

**NELAC CERTIFICATION #E84167** 

### ANALYTICAL TEST REPORT THESE RESULTS MEET NELAC STANDARDS

Submission Number 4110423

B E S Techechnologies, Inc.

7329 International Place

Sarasota, FL 34240

Sara Bondi

Project Name:

**METALS ANALYSIS** 

Date Received:

11/12/2004

Time Received:

1554

Submission Number

4110423

Sample Number:

11/10/000

Sample Description:

Hydrated Product

Sample Date:

11/12/2004

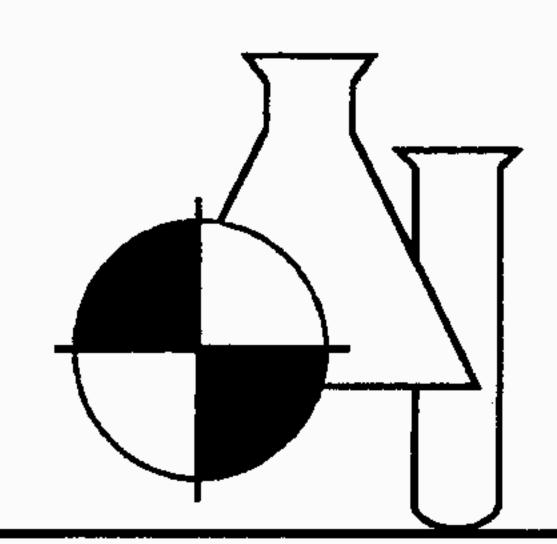
Sample Method:

Grab

Sample Time:

n/a

Parameter	Result	Units	Detection	Procedure	Analysis		Amalmat
			Limit		Date	Time	Analyst
CADMIUM	<b>3</b> U	UG/L	3	200.7	11/26/2004		ТВ
CHROMIUM	2U	UG/L	2	200.7	11/23/2004		TB
COPPER	4U	UG/L	4	200.7	11/23/2004		TB
LEAD	<b>3</b> U	UG/L	3	200.7	11/23/2004		TB
NICKEL	<b>3</b> U	UG/L	3	200.7	11/23/2004		TB
SILVER	<b>0.5</b> U	UG/L	0.5	200.7	11/26/2004		TB
ZINC	17.7	UG/L	4	200.7	11/23/2004		TB



**NELAC CERTIFICATION #E84167** 

Dale D. Dixon / Laboratory Director Date

#### DATA QUALIFIERS THAT MAY APPLY:

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the acceptable range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy mot met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

#### **NOTES:**

PQL = 4xMDL

MBAS calculated as LAS; molecular weight = 348.

- N = Presumptive evidence of presence of material.
- Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

X = Value exceed MCL.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

! = Data deviate from historically established concentration ranges.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

\* = Not reported due to interference.

G = CBOD accuracy standard does not meet method QC criteria, but does meet lab control limits that are in agreement with USEPA generated data. USEPA letter available upon request.

For questions and comments regarding these results, please contact Gwen Smith at (941) 723-9986 or gwen.smith@benchmarkea.net

**NELAC CERTIFICATION #E84167** 

### ANALYTICAL TEST REPORT THESE RESULTS MEET NELAC STANDARDS

**Submission Number** 

4110795

B E S Techechnologies, Inc. 7329 International Place Sarasota, FL 34240

Project Name: ADDITIONAL STUDY

**Date Received:** 

11/24/2004

Time Received:

1030

Sara Bondi

Submission Number

4110795

Sample Number:

Processed Water

Sample Date:

11/12/2004

Sample Method:

