20-8	Endrin	608	0.1	<0.1 µg/L	G or C	1/5 YR
7421-93-4	Endrin Aldehyde	(4)	(5)	<0.05 µg/L	G or C	1/5 YR

Gottfall 995

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
86-50-0	Guthion	(4)	(5)	<1 µg/L	G or C	1/5 YR
76-44-8	Heptachlor	608	0.05	< 0.5 µg/L	G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	(4)	(5)	<0.05 µg/L	G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608	(5)	< 0.5 µg/L	G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608	(5)	< 0.05 µg/L	G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC or Lindane	608	(5)	<0.05 <0.1 µg/L	G or C	1/5 YR
143-50-0	Kepone	(9)	(5)	< 10.2 µg/L	G or C	1/5 YR
121-75-5	Malathion	(4)	(5)	<1 µg/L	G or C	1/5 YR
72-43-5	Methoxychlor	(4)	(5)	<0.05 µg/L	G or C	1/5 YR
2385-85-5	Mirex	(4)	(5)	<0.05 µg/L	G or C	1/5 YR
56-38-2	Parathion	(4)	(5)	<1 µg/L	G or C	1/5 YR
1336-36-3	PCB Total	608	7.0	< 1.05 µg/L	G or C	1/5 YR
8001-35-2	Toxaphene	608	5.0	< 0.5 µg/L	G or C	1/5 YR
	BASE NEUTRAL EXTRACTABLES					
83-32-9	Acenaphthene	625	10.0	<5.10 µg/L	G or C	1/5 YR
120-12-7	Anthracene	625	10.0	<5.10 µg/L	G or C	1/5 YR
92-87-5	Benzidine	(4)	(5)	<10.2 µg/L	G or C	1/5 YR
56-55-3	Benzo (a) anthracene	625	10.0	<5.10 µg/L	G or C	1/5 YR
205-99-2	Benzo (b) fluoranthene	625	10.0	<5.10 µg/L	G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	625	10.0	<5.10 µg/L	G or C	1/5 YR
50-32-8	Benzo (a) pyrene	625	10.0	<5.10 µg/L	G or C	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	(4)	(5)	<5.10 µg/L	G or C	1/5 YR
108-60-1	Bis 2-Chloroisopropyl Ether	(4)	(5)	<5.10 µg/L	G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0	<5.10 µg/L	G or C	1/5 YR
91-58-7	2-Chloronaphthalene	(4)	(5)	<5.10 µg/L	G or C	1/5 YR
218-01-9	Chrysene	625	10.0	<5.10 µg/L	G or C	1/5 YR
53-70-3	Dibenz(a,h)anthracene	625	20.0	<5.10 µg/L	G or C	1/5 YR
84-74-2	Dibutyl phthalate (synonym = Di-n-Butyl Phthalate)	625	10.0	<5.10 µg/L	G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	624	10.0	<5.10 µg/L	G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	624	10.0	<5.10 µg/L	G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	624	10.0	<5.10 µg/L	G or C	1/5 YR

Outfall 995

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
91-94-1	3,3-Dichlorobenzidine	(4)	(5)		G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0	<5.10µg/L	G or C	1/5 YR
117-81-7	Bis-2-ethylhexyl phthalate	625	10.0	<5.10µg/L	G or C	1/5 YR
131-11-3	Dimethyl phthalate	(4)	(5)	<5.10µg/L	G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0	<5.10µg/L	G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine	(4)	(5)	<5.10µg/L	G or C	1/5 YR
206-44-0	Fluoranthene	625	10.0	<5.10µg/L	G or C	1/5 YR
86-73-7	Fluorene	625	10.0	<5.10µg/L	G or C	1/5 YR
118-74-1	Hexachlorobenzene	(4)	(5)	<5.10µg/L	G or C	1/5 YR
87-68-3	Hexachlorobutadiene	(4)	(5)	<5.10µg/L	G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	(4)	(5)	<5.10µg/L	G or C	1/5 YR
67-72-1	Hexachloroethane	(4)	(5)	<5.10µg/L	G or C	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	625	20.0	<5.10µg/L	G or C	1/5 YR
78-59-1	Isophorone	625	10.0	<5.10µg/L	G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0	<5.10µg/L	G or C	1/5 YR
62-75-9	N-Nitrosodimethylamine	(4)	(5)	<5.10µg/L	G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	(4)	(5)	<5.10µg/L	G or C	1/5 YR
86-30-6	N-Nitrosodiphenylamine	(4)	(5)	<5.10µg/L	G or C	1/5 YR
129-00-0	Pyrene	625	10.0	<5.10µg/L	G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0	<5.10µg/L	G or C	1/5 YR
	VOLATILES					
107-02-8	Acrolein	(4)	(5)	<10µg/L	G	1/5 YR
107-13-1	Acrylonitrile	(4)	(5)	<10µg/L	G	1/5 YR
71-43-2	Benzene	624	10.0	<1µg/L	G	1/5 YR
75-25-2	Bromoform	624	10.0	<1µg/L	G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0	<1µg/L	G	1/5 YR
108-90-7	Chlorobenzene (synonym = monochlorobenzene)	624	50.0	<1µg/L	G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0	<1µg/L	G	1/5 YR
67-66-3	Chloroform	624	10.0	<1µg/L	G	1/5 YR
75-09-2	Dichloromethane (synonym = methylene chloride)	624	20.0	<10µg/L	G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0	<1µg/L	G	1/5 YR

Outfall 995

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
107-06-2	1,2-Dichloroethane	624	10.0	<5 µg/L	G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0	<5 µg/L	G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	(4)	(5)	<1 µg/L	G	1/5 YR
78-87-5	1,2-Dichloropropane	(4)	(5)	<1 µg/L	G	1/5 YR
542-75-6	1,3-Dichloropropene	(4)	(5)	<1 µg/L	G	1/5 YR
100-41-4	Ethylbenzene	624	10.0	<1 µg/L	G	1/5 YR
74-83-9	Methyl Bromide	(4)	(5)	<~~1~~ 10 µg/L	G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	(4)	(5)	<5 µg/L	G	1/5 YR
127-18-4	Tetrachloroethylene	624	10.0	<1 µg/L	G	1/5 YR
10-88-3	Toluene	624	10.0	<1 µg/L	G	1/5 YR
79-00-5	1,1,2-Trichloroethane	(4)	(5)	<5 µg/L	G	1/5 YR
79-01-6	Trichloroethylene	624	10.0	<1 µg/L	G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0	<1 µg/L	G	1/5 YR
ACID EXTRACTABLES[6]						
95-57-8	2-Chlorophenol	625	10.0	<5.10 µg/L	G or C	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0	<~~10.2~~ 5.10 µg/L	G or C	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0	<5.10 µg/L	G or C	1/5 YR
51-28-5	2,4-Dinitrophenol	(4)	(5)	<10.2 µg/L	G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	(4)	(5)	<10.2 µg/L	G or C	1/5 YR
25154-52-3	Nonylphenol	(4)	(5)		G or C	1/5 YR
87-86-5	Pentachlorophenol	625	50.0	<5.10 µg/L	G or C	1/5 YR
108-95-2	Phenol	625	10.0	<5.10 µg/L	G or C	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0	<5.10 µg/L	G or C	1/5 YR
MISCELLANEOUS						
776-41-7	Ammonia as NH3-N	350.1	200	<0.2 mg/L	G C	1/5 YR
7782-50-5	Chlorine Produced Oxidant ?	(4)	(5)	<0.1 mg/L	G	1/5 YR
7782-50-5	Chlorine, Total Residual ?	(4)	100	<0.1 mg/L	G	1/5 YR
57-12-5	Cyanide, Free	(4)	10.0	<0.004 mg/L	G	1/5 YR
N/A	*E. coli / Enterococcus* (N/CML)	(4)	(5)	E Coli 77 mpn/100 EC 17 mpn/100	G	1/5 YR
7783-06-4	Hydrogen Sulfide	(4)	(5)	0.6 mg/L	G	1/5 YR
60-10-5	Tributyltin[7]	NBSR 85-3295	(5)	<0.03 µg/L	G or C	1/5 YR

Outfall 995

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
471-34-1	Hardness (mg/L as $CaCO_3$)	(4)	(5)	2300 mg/L	G or C (10)	1/5 YR

William Purcell, Env. Mgr.
Name of Principal Exec. Officer or Authorized Agent/Title

11/23/15
Signature of Principal Officer or Authorized Agent/Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information shall be submitted to document that the required quantification level has been attained.

