

13 October 2003

A Tranter  
Property and Environmental Services  
Building 330  
Westcott Venture Park, Westcott  
Aylesbury  
BUCKS HP18 0NP

DATE OF RECEIPT	
16 OCT 2003	
PROJ	NO
ACTN	
PROPERTY AND ENVIRONMENTAL SERVICES	

P501/00/06

Dear Andrew,

**RESULT FOR BISHOPTON WATER SAMPLE TESTED AS A SOLID FOR EXPLOSIVES**

Please find enclosed result sheet for sample tested for explosives as requested on the 3<sup>rd</sup> October 2003.

The sample had very little water and was mainly mud. We therefore treated the sample as a soil sample and tested it for open space explosives.

If you have any queries regarding this work, please do not hesitate to contact.

Yours sincerely,



**DAVE MALCOLM**  
**Laboratory Manager**  
**BAE SYSTEMS Environmental Services**

Direct Line +44 (0) 1257 242227 Direct Fax +44 (0) 1257 242599 Email david.malcolm@baesystems.com

13 October 2003

A Tranter  
Property and Environmental Services  
Building 330  
Westcott Venture Park, Westcott  
Aylesbury  
BUCKS HP18 0NP

P501/00/06

Dear Andrew,

**RESULT FOR BISHOPTON WATER SAMPLE TESTED AS A SOLID FOR EXPLOSIVES**

Please find enclosed result sheet for sample tested for explosives as requested on the 3<sup>rd</sup> October 2003.

The sample had very little water and was mainly mud. We therefore treated the sample as a soil sample and tested it for open space explosives.

If you have any queries regarding this work, please do not hesitate to contact.

Yours sincerely,



**DAVE MALCOLM**  
**Laboratory Manager**  
**BAE SYSTEMS Environmental Services**

Direct Line +44 (0) 1257 242227 Direct Fax +44 (0) 1257 242599 Email [david.malcolm@baesystems.com](mailto:david.malcolm@baesystems.com)



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ASP C				BISHOPTON		LABORATORY REF: LN 3867/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



**TEST CERTIFICATE**  
**Certificate Number: 3860 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

ASP D  
 BISHOPTON  
 P501/OCR2


Non-accredited tests are marked with <sup>Φ</sup>

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ASP D				BISHOPTON		LABORATORY REF: LN 3860/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG A				BISHOPTON		LABORATORY REF: LN 3864/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



**TEST CERTIFICATE**  
**Certificate Number: 3865 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

ESG B  
 BISHOPTON  
 P501/OCR2

Non-accredited tests are marked with <sup>Φ</sup>

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED..... *SM* .....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG B			BISHOPTON		LABORATORY REF: LN 3865/03		
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG C		BISHOPTON		LABORATORY REF:		LN 3866/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									

**TEST CERTIFICATE**  
**Certificate Number: 3862 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>	Sampled by Client	

**CLIENT SAMPLE IDENTIFICATION:**ESG D  
BISHOPTON  
P501/OCR2Non-accredited tests are marked with  $\Phi$ 

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**APPROVED..... Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES

## GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG D				BISHOPTON		LABORATORY REF: LN 3862/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



**TEST CERTIFICATE**  
**Certificate Number: 3853 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

ESG F  
BISHOPTON  
P501/OCR2

Non-accredited tests are marked with  $\Phi$

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....*DM*.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG F				BISHOPTON		LABORATORY REF:		LN 3853/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS			
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l		
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]			
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide			
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]			
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter			
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]			
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]			
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]			
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons			
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]			
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride			
Picrite	212			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate			
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]			
				°Potassium		°Benzo(a)pyrene					
				°Lithium		°Indeno(1,2,3-cd)pyrene					
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene					
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l		
2,4 DNT	< 50					°PAH Total		°PCB 28			
								°PCB 52			
								°PCB 101			
								°PCB 118			
								°PCB 138			
								°PCB 153			
								°PCB 180			
								°I.C.7 TOTAL			
NOTES											