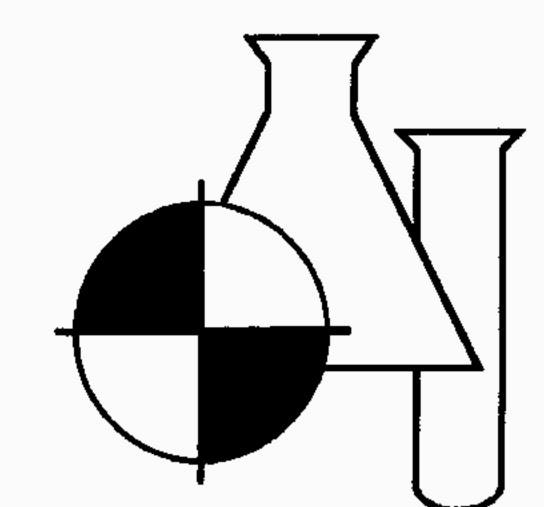
Sample Description:

Grab

Sample Time:

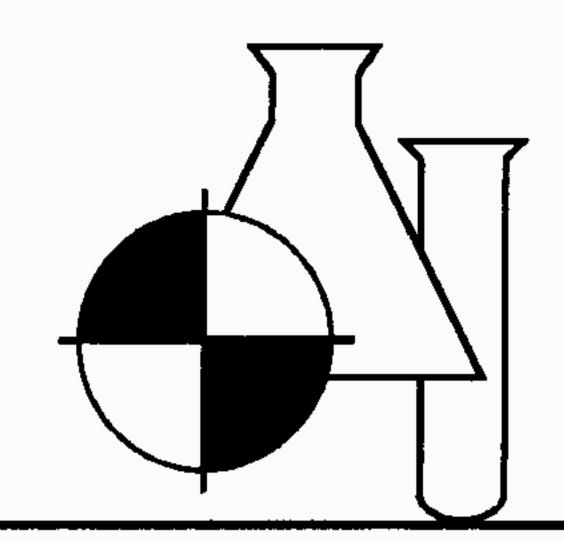
N/A

Parameter	Result	Units	Detection	n Procedure	Analysis		<u> </u>
			Limit		Date	Time	Analyst
1,1,1-TRICHLOROETHANE	0.33 UQ	UG/L	0.33	624	11/29/2004		E83079
1,1,2,2-TETRACHLOROETHANE	0.44 UQ	UG/L	0.44	624	11/29/2004	ļ.	E83079
1,1,2-TRICHLOROETHANE	0.17 UQ	UG/L	0.17	624	11/29/2004	ļ.	E83079
1,1-DICHLOROETHANE	0.26 UQ	UG/L	0.26	624	11/29/2004	ļ	E83079
1,1-DICHLOROETHENE	0.40 UQ	UG/L	0.40	624	11/29/2004	ļ	E83079
1,2-DICHLOROBENZENE	0.16 UQ	UG/L	0.16	624	11/29/2004	ļ.	E83079
1,2-DICHLOROETHANE	0.19 UQ	UG/L	0.19	624	11/29/2004	ļ	E83079
1,2-DICHLOROPROPANE	0.33 UQ	UG/L	0.33	624	11/29/2004	ļ	E83079
1,3-DICHLOROBENZENE	0.18 UQ	UG/L	0.18	624	11/29/2004	ļ.	E83079
1,4-DICHLOROBENZENE	0.19 UQ	UG/L	0.19	624	11/29/2004		E83079
2-CHLOROETHYLVINYL ETHER	0.17 UQ	UG/L	0.17	624	11/29/2004	ļ.	E83079
ACROLEIN	3.0 UQ	UG/L	3.0	624	11/29/2004	ļ.	E83079
ACRYLONITRILE	2.2 UQ	UG/L	2.2	624	11/29/2004		E83079
BENZENE	0.23 UQ	UG/L	0.23	624	11/29/2004		E83079
BROMODICHLOROMETHANE	0.26 UQ	UG/L	0.26	624	11/29/2004	ļ	E83079
BROMOFORM	1.0 UQ	UG/L	1.0	624	11/29/2004		E83079
BROMOMETHANE	0.60 UQ	UG/L	0.60	624	11/29/2004		E83079
CARBON TETRACHLORIDE	0.29 UQ	UG/L	0.29	624	11/29/2004	•	E83079
CHLOROBENZENE	0.15 UQ	UG/L	0.15	624	11/29/2004		E83079
CHLOROETHANE	0.51 UQ	UG/L	0.51	624	11/29/2004		E83079
CHLOROFORM	0.23 UQ	UG/L	0.23	624	11/29/2004		E83079
CHLOROMETHANE	0.50 UQ	UG/L	0.50	624	11/29/2004		E83079