Quantification Levels (ug/L)

CAS	Parameter	Outfall 002	Outfall 995	Refrigeration Water
7440-36-0	Antimony, dissolved	6400	3200	1.4
7440-38-2	Arsenic, dissolved	2200	55	1.0
7440-43-9	Cadmium, dissolved	530	32	0.3
16065-83-1	Chromium III, dissolved	3.6	3.6	3.6
18540-29-9	Chromium VI, dissolved	3000	880	1.6
7440-50-8	Copper, dissolved	360	7.4	0.50
7439-92-1	Lead, dissolved	560	190	0.50
7439-97-6	Mercury, dissolved	56	1.4	1.0
7440-02-0	Nickel, dissolved	490	59	0.94
7782-49-2	Selenium, dissolved	4300	230	2.0
7440-22-4	Silver, dissolved	76	1.5	0.20
7440-66-6	Zinc, dissolved	3600	72	3.6

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

REVISED
SS 12/11/15

Universal Laboratories
20 Research Drive
Hampton, VA 23666
Phone: 1-800-695-2162
Fax: **757-865-8014**

Client Report For:	**Omega Protein, Inc.**
Attention:	Mr. Bill Purcell
Client Address:	610 Menhaden Road Reedville, VA 22539
Project:	**OF-995 2C and Attachment A**
Order Number:	**1508097**
Report Date:	12/11/2015
Lab Receipt Date:	08/11/2015
Comment:	This report contains the analytical results for the indicated Project and Order. The results contained in this report relate only to the samples identified in this Order. The analytical results meet all requirements of NELAC unless specifically stated. This report shall not be reproduced except in full.

The data in this report has been reviewed and validated by: Carol K Zeno Signature

Carol K Zeno Name

Prod Tech Director Title

Universal Laboratories

Client: Omega Protein, Inc. **Client Sample ID:** OF-995

Lab ID: 1508097-001 **Collection Date:** 08/11/2015 08:00

Permit ID VA0003867 **Matrix:** AQUEOUS

Analyses

Biochemical Oxygen Demand (BOD) 5 Day *SM 5210 B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Biochemical Oxygen Demand	2	mg/L	2	08/12/2015 12:42	RB		460036

Chemical Oxygen Demand *HACH 8000*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Chemical Oxygen Demand	457.9	mg/L	20	08/19/2015 11:48	EK		460036

Solids, Total Suspended *SM 2540D (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Solids, Total Suspended	12.9	mg/L	1	08/13/2015 23:45	RB		460036

Ammonia as N, Total *EPA 350.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Ammonia as N	ND	mg/L	0.2	08/18/2015 13:44	EK		460036

Bromide *SM 4500 Br- B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Bromide	36.0	mg/L	5	08/25/2015 18:10	LS	MS	

Color *SM 2120B (2001)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Color	10	CU	1	08/12/2015 23:35	LS		460036
Temperature	23.2	C	0.1	08/12/2015 23:35	LS		
pH	8.0	pH Units	0.1	08/12/2015 23:35	LS		

Fluoride *SM 4500 F C (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Fluoride	0.5	mg/L	0.1	08/12/2015 18:51	EK		460036

Nitrate and Nitrite *EPA 353.2*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Nitrate/Nitrite as N	ND	mg/L	0.1	08/15/2015 17:43	EK		460036

Oil and Grease (SGT-HEM) *EPA 1664A*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Petroleum Oil Hydrocarbons (SGT-HEM)	ND	mg/L	5	08/12/2015 13:30	LS		460036

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-995
Lab ID: 1508097-001	**Collection Date:** 08/11/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Nitrogen, Organic — *EPA 351.2/ EPA 350.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Ammonia as N	ND	mg/L	0.2	08/18/2015 18:54	EK		
Nitrogen, Total Kjeldahl	1.11	mg/L	0.2	08/18/2015 18:54	EK		
Nitrogen, Organic	1.1	mg/L	0.2	08/18/2015 18:54	EK		

Phosphorus, Total — *EPA 365.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Phosphorus, Total	0.08	mg/L	0.02	08/13/2015 19:35	EK		460036

Sulfate — *ASTM D516-07*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sulfate as SO4	1300	mg/L	25	08/12/2015 11:57	EK		460036

Sulfide — *SM 4500-S2 F (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sulfide	0.6	mg/L	0.5	08/18/2015 19:50	LS		460036

Methylene Blue Active Substances — *SM 5540C (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Methylene Blue Active Substances	ND	mg/L	0.2	08/12/2015 20:45	LS		460036

Phenolics, Total — *SM 5530 D (2005)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Phenolics	ND	mg/L	0.05	LS	08/20/2015 21:15		460036

Cyanide, Total — *EPA 335.4*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Cyanide, Total	ND	mg/L	0.002	08/13/2015 18:18	EK		460036

Hardness as CaCO3 — *SM 2340C (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Hardness, Total	2800	mg/L	2	08/19/2015 18:46	EK		460036

Dioxin Screen AQ — *EPA 625*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
2,3,7,8-TCDD	Negative			8/13/2015 11:56 am			

Volatile Organics AQ — *EPA 624*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
1,1,1-Trichloroethane	ND	ug/L	1	8/21/2015 1:13	BD		460036

Universal Laboratories

Client:	Omega Protein, Inc.	**Client Sample ID:**	OF-995
Lab ID:	1508097-001	**Collection Date:**	08/11/2015 08:00
Permit ID	VA0003867	**Matrix:**	AQUEOUS