**TEST CERTIFICATE**  
**Certificate Number: 3854 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

ESG H  
BISHOPTON  
P501/OCR2

Non-accredited tests are marked with <sup>Φ</sup>

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....  .....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG H				BISHOPTON		LABORATORY REF: LN 3854/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



**TEST CERTIFICATE**  
**Certificate Number: 3858 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

ESG I  
 BISHOPTON  
 P501/OCR2

Non-accredited tests are marked with  $\Phi$  Sub-contracted tests are indicated by #

**TEST METHODS:**  
 HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....  .....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG I		BISHOPTON		LABORATORY REF:		LN 3858/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		ESG J		BISHOPTON		LABORATORY REF:		LN 3861/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound	[P.C.B.] mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	

**NOTES**  
NON-UKAS COMMENT: SMALL PEAK FOR PICRITE APPROX. 47ug/l



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		GT10		BISHOPTON		LABORATORY REF:		LN 3863/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
*Colorimetric 1		*Arsenic		*Barium		*Naphthalene		*Sulphate [total]	
*Colorimetric 2		*Cadmium		*Antimony		*Acenaphthylene		*Sulphide	
Explosive	ug/l	*Chromium		*Silver		*Acenaphthene		*Sulphur [free]	
HMX	< 50	*Lead		*Aluminium		*Fluorene		*Toluene extractable matter	
RDX	< 50	*Mercury		*Bismuth		*Phenanthrene		*Chromium [hexavalent]	
EGDN	< 50	*Selenium		*Magnesium		*Anthracene		*Cyanide [total]	
Tetryl	< 50	*Copper		*Manganese		*Fluoranthene		*Cyanide [free]	
NG	< 50	*Nickel		*Molybdenum		*Pyrene		*Total Hydrocarbons	
TNT	< 50	*Zinc		*Titanium		*Benz(a)anthracene		*Phenols [monohydric]	
PETN	< 50	*Boron [water soluble]		*Strontium		*Chrysene		*Chloride	
Picrite	< 50			*Phosphorus		*Benzo(b)fluoranthene		*Thiocyanate	
Picric Acid	< 50			*Sulphur		*Benzo(k)fluoranthene		*PH [pH units]	
				*Potassium		*Benzo(a)pyrene			
				*Lithium		*Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				*Vanadium		*Dibenzo(a,h)anthracene			
2,6 DNT	< 50			*Tin		*Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					*PAH Total		*PCB 28	
								*PCB 52	
								*PCB 101	
								*PCB 118	
								*PCB 138	
								*PCB 153	
								*PCB 180	
								*I.C.7 TOTAL	
NOTES									



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		P 21				BISHOPTON		LABORATORY REF: LN 3855/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									

**TEST CERTIFICATE**  
**Certificate Number: 3859 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	13/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	13/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

P 22  
 BISHOPTON  
 P501/OCR2

Non-accredited tests are marked with <sup>Φ</sup>

Sub-contracted tests are indicated by #

**TEST METHODS:**

NC using ESAL/QC/4a and l.  
 HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, HNS, Picric Acid & Picrite using ESAL/QC/4a and h;  
 Arsenic, Cadmium, Chromium, Lead, Copper, Nickel, Zinc using ESAL/QC/4 parts a, b and c;  
 Mercury using ESAL/QC/4 parts a, b and g;  
 Selenium using ESAL/QC/4 parts a, b, and f;  
 Boron [water-soluble] using ESAL/QC/4 parts a, d and e;  
 Polyaromatic Hydrocarbons using ESAL/QC/4a and s.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL SOIL ANALYSIS REPORT