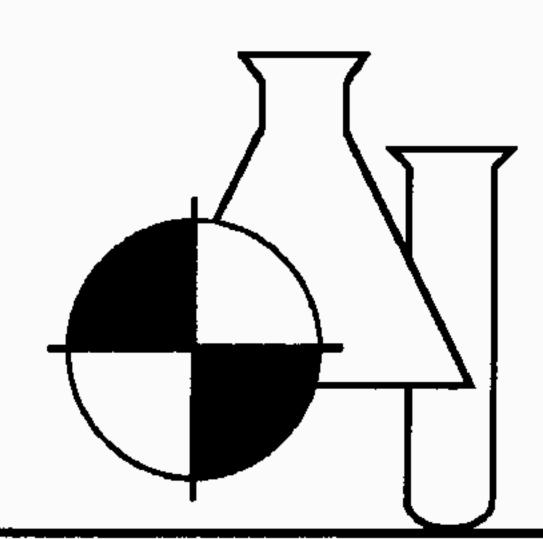
**NELAC CERTIFICATION #E84167** 

······································		······································	<del></del>		<b>₹</b>	
CIS-1,3-DICHLOROPROPENE	0.23 UQ	UG/L	0.23	624	11/29/2004	E83079
DIBROMOCHLOROMETHANE	0.19 UQ	UG/L	0.19	624	11/29/2004	E83079
ETHYLBENZENE	0.20 UQ	UG/L	0.20	624	11/29/2004	E83079
METHYLENE CHLORIDE	2.0 UQ	UG/L	2.0	624	11/29/2004	E83079
TETRACHLOROETHENE	0.17 UQ	UG/L	0.17	624	11/29/2004	E83079
TOLUENE	0.35 UQ	UG/L	0.35	624	11/29/2004	E83079
TOTAL XYLENES	0.32 UQ	UG/L	0.32	624	11/29/2004	E83079
TRANS-1,2-DICHLOROETHENE	0.17 UQ	UG/L	0.17	624	11/29/2004	E83079
TRANS-1,3-DICHLOROPROPENE	0.25 UQ	UG/L	0.25	624	11/29/2004	E83079
TRICHLOROETHENE	0.27 UQ	UG/L	0.27	624	11/29/2004	E83079
TRICHLOROFLUOROMETHANE	0.50 UQ	UG/L	0.50	624	11/29/2004	E83079
VINYL CHLORIDE	0.43 UQ	UG/L	0.43	624	11/29/2004	E83079
1,2,4-TRICHLOROBENZENE	0.85U	UG/L	0.85	625	12/01/2004	E83079
1,2-DICHLOROBENZENE	<b>0.95</b> U	UG/L	0.95	625	12/01/2004	E83079
1,2-DIPHENYLHYDRAZINE	<b>0.94</b> U	UG/L	0.94	625	12/01/2004	E83079
1,3-DICHLOROBENZENE	1.0U	UG/L	1.0	625	12/01/2004	E83079
1,4-DICHLOROBENZENE	1. <b>0</b> U	UG/L	1.0	625	12/01/2004	E83079
2,4,6-TRICHLOROPHENOL	0.93U	UG/L	0.93	625	12/01/2004	E83079
2,4-DICHLOROPHENOL	<b>0.98</b> U	UG/L	0.98	625	12/01/2004	E83079
2,4-DIMETHYLPHENOL	1.3U	UG/L	1.3	625	12/01/2004	E83079
2,4-DINITROPHENOL	<b>2.0</b> U	UG/L	2.0	625	12/01/2004	E83079
2,4-DINITROTOLUENE	1.4U	UG/L	1.4	625	12/01/2004	E83079
2,6-DINITROTOLUENE	1.2U	UG/L	1.2	625	12/01/2004	E83079
2-CHLORONAPHTHALENE	0.65U	UG/L	0.65	625	12/01/2004	E83079
2-CHLOROPHENOL	1.3U	UG/L	1.3	625	12/01/2004	E83079
2-METHYL-4,6-DINITROPHENOL	1.1U	UG/L	1.1	625	12/01/2004	E83079
2-NITROPHENOL	1.1U	UG/L	1.1	625	12/01/2004	E83079
3,3'-DICHLOROBENZIDINE	0.58U	UG/L	0.58	625	12/01/2004	E83079
4-BROMOPHENYL PHENYL ETHER	0.64U	UG/L	0.64	625	12/01/2004	E83079
4-CHLORO-3-METHYLPHENOL (P-CHLOI	1. <b>8</b> U	UG/L	1.8	625	12/01/2002	E83079
4-CHLOROPHENYL PHENYL ETHER	1. <b>2</b> U	UG/L	1.2	625	12/01/2004	E83079
4-NITROPHENOL	0.99U	UG/L	0.99	625	12/01/2004	E83079
ACENAPHTHENE	0.80U	UG/L	0.80	625	12/01/2004	E83079
ACENAPHTHYLENE	1.1U	UG/L	1.1	625	12/01/2004	E83079
ANTHRACENE	0.57U	UG/L	0.57	625	12/01/2004	E83079
BENZIDINE	0.77U	UG/L	0.77	625	12/01/2004	E83079
BENZO(A)ANTHRACENE	0.64U	UG/L	0.64	625	12/01/2004	E83079
BENZO(A)PYRENE	0.69U	UG/L	0.69	625	12/01/2004	E83079
BENZO(B)FLUORANTHENE	0.81U	UG/L	0.81	625	12/01/2004	E83079
BENZO(GHI)PERYLENE	3.7 I	UG/L	1.0	625	12/01/2004	E83079