Analyses

Volatile Organics AQ — *EPA 624*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
1,1,2,2-Tetrachloroethane	ND	ug/L	5	8/21/2015 1:13	BD		460036
1,1,2-Trichloroethane	ND	ug/L	5	8/21/2015 1:13	BD		460036
1,1-Dichloroethane	ND	ug/L	1	8/21/2015 1:13	BD		460036
1,1-Dichloroethene	ND	ug/L	5	8/21/2015 1:13	BD		460036
1,2-Dichloroethane	ND	ug/L	5	8/21/2015 1:13	BD		460036
1,2-Dichloropropane	ND	ug/L	1	8/21/2015 1:13	BD		460036
1,3-Dichlorobenzene	ND	ug/L	1	8/21/2015 1:13	BD		460036
2-Chloroethylvinyl ether	ND	ug/L	1	8/21/2015 1:13	BD		460036
Acrolein	ND	ug/L	10	8/21/2015 1:13	BD		460036
Acrylonitrile	ND	ug/L	10	8/21/2015 1:13	BD		460036
Benzene	ND	ug/L	1	8/21/2015 1:13	BD		460036
Bromodichloromethane	ND	ug/L	1	8/21/2015 1:13	BD		460036
Bromoform	ND	ug/L	1	8/21/2015 1:13	BD		460036
Bromomethane	ND	ug/L	10	8/21/2015 1:13	BD		460036
Carbon tetrachloride	ND	ug/L	1	8/21/2015 1:13	BD		460036
Chlorobenzene	ND	ug/L	1	8/21/2015 1:13	BD		460036
Chloroethane	ND	ug/L	5	8/21/2015 1:13	BD		460036
Chloroform	ND	ug/L	1	8/21/2015 1:13	BD		460036
Chloromethane	ND	ug/L	1	8/21/2015 1:13	BD		460036
cis-1,3-Dichloropropene	ND	ug/L	1	8/21/2015 1:13	BD		460036
Dibromochloromethane	ND	ug/L	1	8/21/2015 1:13	BD		460036
Ethylbenzene	ND	ug/L	1	8/21/2015 1:13	BD		460036
Methylene chloride	ND	ug/L	10	8/21/2015 1:13	BD		460036
Tetrachloroethene	ND	ug/L	1	8/21/2015 1:13	BD		460036
Toluene	ND	ug/L	1	8/21/2015 1:13	BD		460036
trans-1,2-Dichloroethene	ND	ug/L	1	8/21/2015 1:13	BD		460036
trans-1,3-Dichloropropene	ND	ug/L	1	8/21/2015 1:13	BD		460036
Trichloroethene	ND	ug/L	1	8/21/2015 1:13	BD		460036
Vinyl chloride	ND	ug/L	1	8/21/2015 1:13	BD		460036
surrogate 1,2-Dichloroethane-d4 (% Recovery)	103	%	69.5-130.5	8/21/2015 1:13	BD		
surrogate 4-Bromofluorobenzene (% Recovery)	94	%	69.5-130.5	8/21/2015 1:13	BD		
surrogate Dibromofluoromethane (% Recovery)	96	%	69.5-130.5	8/21/2015 1:13	BD		
surrogate Toluene-d8 (% Recovery)	99	%	69.5-130.5	8/21/2015 1:13	BD		

Tributyltin AQ — *Analysis of Butyltins in Env. Samples*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Tributyltin	ND	ug/L	0.03	08/18/2015 13:54	AS		460036
surrogate Tripentyltin (% Recovery)	72	%	49.5-150.5	08/18/2015 13:54	AS		

Universal Laboratories

Client:	Omega Protein, Inc.	**Client Sample ID:**	OF-995
Lab ID:	1508097-001	**Collection Date:**	08/11/2015 08:00
Permit ID	VA0003867	**Matrix:**	AQUEOUS

Analyses

Metals by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Tin, Total	ND	mg/L	0.005	08/21/2015 18:56	LS		
Aluminum, Total	0.072	mg/L	0.02	08/17/2015 15:22	LS		460036
Antimony, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Arsenic, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Barium, Total	0.027	mg/L	0.005	08/17/2015 15:22	LS		460036
Beryllium, Total	ND	mg/L	0.001	08/17/2015 15:22	LS		460036
Boron, Total	1.84	mg/L	0.005	08/17/2015 15:22	LS		460036
Cadmium, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Chromium, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Cobalt, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Copper, Total	0.010	mg/L	0.005	08/17/2015 15:22	LS		460036
Iron, Total	0.136	mg/L	0.02	08/17/2015 15:22	LS		460036
Lead, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Magnesium, Total	1150	mg/L	0.05	08/17/2015 15:22	LS		460036
Manganese, Total	0.014	mg/L	0.001	08/17/2015 15:22	LS		460036
Molybdenum, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Nickel, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Selenium, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Sodium, Total	9500	mg/L	1	08/17/2015 15:22	LS		460036
Thallium, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Titanium, Total	ND	mg/L	0.005	08/17/2015 15:22	LS		460036
Zinc, Total	0.011	mg/L	0.005	08/17/2015 15:22	LS		460036

Metals Dissolved by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Antimony, Dissolved	ND	mg/L	0.005	08/18/2015 15:33	LS		460036
Arsenic, Dissolved	ND	mg/L	0.005	08/18/2015 15:33	LS		460036
Cadmium, Dissolved	ND	mg/L	0.005	08/18/2015 15:33	LS		460036
Copper, Dissolved	0.009	mg/L	0.005	08/18/2015 15:33	LS		460036
Lead, Dissolved	ND	mg/L	0.005	08/18/2015 15:33	LS		460036
Nickel, Dissolved	ND	mg/L	0.005	08/18/2015 15:33	LS		460036
Selenium, Dissolved	ND	mg/L	0.005	08/18/2015 15:33	LS		460036
Thallium, Dissolved	ND	mg/L	0.005	08/18/2015 15:33	LS		460036
Zinc, Dissolved	0.011	mg/L	0.005	08/18/2015 15:33	LS		460036

Pesticides AQ ***EPA 8081B***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
4,4'-DDD	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD		460036
4,4'-DDE	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD		460036
4,4'-DDT	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD	V	460036

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-995
Lab ID: 1508097-001	**Collection Date:** 08/11/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Pesticides AQ ***EPA 8081B***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Aldrin	ND	ug/L	0.05	8-14-2015 03:05:40 AM	BD		460036
alpha-BHC	ND	ug/L	0.5	8-14-2015 03:05:40 AM	BD		460036
beta-BHC	ND	ug/L	0.05	8-14-2015 03:05:40 AM	BD		460036
Chlordane (tech)	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD		
delta-BHC	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD	V	460036
Dieldrin	ND	ug/L	0.05	8-14-2015 03:05:40 AM	BD		460036
Endosulfan I	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD		460036
Endosulfan II	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD		460036
Endosulfan sulfate	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD		460036
Endrin	ND	ug/L	0.1	8-14-2015 03:05:40 AM	BD		460036
Endrin aldehyde	ND	ug/L	0.05	8-14-2015 03:05:40 AM	BD		460036
gamma-BHC (Lindane)	ND	ug/L	0.05	8-14-2015 03:05:40 AM	BD		460036
Heptachlor	ND	ug/L	0.5	8-14-2015 03:05:40 AM	BD		460036
Heptachlor epoxide	ND	ug/L	0.05	8-14-2015 03:05:40 AM	BD		460036
Methoxychlor	ND	ug/L	0.05	8-14-2015 03:05:40 AM	BD		460036
Toxaphene (tech)	ND	ug/L	0.5	8-14-2015 03:05:40 AM	BD		
surrogate TCMX (% Recovery)	38	%	29.5-130.5	8-14-2015 03:05:40 AM	BD		
surrogate DCB (% Recovery)	54	%	29.5-130.5	8-14-2015 03:05:40 AM	BD		

Semi Volatile Organics AQ ***EPA 8270D***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
1,2,4-Trichlorobenzene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
1,2-Dichlorobenzene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
1,3-Dichlorobenzene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
1,4-Dichlorobenzene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
2,4,6-Trichlorophenol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-995
Lab ID: 1508097-001	**Collection Date:** 08/11/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Semi Volatile Organics AQ ***EPA 8270D***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
2,4-Dichlorophenol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
2,4-Dimethylphenol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
2,4-Dinitrophenol	ND	ug/L	10.2	13 Aug 2015 12:57 am	BD		460036
2,4-Dinitrotoluene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
2,6-Dinitrotoluene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
2-Chloronaphthalene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
2-Chlorophenol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
2-Methyl-4,6-dinitrophenol	ND	ug/L	10.2	13 Aug 2015 12:57 am	BD		460036
2-Nitrophenol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
4-Bromophenyl phenyl ether	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
4-Chlorophenyl phenyl ether	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
4-Nitrophenol	ND	ug/L	10.2	13 Aug 2015 12:57 am	BD		460036
Acenaphthene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Acenaphthylene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Anthracene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Azobenzene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Benzidine	ND	ug/L	10.2	13 Aug 2015 12:57 am	BD		460036
Benzo (a) anthracene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Benzo (a) pyrene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Benzo (b) fluoranthene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Benzo (g,h,i) perylene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Benzo (k) fluoranthene	ND	ug/L	10.2	13 Aug 2015 12:57 am	BD		460036
Bis(2-chloroethoxy)methane	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Bis(2-chloroethyl)ether	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Bis(2-chloroisopropyl)ether	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036