SAMPLE REF:		P 22		BISHOPTON		LABORATORY REF:		LN 3859/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
SOIL		Element	mg/kg	Element	mg/kg	Compound	mg/kg	Test	mg/kg
°Colorimetric 1		Arsenic		°Barium		Naphthalene		°Sulphate [total]	
°Colorimetric 2	-ve	Cadmium		°Antimony		Acenaphthylene		°Sulphide	
Explosive	mg/kg	Chromium		°Silver		Acenaphthene		°Sulphur [free]	
NC	< 5000	Lead		°Aluminium		Fluorene		°Toluene extractable matter	
HMX	< 20	Mercury		°Bismuth		Phenanthrene		°Chromium [hexavalent]	
RDX	< 20	Selenium		°Magnesium		Anthracene		°Cyanide [total]	
EGDN	< 20	Copper		°Manganese		Fluoranthene		°Cyanide [free]	
Tetryl	< 20	Nickel		°Molybdenum		Pyrene		°Total Hydrocarbons	
NG	< 20	Zinc		°Titanium		Benz(a)anthracene		°Phenols [monohydric]	
TNT	< 20	Boron [water soluble]		°Strontium		Chrysene		°Chloride	
PETN	< 20			°Phosphorus		Benzo(b)fluoranthene		°Thiocyanate	
HNS	< 5			°Sulphur		Benzo(k)fluoranthene		°PH [pH units]	
Picrite	< 20			°Potassium		Benzo(a)pyrene		°% Solids @ 105 °C	
Picric Acid	< 20			°Lithium		Indeno(1,2,3-cd)pyrene			
Others:				°Vanadium		Dibenzo(a,h)anthracene			
2,6 DNT	< 20			°Tin		Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/kg
2,4 DNT	< 20					°PAH Total		°PCB 28	
Validation studies have shown that the concentration of NC in high organic content soils may be overestimated.								°PCB 52	
								°PCB 101	
NOTES								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	

°Asbestos
Types Found



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		P 23				BISHOPTON		LABORATORY REF:		LN 3857/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS			
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l		
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]			
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide			
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]			
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter			
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]			
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]			
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]			
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons			
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]			
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride			
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate			
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]			
				°Potassium		°Benzo(a)pyrene					
				°Lithium		°Indeno(1,2,3-cd)pyrene					
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene					
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l		
2,4 DNT	< 50					°PAH Total		°PCB 28			
								°PCB 52			
								°PCB 101			
								°PCB 118			
								°PCB 138			
								°PCB 153			
								°PCB 180			
								°I.C.7 TOTAL			
NOTES											



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		P 24				BISHOPTON		LABORATORY REF:		LN 3856/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS			
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l		
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]			
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide			
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]			
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter			
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]			
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]			
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]			
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons			
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]			
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride			
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate			
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]			
				°Potassium		°Benzo(a)pyrene					
				°Lithium		°Indeno(1,2,3-cd)pyrene					
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene					
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound	P.C.B.	mg/l	
2,4 DNT	< 50					°PAH Total		°PCB 28			
								°PCB 52			
								°PCB 101			
								°PCB 118			
								°PCB 138			
								°PCB 153			
								°PCB 180			
								°I.C.7 TOTAL			
NOTES											

Property & Environmental Services  
Brisance House  
Euxton Lane  
Chorley  
Lancashire  
PR7 6AQ, England.  
Telephone: (01257) 242000  
Facsimile: (01257) 242599



No. 1764

**TEST CERTIFICATE**  
**Certificate Number: 3845 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

SW01  
BISHOPTON  
P501/OCR2

Non-accredited tests are marked with <sup>⊕</sup>

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

RECEIPT

13 OCT 2003

APPROVED.....*JM*.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW01			BISHOPTON		LABORATORY REF:		LN 3845/03	
EXPLOSIVES		METALS			PAHs		GENERAL TESTS			
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l	
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]		
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide		
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]		
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter		
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]		
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]		
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]		
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons		
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]		
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride		
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate		
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]		
				°Potassium		°Benzo(a)pyrene				
				°Lithium		°Indeno(1,2,3-cd)pyrene				
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene				
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound	[P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28		
								°PCB 52		
								°PCB 101		
								°PCB 118		
								°PCB 138		
								°PCB 153		
								°PCB 180		
								°I.C.7 TOTAL		
NOTES										