**NELAC CERTIFICATION #E84167** 

BENZO(K)FLUORANTHENE	<b>0.66</b> U	UG/L	0.66	625	12/01/2004	E83079
BENZYL BUTYL PHTHALATE	<b>0.78</b> U	UG/L	0.78	625	12/01/2004	E83079
BIS(2-CHLOROETHOXY)METHANE	1.2U	UG/L	1.2	625	12/01/2004	E83079
BIS(2-CHLOROETHYL)ETHER	1.3U	UG/L	1.3	625	12/01/2004	E83079
BIS(2-CHLOROISOPROPYL)ETHER	1.1U	UG/L	1.1	625	12/01/2004	E83079
BIS(2-ETHYLHEXYL)PHTHALATE	0.78U	UG/L	0.78	625	12/01/2004	E83079
CHRYSENE	<b>0.58</b> U	UG/L	0.58	625	12/01/2004	E83079
DI-N-BUTYLPHTHALATE	0.70U	UG/L	0.70	625	12/01/2004	E83079
DI-N-OCTYLPHTHALATE	0.69U	UG/L	0.69	625	12/01/2004	E83079
DIBENZO(A,H)ANTHRACENE	3.9 X	UG/L	2.0	625	12/01/2004	E83079
DIETHYL PHTHALATE	1.4U	UG/L	1.4	625	12/01/2004	E83079
DIMETHYL PHTHALATE	1.1U	UG/L	1.1	625	12/01/2004	E83079
DIOXIN SCREEN	<b>5.0</b> U	UG/L	5.0	625	12/01/2004	E83079
FLUORANTHENE	0.53U	UG/L	0.53	625	12/01/2004	E83079
FLUORENE	1.4U	UG/L	1.4	625	12/01/2004	E83079
HEXACHLOROBENZENE	0.59U	UG/L	0.59	625	12/01/2004	E83079
HEXACHLOROBUTADIENE	0.98U	UG/L	0.98	625	12/01/2004	E83079
HEXACHLOROCYCLOPENTADIENE	3.6U	UG/L	3.6	625	12/01/2004	E83079
HEXACHLOROETHANE	1.5U	UG/L	1.5	625	12/01/2004	E83079
INDENO(1,2,3-CD)PYRENE	2.0 X	UG/L	1.2	625	12/01/2004	E83079
ISOPHORONE	4.4 IV	UG/L	0.99	625	12/01/2004	E83079
N-NITROSODI-N-PROPYLAMINE	1.2U	UG/L	1.2	625	12/01/2004	E83079
N-NITROSODIMETHYLAMINE	0.63U	UG/L	0.63	625	12/01/2004	E83079
N-NITROSODIPHENYLAMINE	0.67U	UG/L	0.67	625	12/01/2004	E83079
NAPHTHALENE	<b>0.86</b> U	UG/L	0.86	625	12/01/2004	E83079
NITROBENZENE	1.4U	UG/L	1.4	625	12/01/2004	E83079
PENTACHLOROPHENOL	1.4U	UG/L	1.4	625	12/01/2004	E83079
PHENANTHRENE	<b>0.73</b> U	UG/L	0.73	625	12/01/2004	E83079
PHENOL	0.55U	UG/L	0.55	625	12/01/2004	E83079
PYRENE	0.72U	UG/L	0.72	625	12/01/2004	E83079