Universal Laboratories

Client: Omega Protein, Inc.	**Client Sample ID:** OF-995
Lab ID: 1508097-001	**Collection Date:** 08/11/2015 08:00
Permit ID VA0003867	**Matrix:** AQUEOUS

Analyses

Semi Volatile Organics AQ ***EPA 8270D***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Bis(2-ethylhexyl)phthalate	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Butyl benzyl phthalate	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Chrysene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Cresols, Total	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		
Di-n-butyl phthalate	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Di-n-octyl phthalate	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Dibenz (a,h) anthracene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Diethyl phthalate	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Dimethyl phthalate	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Fluoranthene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Fluorene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Hexachlorobenzene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Hexachlorobutadiene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Hexachlorocyclopentadiene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Hexachloroethane	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Indeno (1,2,3-cd) pyrene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Isophorone	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Kepone	ND	ug/L	10.2	13 Aug 2015 12:57 am	BD		460036
m,p-Cresols	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
N-Nitrosodi-n-propylamine	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
N-Nitrosodimethylamine	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
N-Nitrosodiphenylamine	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Naphthalene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Nitrobenzene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
o-Cresol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036

Universal Laboratories

Client:	Omega Protein, Inc.	**Client Sample ID:**	OF-995
Lab ID:	1508097-001	**Collection Date:**	08/11/2015 08:00
Permit ID	VA0003867	**Matrix:**	AQUEOUS

Analyses

Semi Volatile Organics AQ — *EPA 8270D*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Pentachlorophenol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Phenanthrene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Phenol	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
Pyrene	ND	ug/L	5.10	13 Aug 2015 12:57 am	BD		460036
surrogate 2,4,6-Tribromophenol (% Recovery)	71	%	9.5-123.4	13 Aug 2015 12:57 am	BD		
surrogate 2-Fluorobiphenyl (% Recovery)	48	%	42.6-116.5	13 Aug 2015 12:57 am	BD		
surrogate 2-Fluorophenol (% Recovery)	56	%	20.6-110.5	13 Aug 2015 12:57 am	BD		
surrogate Nitrobenzene-d5 (% Recovery)	48	%	34.6-114.5	13 Aug 2015 12:57 am	BD		
surrogate p-Terphenyl-d14 (% Recovery)	47	%	32.6-141.4	13 Aug 2015 12:57 am	BD		
surrogate Phenol-d5 (% Recovery)	48	%	9.5-110.5	13 Aug 2015 12:57 am	BD		

Polychlorinated Biphenyls AQ — *EPA 8082A*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
PCBs, Total	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		
PCB-1016	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		460036
PCB-1260	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		460036
PCB-1221	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		460036
PCB-1232	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		460036
PCB-1242	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		460036
PCB-1248	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		460036
PCB-1254	ND	ug/L	1.05	8-14-2015 03:05:40 AM	BD		460036
surrogate TCMX (% Recovery)	40	%	29.5-150.5	8-14-2015 03:05:40 AM	BD		
surrogate DCB (% Recovery)	94	%	29.5-150.5	8-14-2015 03:05:40 AM	BD		

Chromium, Hexavalent — *SM 3500-CR B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Chromium, Hexavalent	ND	mg/L	0.005	08/11/2015 18:30	EK		460036

Universal Laboratories

Client:	Omega Protein, Inc.	**Client Sample ID:**	OF-995
Lab ID:	1508097-001	**Collection Date:**	08/11/2015 08:00
Permit ID	VA0003867	**Matrix:**	AQUEOUS

Analyses

Chromium, Trivalent by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Chromium, Trivalent	ND	ug/L	5	08/17/2015 15:22	LS		

Silver, Dissolved by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Silver, Dissolved	ND	mg/L	0.05	08/26/2015 16:58	LS		460036

Silver, Total by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Silver, Total	ND	mg/L	0.05	08/26/2015 16:58	LS		460036

Glossary of Terms and Abbreviations

ND	No Analyte Detected
NR	No Results available, analyte not in instrument calibration
RL	(Reporting Limit) The minimum levels, concentrations, or quantities of a target analyte that can be reported within a specified degree of confidence. Generally, this number is equal to or just above the lowest calibration standard run with the analytical batch.
B	Analyte was found in the method blank
D	RPD outside acceptable limits
H	Holding time exceeeded
IS	Internal standard outside acceptable limits
J	Result above calibration curve - results are approximate
L	LCS Outside acceptable limits
MI	Matrix interence
MS	Matrix spike recovery outside acceptable limits
QC	Method QC criteria not met
S	Surrogate outside acceptable limits
V	ICV/CCV/FCV outside acceptable limits
LCS	(Laboratory Control Sample) A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	Method Detection Limitis is an estimate of the minimum amount of a substance that an analytical process can reliably detect
RPD	(Relative Percent Difference) The difference between a set of duplicates or sample spike duplicates.
MS/MSD	(Matrix Spike or Matrix Spike Duplicate) A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analytes concentration is available. Matrix Spikes are used, for example, to determine the effect of the matrix on a method's recovery efficiency.
Calibration Verfication	(Initial, Continuing, or Final) A standard analyzed at different times to verify that the initial calibration curve is still valid.
Holding Time	The maximum time that samples may be held prior to analysis and still be considered valid or not compromised.
Internal Standard	A known amount of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method.
Method Blank	A sample of a matrix similar to the batch associated samples (when available) that is free from the analytes of interest and is processed simulatanously with and under the same conditions as samples.
Surrogate	A substance with properties that mimic the analyte of interest. It is unlikely to be found in environmental samples and is added to them for quality control purposes in Organics.
EPL	Exceeds Permit Limit. This is a qualifier to denote that the result exceeds the permit limit of the sample location.
Exceeds Benchmark Concentration	Result Exceeds Benchmark concentration listed in the General Permit. Benchmark Concentrations are primarily used to determine the overall effectivenss of the Stormwater pollution prevention plan. Excedence of Benchamrk concentrations does NOT constitute a violation of this permit and does NOT indicate that violation of a water quality standard has occured.

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Universal Laboratories
20 Research Drive
Hampton VA 23666-1396

August 24, 2015

Project: Water

Submittal Date: 08/18/2015
Group Number: 1585846
PO Number: 081715-006
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
1508097-001 N OF-995 Water	8012271

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO Universal Laboratories Attn: Dan Thornton

Respectfully Submitted,

Stacy L. Butt
Specialist

(717) 556-7236

eurofins | Lancaster Laboratories Environmental

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Analysis Report

Sample Description: 1508097-001 N OF-995 Water

Project Name: Water

Collected: 08/11/2015 08:00

Submitted: 08/18/2015 09:20
Reported: 08/24/2015 12:18

LL Sample # WW 8012271
LL Group # 1585846
Account # 02171

Universal Laboratories
20 Research Drive
Hampton VA 23666-1396

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Wet Chemistry		SM 4500-CN E-1999	mg/l	mg/l	mg/l	
00241	Cyanide (Free)	n.a.	N.D.	0.0040	0.010	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00241	Cyanide (Free)	SM 4500-CN E-1999	1	15233114101A	08/21/2015 17:26	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Quality Control Summary

Client Name: Universal Laboratories
Reported: 08/24/2015 12:18

Group Number: 1585846

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 15233114101A	Sample number(s): 8012271								
Cyanide (Free)	N.D.	0.0040	0.010	mg/l	98		90-110		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 15233114101A	Sample number(s): 8012271 UNSPK: P011491 BKG: P011491								
Cyanide (Free)	72*		90-110			N.D.	N.D.	0 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

1585846 8012271

A - 2171 G ~~1585571~~ ③ 8/19/15 S - ~~8010989-990~~

Universal Laboratories
Subcontract Chain of Custody

20 Research Drive Hampton, VA 23666
Phone: 757-865-0880
Fax: 757-865-8014
UL Contact: Dan Thornton

To: Sample Receiving
Eurofins Lancaster Laboratories

SUB PO Number: 081715-006

	Sample #	Sample Location	Test	Matrix	Sample Date	Sample Time
1.	1504405-002 N	OF-002	Cyanide, Free	Aqueous	08/04/2015	8:00AM
2.	1508097-001 N	OF-995	Cyanide, Free	Aqueous	08/11/2015	8:00AM

Comments:	Please report separately	Cooler Temp:	2.8
		Preservation:	

Relinquish By	Date/Time	Receive By:	Date/Time
[signature]	8-17-15/1350		
		[signature]	8-18-15 920

eurofins | Lancaster Laboratories Environmental

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference...

