



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

ENVIRONMENTAL
LABORATORY SECTION

PHONE: (302) 739-9942
FAX: (302) 739-3491

February 05, 2008

J. Chris Cleaver
DWR - Surface Water Discharge Section - NPDES
89 Kings Highway
Dover, DE 19901

Attention: J. Chris Cleaver



Attached you will find the following Laboratory Results:

Order Number: 0801031
Project Description: Pinnacle
Date Received: 01/09/2008
Time Received: 14:00

If you have any questions regarding this data, please contact me at the above telephone number.

Sincerely,


Kathy A. Knowles
Laboratory Manager

Delaware's good nature depends on you!



ANALYSIS REPORT

ELS Sample Number:	0801031-001	Matrix:	Waste Water			
Client Sample Description:	001	Sampling Method:	Grab			
Site ID:	001	Date and Time Collected:	1/9/2008	11:10		
<i>Test Parameter</i>	<i>Method</i>	<i>Result</i>	<i>Units</i>	<i>Qualifier</i>	<i>LOQ</i>	<i>Analysis Date</i>
Inorganic Nonmetallic Constituents						
Ammonia as N, Total	EPA 350.1	0.030	mg/L		0.020	01/09/2008
Microbiological Examination						
Enterococcus	Enterolert	19 ✓	cfu/100ml		1	01/10/2008
Organic Aggregate Constituents						
BOD, 5-Day	SM 5210B	7.64	mg/L		2.40	01/10/2008
Physical and Aggregate Properties						
Residue, Nonfilterable (TSS)	EPA 160.2	8	mg/L		2	01/10/2008

ANALYSIS REPORT

ELS Sample Number:	0801031-002	Matrix:	Waste Water			
Client Sample Description:	001-1	Sampling Method:	Grab			
Site ID:	001-1	Date and Time Collected:	1/9/2008	11:11		
<i>Test Parameter</i>	<i>Method</i>	<i>Result</i>	<i>Units</i>	<i>Qualifier</i>	<i>LOQ</i>	<i>Analysis Date</i>
Microbiological Examination						
Enterococcus	Enterolert	12 ✓	cfu/100ml		1	01/10/2008



Qualifier Codes, Definitions, and Abbreviations

Qualifier/Flag

<	Sample value is below the method detection limit. The result is reported as < MDL.
>	Sample value is above the upper quantitation limit. The upper quantitation limit is reported.
AB	Air Bubble in DO bottle
B	Compound not detected substantially (10 times) above the level reported in the laboratory blanks (For Chlorophyll & Pheophytin, blank value is at or below amount detected in sample).
BT	Secchi disk ON BOTTOM. The reported result is the depth from the surface to the bottom.
C	See report narrative or comment line for observations concerning this result.
D	Sample diluted for analysis.
EG	Value exceeds a theoretically equivalent or greater value (e.g. dissolved > total).
EW	Value exceeds a theoretically equal or greater value (e.g. dissolved > total). However, the difference is within the expected precision of the analytical techniques and is not statistically significant.
FZ	Samples frozen prior to analysis
I	The reported value is estimated due to the presence of interference.
IM	Instrument malfunctioned; No measurement taken.
J	Analyte present; reported value is estimated; concentration is below the range for accurate quantitation (greater than the MDL, but less than the LOQ).
JH	Result is likely overestimated due to matrix effect.
JL	Result is likely underestimated due to matrix effect
K	Sample not analyzed for the dissolved metal. The Total metal result is below the lower quantitation limit.
LOQ	Limit of Quantitation
MDL	Method Detection Limit
NA	Not Analyzed but required by project workplan or analytical request form.
NBF	No bottom measurement recorded in the field due to shallow water; Bottom records are those measurements recorded at surface.
NC	Sample not collected, but required by the project work plan.
ND	Not Detected.
NE	Field measurement not taken due to uncontrollable field sampling event or Natural Condition (Depth of water too deep/shallow).
NF	Sample collected, but not analyzed by the laboratory due to field error.
NO	None Observed
NR	No Result. See report narrative or comments for explanation.
NV#	Analytical result not valid.
O	Sample outsourced for analysis. Data will be reported separately.
P	Sample not properly preserved in field in accordance with preservation requirements. Data may be suspect.
PMM	Par Meter Malfunction
QC	Quality control value is outside acceptance limits.
QNS	Quantity not sufficient. Not enough sample to perform requested analyses.
S	Results will be reported in a separate report; See attached report.
SD	Sample discarded; Sample collected but not analyzed as per client request.
SNF	Site has no flow (i.e. a dry stream or a stream with no velocity)
STD	Stream too deep
STS	Site is too shallow to sample
U	Compound was analyzed but not detected. The method detection limit is reported.
UR	Nothing unusual was noted during the analysis of this sample. However, the test result differs from the norm to an extent that the laboratory considers it unreliable.
V	Analysis performed after holding time expired.
X	Results were not available at the time of the release of the report. Results will be reported when available.



Qualifier Codes, Definitions, and Abbreviations

Units

CFS	Cubic Feet per Second.
cfu/100mL	Colony forming units per 100 mL.
G	gram; there are 1000 g in 1 Kg.
GPM	Gallons per minute.
IN	Inches.
Kg	Kilogram.
L	Liter.
mg	milligram; there are 1000 mg in 1 g.
MGD	Millions of Gallons per Day.
ml	milliliter; there are 1000 ml in 1 L.
NTU	Nephelometric Turbidity Units. NTU is numerically equivalent to Formazin turbidity unit (FTU).
oC	Celsius.
pCi/L	Pico curie per liter.
ppb	Parts per billion=ug/Kg, ug/L.
ppm	Parts per million=mg/Kg, ug/g, mg/L, ug/ml; 1 ppm=1000 ppb.
su	Standard Units.
ug	microgram; there are 1000 ug in 1 mg.
uL	microliter; there are 1000 ul in 1 ml.
uMhos	Conductivity units for laboratory measurements.
uS	micro siemens; units used to measure conductivity in the field; same as uMhos.



Environmental Laboratory Section - Division of Water Resources
Delaware Department of Natural Resources and Environmental Control
89 Kings Highway, Dover, DE 19901 Phone: 302-739-9942

INVOICE

Invoice To:

J. Chris Cleaver
DWR - Surface Water Discharge Section - NPDES
89 Kings Highway
Dover, DE 19901

Report To:

J. Chris Cleaver
DWR - Surface Water Discharge Section - NPDE
89 Kings Highway
Dover, DE 19901

Invoice ID:	Account:	ELS Contact:	Invoice Date:	Priority:
IN3089	DWR-NPDES	Donna.Faries	05-Feb-08	Normal
Order ID:	Project Name:	Date Received:		
0801031	Pinnacle	09-Jan-08		
Matrix:	Description:	Quantity:	Unit Price:	Extended Price:
Waste Water	Residue, Nonfilterable (TSS)	1	\$11.00	\$11.00
Waste Water	Enterococcus	2	\$25.00	\$50.00
Waste Water	BOD, 5-Day	1	\$22.00	\$22.00
Waste Water	Ammonia as N, Total	1	\$19.00	\$19.00

Thank you for allowing us to serve you

Total: \$102.00