**NELAC CERTIFICATION #E84167** 

Dale D. Dixon / Laboratory Director

12/13/2004

Date

#### **DATA QUALIFIERS THAT MAY APPLY:**

A = Value reported is an average of two or more determinations.

B = Results based upon colony counts outside the acceptable range.

H = Value based on field kit determination. Results may not be accurate.

I = Reported value is between the laboratory MDL and the PQL.

J1 = Est. value surrogate recovery limits exceeded.

J2 = Est. value. No quality control criteria exists for component.

J3 = Est. value quality control criteria for precision or accuracy mot met.

J4 = Est. value. Sample matrix interference suspected.

J5 = Est. value. Data questionable due to improper lab or field protocols

K = Off-scale low. Value is known to be < the value reported.

L = Off-scale high. Value is known to be > the value reported

#### NOTES:

PQL = 4xMDL

MBAS calculated as LAS; molecular weight = 348.

N = Presumptive evidence of presence of material.

Q = Sample held beyond accepted hold time.

T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.

U = Analyte analyzed but not detected at the value indicated.

V = Analyte detected in sample and method blank.

X = Value exceed MCL.

Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.

! = Data deviate from historically established concentration ranges.

? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the Presence or absence of the analyte cannot be determined from the data.

\* = Not reported due to interference.

G = CBOD accuracy standard does not meet method QC criteria, but does meet lab control limits that are in agreement with USEPA generated data. USEPA letter available upon request.

Method 625: Base Neutrals and Acids - Spike Recovery outside accepted recovery limits. See attached Case Narrative.

For questions and comments regarding these results, please contact Gwen Smith at (941) 723-9986 or gwen.smith@benchmarkea.net

### Case Narrative

CLIENT:

Benchmark Analytical Lab Inc.

Project:

**BEST** 

Lab Order:

F04110781

### I. SAMPLE RECEIVING ACTIVITY

The samples were received on the date specified in the cover letter. The samples arrived in good condition and were processed by sample control. Upon completion of the initial inspection, the samples were distributed within the laboratory for analysis.

#### II. DATA

Samples were prepped, analyzed and reported per method guidelines and specifications, except as noted. Sample 4110795 extracted past 7 day holding time for extraction of SVOC, since received past holding time and as requested.

### III. QUALITY CONTROL

All QA/QC data meet method specifications, unless otherwise specified on the QC report. For method 625, analytes were detected in the associated method blank below the PQL. For isophorone, the compound was detected in the sample at the same level as the method blank. All other compounds detected in method blank were BDL in the sample. For method 625, there was insufficient sample volume available for Matrix Spikes (MS/MSD) for this batch. A Laboratory Control Sample and a Duplicate were extracted with the batch to calculate precision.

The Quality Control data for this submission are included with the sample analytical results.