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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REPORT OF ANALYSIS

CLIENT: Universal Laboratories
ATTN: Dan Thornton
ADDRESS: 20 Research Drive
Hampton, VA 23666
PHONE: (757) 865-0880
FAX: e: d.thornton@universallaborato

Special Notes:

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 8/11/2015 Time: 0800
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: CLIENT
SAMPLE RECEIPT:
Date: 8/12/2015 Time: 0938
NUMBER OF CONTAINERS: 6
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)
REPORT NO: 15-11773 10:44

SAMPLE ID: 1508097-001 OF-995
SAMPLE NO: 15-11773

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Chlorinated Pesticides and PCBs							
Mirex	8081B	0.05	< 0.05	ug/L	JFS	08/18/15	0503
Organophosphorous Pesticides							
Guthion	622	1	< 1	ug/L	JFS	08/21/15	0520
Chlorpyrifos	622	0.2	< 0.2	ug/L	JFS	08/21/15	0520
Organophosphorus Pesticides							
Parathion	614	1	< 1	ug/L	JFS	08/21/15	0640
Malathion	614	1	< 1	ug/L	JFS	08/21/15	0640
Demeton	614	1	< 1	ug/L	JFS	08/21/15	0640
Diazinon	614	1	< 1	ug/L	JFS	08/21/15	0640

REPORT OF ANALYSIS

SAMPLE ID: 1508097-001 OF-995
SAMPLE NO: 15-11773

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

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The results on this report relate only to the sample(s) provided for analysis.

Results conform to NELAC standards, where applicable, unless otherwise indicated.

Authorized By: Elaine Claiborne

Elaine Claiborne, Laboratory Director

Date: 24-Aug-15

James R. Reed & Associates
770 Pilot House Drive, Newport News, VA 23606
(757) 873-4703 ● Fax: (757) 873-1498

VELAP# 460013
EPA# VA00015

Universal Laboratories
Subcontract Chain of Custody

20 Research Drive Hampton, VA 23666
Phone: 757-865-0880
Fax: 757-865-8014
UL Contact: Dan Thornton

To: Sample Receiving
James R. Reed

15-11773 SUB PO Number: 081115-019 A1-6

Sample #	Sample Location	Test	Matrix	Sample Date	Sample Time
1508097-001	OF-995	Pesticides	Aqueous	08/11/2015	8:00AM
(XX2, FF, GG, HH)					

Comments:	Report: Dursban, Demeton, Diazinon, Guthion, Malathion, Mirex, & Parathion by any VA certified 40 CFR Part 136 method	Cooler Temp:	2.3°C
		Preservation:	Ice

Relinquish By	Date/Time	Receive By:	Date/Time
[signature]	8-12-15/0938	[signature]	8/12/15 0938

Microbac

Laboratory Report Number: L15080935

Dan Thornton
Universal Labs
20 Research Drive
Hampton, VA 23666

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Emily Yoak – Client Services Specialist
(740) 373-4071
emily.yoak@microbac.com

I certify that all test results meet all of the requirements of the accrediting authority listed below. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on August 25 2015

David E. Vandenberg

David Vandenberg – Managing Director

State of Origin: VA
Accrediting Authority: Common Wealth of Virginia ID:460187
QAPP: Microbac OVD

Microbac

Lab Report #: L15080935
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

The following discrepancies were noted:

Discrepancy	Resolution
No date/time on bottles. Will log per information on COC. BRG	Please log per the COC.

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #	Temp Required?
00113010	I	1.0		1001891772560004575000774299272235	X

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	NA
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	No
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	NA

Microbac

Lab Report #: L15080935
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
1508097-001	L15080935-01	08/11/2015 00:00	08/18/2015 10:38

Microbac Laboratories • Ohio Valley Division
158 Starlite Drive, Marietta, OH 45750 • T: (740)373-4071 F: (740)373-4835
www.microbac.com

Microbac

Lab Report #: L15080935
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Certificate of Analysis

Sample #:	L15080935-01	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	1508097-001	**Prep Method:**	SM5310-C-2000	**Prep Date:**	N/A
Matrix:	Water 2	**Analytical Method:**	SM5310-C-2000	**Cal Date:**	05/27/2015 15:47
Workgroup #:	WG535971	**Analyst:**	DIH	**Run Date:**	08/24/2015 13:15
Collect Date:	08/11/2015 00:00	**Dilution:**	1	**File ID:**	TC08242015.006
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon	TOC	1.79		1.00	0.500

Page 1 of 1

Generated at Aug 25, 2015 10:05

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
August 25, 2015

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001 - BIO-CHEM TESTING WVDEP 220
002 - REIC Consultants, Inc. WVDEP 060
003 - Sturm Environmental
004 - MICROBAC PITTSBURGH
005 - ES LABORATORIES
006 - ALCOSAN LABORATORIES
007 - ALS LABORATORIES
008 - BENCHMARK LABORATORIES
010 - MICROBAC CHICAGOLAND
AC - AMBER R. CARMICHAEL
ADC - ANTHONY D. CANTER
ADG - APRIL D. GREENE
AED - ALLEN E. DAVIS
ALS - ADRIANE L. STEED
AWE - ANDREW W. ESSIG
AZH - AFTER HOURS
BJO - BRIAN J. OGDEN
BKT - BRENDAN TORRENCE
BLG - BRENDA L. GREENWALT
BRG - BRENDA R. GREGORY
CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS
CEB - CHAD E. BARNES
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CLC - CHRYS L. CRAWFORD
CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS
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DEV - DAVID E. VANDENBERG
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EPT - ETHAN P. TIDD
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JBK - JEREMY B. KINNEY
JDH - JUSTIN D. HESSON
JDS - JARED D. SMITH
JJS - JOHN J. STE MARIE
JKP - JACQUELINE K. PARSONS
JLL - JOHN L. LENT
JMW - JEANA M. WHITE
JTP - JOSHUA T. PEMBERTON
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KAJ - KELLIE A. JOHNSON
KAT - KATHY A. TUCKER
KDW - KATHRYN D. WELCH
KEB - KATIE E. BARNES
KHR - KIM H. RHODES
KKB - KERRI K. BUCK
KRA - KATHY R. ALBERTSON
KRB - KAELY R. BECKER
KRP - KATHY R. PARSONS
LEC - LAURA E. CARPENTER
LKN - LINDA K. NEDEFF
LLS - LARRY L. STEPHENS
LSB - LESLIE S. BUCINA
MBK - MORGAN B. KNOWLTON
MDA - MIKE D. ALBERTSON
MDC - MIKE D. COCHRAN
MES - MARY E. SCHILLING
MLB - MEGAN L. BACHE
MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR
MSW - MATT S. WILSON
PDM - PIERCE D. MORRIS
PIT - MICROBAC WARRENDALE
PRL - PAIGE R. LAMB
PSW - PEGGY S. WEBB
QX - QIN XU
RAH - ROY A. HALSTEAD
REK - BOB E. KYER
RLB - BOB BUCHANAN
RM - RAYMOND MALEKE
RNP - RICK N. PETTY
RST - ROBIN S. TURNER
SAV - SARAH A. VANDENBERG
SCB - SARAH C. BOGOLIN
SDC - SHALYN D. CONLEY
SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF
TB - TODD BOYLE
TGF - TIM G. FELTON
TMB - TIFFANY M. BAILEY
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER
WJB - WILL J. BEASLEY
WRR - WESLEY R. RICHARDS
WTD - WADE T. DELONG
XXX - UNAVAILABLE OR SUBCONTRACT

Microbac Laboratories Inc.
List of Valid Qualifiers
August 25, 2015

Qualkey: STD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
B,H1	Analyte present in method blank. Sample analysis performed past holding time.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
CT1	The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
E,CT1	Estimated results. The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
F,CT1	Estimated value; the analyte concentration was less than the RL/LOQ. The cooler temperature at receipt exceeded regula
FL	Free Liquid
H1	Sample analysis performed past holding time.
H1,CT1	Sample analysis performed past holding time. The cooler temperature at receipt exceeded regulatory guidelines for reque
I	Semiquantitative result (out of instrument calibration range)
J	Estimated value; the analyte concentration was less than the RL/LOQ.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,CT1	Estimated value; the analyte concentration was less than the RL/LOQ.
J,CT1	Estimated value; the analyte concentration was less than the RL/LOQ. The cooler temperature at receipt exceeded regula
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL)
ND, B	Not detected at or above the reporting limit (RL). Analyte present in method blank.
ND, CT1	Analyte was not detected. The concentration is below the reported LOD. The cooler temperature at receipt exceeded reg
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
ND,H1	Not detected; Sample analysis performed past holding time.
ND,H1,CT1	Not detected; Sample analysis performed past holding time. The cooler temperature at receipt exceeded regulatory guide
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
TNTC, B	Too numerous to count. Analyte present in method blank.
TNTC,CT1	Too numerous to count. The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
TNTC,H1	Too numerous to count. Sample analysis performed past holding time.
U	Analyte was not detected. The concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)

Z	Cannot be resolved from isomer - see below

Universal Laboratories
Subcontract Chain of Custody

20 Research Drive Hampton, VA 23666
Phone: 757-865-0880
Fax: 757-865-8014
UL Contact: Dan Thornton

To: Sample Receiving
Microbac OVD

SUB PO Number: 081715-007

	Sample #	Sample Location	Test	Matrix	Sample Date	Sample Time
1.	1508097-001 P	OF-995	Organic Carbon, Total	Aqueous	08/11/2015	8:00AM
2.	1508141-001 A	GB01087	Organic Carbon, Total	Aqueous	08/14/2015	1:09PM
	1508141-002 A	GB01097	Organic Carbon, Total	Aqueous	08/14/2015	1:12PM
	1508141-003 A	GB00607	Organic Carbon, Total	Aqueous	08/14/2015	1:18PM
	1508141-004 A	GB01213	Organic Carbon, Total	Aqueous	08/14/2015	1:22PM
	1508141-005 A	GB00298	Organic Carbon, Total	Aqueous	08/14/2015	1:27PM
	1508141-006 A	GB00289	Organic Carbon, Total	Aqueous	08/14/2015	1:31PM
	1508141-007 A	DI Water	Organic Carbon, Total	Aqueous	08/14/2015	1:35PM

Comments:	VA Certification	Please report separately	Cooler Temp:	
			Preservation:	

Relinquish By	Date/Time	Receive By:	Date/Time
[signature]	8-17-15/1350	Microbac OVD Received: 08/18/2015 10:38 By: CARA STRICKLER 221000074086 Cara Strickler	

NELAP Addendum - July 27, 2015

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
Total Halide by Bomb Combustion (TX)
Particle Sizing - 200 Mesh (PS200)
Specific Gravity/Density (SPGRAV)
Total Residual Chlorine (CL-TRL)
Total Volatile Solids (all forms) (TVS)
Total Coliform Bacteria (all methods)
Fecal Coliform Bacteria (all methods)
Sulfite (SO3)
Propionaldehyde (HPLC-UV)

SOLID AND HAZARDOUS CHEMICALS
Nitrogen, Ammonia by Method 350.1
Chromium, Hexavalent, Leachable by SM3500 Cr-B 2009
Phenolics, Total by Method 420.1
ASTM D3987-06

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
Acetic acid
Butyric acid
Lactic acid
Propionic acid
Pyruvic acid

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene
1,4-Dioxane
Atrazine
Benzaldehyde
Biphenyl
Caprolactam
Hexamethylphosphoramide (HMPA)
Pentachlorobenzene
Pentachloroethane

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

OVL HPLC12/HPLC/UV

Acetate
Formate

OVL RSK01/GC-FID

Acetylene
Propane

OVL K9305/ISE

Fluoroborate

SOLID AND HAZARDOUS CHEMICALS

OVL MSS0I/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP

SOLID AND HAZARDOUS CHEMICALS

OVL MSV0I/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

Microbac

Laboratory Report Number: L15080947

Dan Thornton
Universal Labs
20 Research Drive
Hampton, VA 23666

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Emily Yoak – Client Services Specialist
(740) 373-4071
emily.yoak@microbac.com

I certify that all test results meet all of the requirements of the accrediting authority listed below. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on August 25 2015

David E. Vandenberg

David Vandenberg – Managing Director

State of Origin: VA
Accrediting Authority: Common Wealth of Virginia ID:460187
QAPP: Microbac OVD

Microbac

Lab Report #: L15080947
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

The following discrepancies were noted:

Discrepancy	Resolution
No date/time on bottles. Will log per information on COC. BRG	Please log per the COC.

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #	Temp Required?
00113010	I	1.0		1001891772560004575000774299272235	X

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	NA
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	No
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	NA

Microbac

Lab Report #: L15080947
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
1508097-001J	L15080947-01	08/11/2015 08:00	08/18/2015 10:38
1508097-001H	L15080947-02	08/11/2015 08:00	08/18/2015 10:38

Microbac

Lab Report #: L15080947
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Certificate of Analysis

Sample #:	L15080947-01	**PrePrep Method:**	N/A	**Instrument:**	CVAA1
Client ID:	1508097-001J	**Prep Method:**	7470A	**Prep Date:**	08/19/2015 10:13
Matrix:	Water 2	**Analytical Method:**	245.1	**Cal Date:**	08/21/2015 09:11
Workgroup #:	WG535959	**Analyst:**	PDM	**Run Date:**	08/21/2015 09:47
Collect Date:	08/11/2015 08:00	**Dilution:**	1	**File ID:**	M7.082115.094701
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		ND	0.000200	0.000100
ND	Not detected at or above the reporting limit (RL)				

Sample #:	L15080947-02	**PrePrep Method:**	N/A	**Instrument:**	CVAA1
Client ID:	1508097-001H	**Prep Method:**	7470A	**Prep Date:**	08/19/2015 10:13
Matrix:	Water 2	**Analytical Method:**	245.1	**Cal Date:**	08/21/2015 09:11
Workgroup #:	WG535959	**Analyst:**	PDM	**Run Date:**	08/21/2015 09:59
Collect Date:	08/11/2015 08:00	**Dilution:**	1	**File ID:**	M7.082115.095943
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6		ND	0.000200	0.000100
ND	Not detected at or above the reporting limit (RL)				

Microbac

Lab Report #: L15080947
Lab Project #: 3137.001
Project Name: Universal Labs-VA
Lab Contact: Emily Yoak

Certificate of Analysis

Generated at Aug 25, 2015 16:05

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
August 25, 2015

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001 - BIO-CHEM TESTING WVDEP 220
002 - REIC Consultants, Inc. WVDEP 060
003 - Sturm Environmental
004 - MICROBAC PITTSBURGH
005 - ES LABORATORIES
006 - ALCOSAN LABORATORIES
007 - ALS LABORATORIES
008 - BENCHMARK LABORATORIES
010 - MICROBAC CHICAGOLAND
AC - AMBER R. CARMICHAEL
ADC - ANTHONY D. CANTER
ADG - APRIL D. GREENE
AED - ALLEN E. DAVIS
ALS - ADRIANE L. STEED
AWE - ANDREW W. ESSIG
AZH - AFTER HOURS
BJO - BRIAN J. OGDEN
BKT - BRENDAN TORRENCE
BLG - BRENDA L. GREENWALT
BRG - BRENDA R. GREGORY
CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS
CEB - CHAD E. BARNES
CJR - COURTNEY J. REXROAD
CLC - CHRYS L. CRAWFORD
CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS
CPD - CHAD P. DAVIS
CSH - CHRIS S. HILL
DAK - DEAN A. KETELSEN
DCM - DAVID C. MERCKLE
DEV - DAVID E. VANDENBERG
DIH - DEANNA I. HESSON
DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE
DLW - DIANA L. WRIGHT
DSM - DAVID S. MOSSOR
ECL - ERIC C. LAWSON
ENY - EMILY N. YOAK
EPT - ETHAN P. TIDD
ERP - ERIN R. PORTER
FJB - FRANCES J. BOLDEN
JBK - JEREMY B. KINNEY
JDH - JUSTIN D. HESSON
JDS - JARED D. SMITH
JJS - JOHN J. STE MARIE
JKP - JACQUELINE K. PARSONS
JLL - JOHN L. LENT
JMW - JEANA M. WHITE
JTP - JOSHUA T. PEMBERTON
JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES
JYH - JI Y. HU
KAJ - KELLIE A. JOHNSON
KAT - KATHY A. TUCKER
KDW - KATHRYN D. WELCH
KEB - KATIE E. BARNES
KHR - KIM H. RHODES
KKB - KERRI K. BUCK
KRA - KATHY R. ALBERTSON
KRB - KAELY R. BECKER
KRP - KATHY R. PARSONS
LEC - LAURA E. CARPENTER
LKN - LINDA K. NEDEFF
LLS - LARRY L. STEPHENS
LSB - LESLIE S. BUCINA
MBK - MORGAN B. KNOWLTON
MDA - MIKE D. ALBERTSON
MDC - MIKE D. COCHRAN
MES - MARY E. SCHILLING
MLB - MEGAN L. BACHE
MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR
MSW - MATT S. WILSON
PDM - PIERCE D. MORRIS
PIT - MICROBAC WARRENDALE
PRL - PAIGE R. LAMB
PSW - PEGGY S. WEBB
QX - QIN XU
RAH - ROY A. HALSTEAD
REK - BOB E. KYER
RLB - BOB BUCHANAN
RM - RAYMOND MALEKE
RNP - RICK N. PETTY
RST - ROBIN S. TURNER
SAV - SARAH A. VANDENBERG
SCB - SARAH C. BOGOLIN
SDC - SHALYN D. CONLEY
SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF
TB - TODD BOYLE
TGF - TIM G. FELTON
TMB - TIFFANY M. BAILEY
TMM - TAMMY M. MORRIS
VC - VICKI COLLIER
WJB - WILL J. BEASLEY
WRR - WESLEY R. RICHARDS
WTD - WADE T. DELONG
XXX - UNAVAILABLE OR SUBCONTRACT

Microbac Laboratories Inc.
List of Valid Qualifiers
August 25, 2015

Qualkey: STD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
B,H1	Analyte present in method blank. Sample analysis performed past holding time.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
CT1	The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
E,CT1	Estimated results. The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
F,CT1	Estimated value; the analyte concentration was less than the RL/LOQ. The cooler temperature at receipt exceeded regula
FL	Free Liquid
H1	Sample analysis performed past holding time.
H1,CT1	Sample analysis performed past holding time. The cooler temperature at receipt exceeded regulatory guidelines for reque
I	Semiquantitative result (out of instrument calibration range)
J	Estimated value; the analyte concentration was less than the RL/LOQ.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,CT1	Estimated value; the analyte concentration was less than the RL/LOQ.
J,CT1	Estimated value; the analyte concentration was less than the RL/LOQ. The cooler temperature at receipt exceeded regula
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit (RL)
ND, B	Not detected at or above the reporting limit (RL). Analyte present in method blank.
ND, CT1	Analyte was not detected. The concentration is below the reported LOD. The cooler temperature at receipt exceeded reg
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
ND,H1	Not detected; Sample analysis performed past holding time.
ND,H1,CT1	Not detected; Sample analysis performed past holding time. The cooler temperature at receipt exceeded regulatory guide
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
TNTC, B	Too numerous to count. Analyte present in method blank.
TNTC,CT1	Too numerous to count. The cooler temperature at receipt exceeded regulatory guidelines for requested testing.
TNTC,H1	Too numerous to count. Sample analysis performed past holding time.
U	Analyte was not detected. The concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)

Z	Cannot be resolved from isomer - see below

Universal Laboratories
Subcontract Chain of Custody

20 Research Drive Hampton, VA 23666
Phone: 757-865-0880
Fax: 757-865-8014
UL Contact: Dan Thornton

To: Sample Receiving
Microbac OVD

SUB PO Number: 081715-009

	Sample #	Sample Location	Test	Matrix	Sample Date	Sample Time
1.	1508097-001 J	OF-995	Mercury, Dissolved	Aqueous	08/11/2015	8:00AM
	1508097-001 H	OF-995	Mercury, Total	Aqueous	08/11/2015	8:00AM
2.	1508111-001 D	ZRT1 Grab	Mercury, Total	Aqueous	08/12/2015	10:35AM

Microbac OVD
Received: 08/18/2015 10:38
By: CARA STRICKLER 221000074087
Cara Strickler

Comments:	VA Certification	Please report separately	Cooler Temp:	
			Preservation:	

Relinquish By	Date/Time	Receive By:	Date/Time
[signature]	8-17-15/1350		

NELAP Addendum - July 27, 2015

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
Total Halide by Bomb Combustion (TX)
Particle Sizing - 200 Mesh (PS200)
Specific Gravity/Density (SPGRAV)
Total Residual Chlorine (CL-TRL)
Total Volatile Solids (all forms) (TVS)
Total Coliform Bacteria (all methods)
Fecal Coliform Bacteria (all methods)
Sulfite (SO3)
Propionaldehyde (HPLC-UV)

SOLID AND HAZARDOUS CHEMICALS
Nitrogen, Ammonia by Method 350.1
Chromium, Hexavalent, Leachable by SM3500 Cr-B 2009
Phenolics, Total by Method 420.1
ASTM D3987-06

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
Acetic acid
Butyric acid
Lactic acid
Propionic acid
Pyruvic acid

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene
1,4-Dioxane
Atrazine
Benzaldehyde
Biphenyl
Caprolactam
Hexamethylphosphoramide (HMPA)
Pentachlorobenzene
Pentachloroethane

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

OVL HPLC12/HPLC/UV

Acetate
Formate

OVL RSK01/GC-FID

Acetylene
Propane

OVL K9305/ISE

Fluoroborate

SOLID AND HAZARDOUS CHEMICALS

OVL MSS0I/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP

SOLID AND HAZARDOUS CHEMICALS

OVL MSV0I/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

Universal Laboratories

CHAIN OF CUSTODY

ID: ~~1504405~~ 1508097

OF-002 and 995 2C and Attachment A

Omega Protein, Inc.
610 Menhaden Road
Reedville,VA,22539

Contact:Becky Robertson,804-453-3830,rrobertson@omegaproteininc.com

20 Research Drive
Hampton, VA 23666
1-800-695-2162
http://www.universallaboratories.net

Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
OF-995	1504405-001		8/10-8/11/15 8:00AM-8:00AM WEP	001A	2/HDPE	<6°C	BOD, COD, TSS, NH3, BR-, COLOR, FLUORIDE, NN, OGN, ORGNIT, T.PHOS, SULFATE, SULFIDE, MBAS, PHENOL, CN, HARD, Dioxin, 624, TBT, METALS, METALSDISS, TOC, CNfree, HGD, HG, PESTsub, 8081, 8270, PCB, AGDISS, AG, F~~EGAL~~MF, CR6, Cr3, FILTER, ~~E.COLI MPN, ENTERO~~
				01AA	1/Glass/Solvent Rinsed	<6°C	
				001B	1/HDPE	<6°C	
				01BB	1/Glass/Solvent Rinsed	<6°C	
				001C	1/HDPE	<6°C	
				01CC	1/Glass/Solvent Rinsed	<6°C	
				001D	1/HDPE	H2SO4/<6°C	
				01DD	1/Glass/Solvent Rinsed	<6°C	
				001E	1/HDPE	H2SO4/<6°C	
				01EE	1/Glass/Solvent Rinsed	<6°C	
				001F	1/HDPE	HNO3/<6°C	
				01FF	1/Glass/Solvent Rinsed	<6°C	
				001G	250/HDPE	HNO3/<6°C	
				01GG	1/Glass/Solvent Rinsed	<6°C	
				001H	250/HDPE	HNO3/<6°C	
				01HH	1/Glass/Solvent Rinsed	<6°C	
				001I	500/Polysterene/ dissolved	HNO3/<6°C	
				~~01II~~	12~~5/Sterile~~	Na~~2S2O3/<6°C~~	
				001J	500/Polysterene/ dissolved	HNO3/<6°C	

Universal Laboratories

CHAIN OF CUSTODY

ID: ~~1504405~~ 1508097 8/11 DT

OF-002 and 995 2C and Attachment A

Omega Protein, Inc.
610 Menhaden Road
Reedville,VA,22539

Contact:Becky Robertson,804-453-3830,rrobertson@omegaproteininc.com

20 Research Drive
Hampton, VA 23666
1-800-695-2162
http://www.universallaboratories.net

Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
			8/10 8/11/15 800 am 800 am WEP	~~01JJ~~	~~125/Sterile~~	~~Na2S2O3/<6°C~~	
				001K	500/Polysterene/ dissolved	<6°C	
				~~01KK~~	~~125/Sterile~~	~~Na2S2O3/<6°C~~	
				001L	500/HDPE/Amber	ZnAcetate/NaOH/ <6°C	
				001M	1/HDPE/Amber	NaOH/<6°C	
				001N	1/HDPE/Amber	NaOH/<6°C	
				001O	2/Polycarbonate	HCl/<6°C	
				001P	150/HDPE	H2SO4/<6°C	
				001Q	40/Glass	HCl/<6°C	
				001R	40/Glass	HCl/<6°C	
				001S	40/Glass	HCl/<6°C	
				001T	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001U	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001V	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001W	1/Glass/Solvent Rinsed	H2SO4/<6°C	
				001X	1/Glass/Solvent Rinsed	<6°C	
				001Y	1/Glass/Solvent Rinsed	<6°C	
				001Z	1/Glass/Solvent Rinsed	<6°C	
~~OF-002~~ 8/11 DT	1504405-002			002A	2/HDPE	<6°C	BOD, COD, TSS, NH3, BR-, COLOR, FLUORIDE, NN, OGN, ORGNIT, T.PHOS, SULFATE, SULFIDE, MBAS, PHENOL, CN, HARD, Dioxin, 624, TBT, METALS, METALSDISS, TOC, CNfree, HGD, HG, PESTsub, 8081, 8270, PCB, FECAL MF, CR6, Cr3, FILTER, E.COLI MPN, ENTERO

Universal Laboratories

CHAIN OF CUSTODY

ID: ~~1504405~~ 8/14/15 1508097

OF-002 and 995 2C and Attachment A

Omega Protein, Inc.
610 Menhaden Road
Reedville,VA,22539

Contact:Becky Robertson,804-453-3830,rrobertson@omegaproteininc.com

20 Research Drive
Hampton, VA 23666
1-800-695-2162
http://www.universallaboratories.net

Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
			8/3 - 8/14/15 800am - 8am WEP	02AA	1/Glass/Solvent Rinsed	<6°C	
			—	002B	1/HDPE	<6°C	
			—	02BB	1/Glass/Solvent Rinsed	<6°C	
			—	002C	1/HDPE	<6°C	
			—	02CC	1/Glass/Solvent Rinsed	<6°C	
			—	002D	1/HDPE	H2SO4/<6°C	
			—	02DD	1/Glass/Solvent Rinsed	<6°C	
			—	002E	1/HDPE	H2SO4/<6°C	
			—	02EE	1/Glass/Solvent Rinsed	<6°C	
			—	002F	1/HDPE	HNO3/<6°C	
			—	02FF	1/Glass/Solvent Rinsed	<6°C	
			—	002G	250/HDPE	HNO3/<6°C	
			—	02GG	1/Glass/Solvent Rinsed	<6°C	
			—	002H	250/HDPE	HNO3/<6°C	
			—	02HH	1/Glass/Solvent Rinsed	<6°C	
			—	002I	500/Polysterene/ dissolved	HNO3/<6°C	
			—	02II	125/Sterile	Na2S2O3/<6°C	
			—	002J	500/Polysterene/ dissolved	HNO3/<6°C	
			—	02JJ	125/Sterile	Na2S2O3/<6°C	
			—	002K	500/Polysterene/ dissolved	<6°C	
			—	02KK	125/Sterile	Na2S2O3/<6°C	
			—	002L	500/HDPE/Amber	ZnAcetate/NaOH/ <6°C	
			—	002M	1/HDPE/Amber	NaOH/<6°C	
			—	002N	1/HDPE/Amber	NaOH/<6°C	

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Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
			8/3 - 8/4/15 800am-800am WEP	002O	2/Polycarbonate	HCl/<6°C	
			–	002P	150/HDPE	H2SO4/<6°C	
			–	002Q	40/Glass	HCl/<6°C	
			–	002R	40/Glass	HCl/<6°C	
			–	002S	40/Glass	HCl/<6°C	
			–	002T	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002U	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002V	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002W	1/Glass/Solvent Rinsed	H2SO4/<6°C	
			–	002X	1/Glass/Solvent Rinsed	<6°C	
			–	002Y	1/Glass/Solvent Rinsed	<6°C	
			–	002Z	1/Glass/Solvent Rinsed	<6°C	

NOTES: No Fecals were sampled CoolerTemp_____C

Phenol int check_____ CN int check_____ BOD int check_____ NH3 int check_____

TRANSFER	SIGNATURE	DATE/TIME
Relinquished by	Brian Thrift	8-11-15/1320
Relinquished by		
Relinquished by		
Relinquished by		

TRANSFER	SIGNATURE	DATE/TIME
Received by	[illegible]	8-11-15/1320
Received by		
Received by		
Received by		