Property & Environmental Services  
Brisance House  
Euxton Lane  
Chorley  
Lancashire  
PR7 6AQ, England.  
Telephone: (01257) 242000  
Facsimile: (01257) 242599



No. 1764

**TEST CERTIFICATE**  
**Certificate Number: 3846 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**  
  
SW02  
BISHOPTON  
P501/OCR2

Non-accredited tests are marked with  $\Phi$  Sub-contracted tests are indicated by #

**TEST METHODS:**  
HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW02		BISHOPTON		LABORATORY REF:		LN 3846/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	60			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



**TEST CERTIFICATE**  
**Certificate Number: 3847 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

SW03  
 BISHOPTON  
 P501/OCR2

Non-accredited tests are marked with  $\Phi$

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW03			BISHOPTON		LABORATORY REF:		LN 3847/03	
EXPLOSIVES		METALS			PAHs		GENERAL TESTS			
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l	
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]		
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide		
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]		
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter		
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]		
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]		
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]		
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons		
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]		
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride		
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate		
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]		
				°Potassium		°Benzo(a)pyrene				
				°Lithium		°Indeno(1,2,3-cd)pyrene				
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene				
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l	
2,4 DNT	< 50					°PAH Total		°PCB 28		
								°PCB 52		
								°PCB 101		
								°PCB 118		
								°PCB 138		
								°PCB 153		
								°PCB 180		
								°I.C.7 TOTAL		
NOTES										



**TEST CERTIFICATE**  
**Certificate Number: 3848 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client


**CLIENT SAMPLE IDENTIFICATION:**

SW04  
 BISHOPTON  
 P501/OCR2

Non-accredited tests are marked with <sup>Φ</sup> Sub-contracted tests are indicated by #

**TEST METHODS:**  
 HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW04			BISHOPTON		LABORATORY REF: LN 3848/03		
EXPLOSIVES		METALS			PAHs		GENERAL TESTS		
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									

**TEST CERTIFICATE**  
**Certificate Number: 3849 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>	Sampled by Client	

**CLIENT SAMPLE IDENTIFICATION:**

SW06  
 BISHOPTON  
 P501/OCR2

Non-accredited tests are marked with  $\Phi$

Sub-contracted tests are indicated by #

**TEST METHODS:**

HMX, RDX, EGDN, Teteryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED..... 

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW06			BISHOPTON		LABORATORY REF:		LN 3849/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS		
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l	
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]		
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide		
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]		
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter		
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]		
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]		
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]		
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons		
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]		
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride		
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate		
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]		
				°Potassium		°Benzo(a)pyrene				
				°Lithium		°Indeno(1,2,3-cd)pyrene				
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene				
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l	
2,4 DNT	< 50					°PAH Total		°PCB 28		
								°PCB 52		
								°PCB 101		
								°PCB 118		
								°PCB 138		
								°PCB 153		
								°PCB 180		
								°I.C.7 TOTAL		
NOTES										

Property & Environmental Services  
Brisance House  
Euxton Lane  
Chorley  
Lancashire  
PR7 6AQ, England.  
Telephone: (01257) 242000  
Facsimile: (01257) 242599



No. 1764

**TEST CERTIFICATE**  
**Certificate Number: 3850 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>		Sampled by Client

**CLIENT SAMPLE IDENTIFICATION:**

SW07  
BISHOPTON  
P501/OCR2

Non-accredited tests are marked with  $\Phi$  Sub-contracted tests are indicated by #

**TEST METHODS:**  
HMX, RDX, EGDN, Tetryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW07				BISHOPTON		LABORATORY REF: LN 3850/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS	
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]	
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide	
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]	
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter	
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]	
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]	
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]	
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons	
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]	
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride	
Picrite	3200			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate	
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]	
				°Potassium		°Benzo(a)pyrene			
				°Lithium		°Indeno(1,2,3-cd)pyrene			
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene			
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l
2,4 DNT	< 50					°PAH Total		°PCB 28	
								°PCB 52	
								°PCB 101	
								°PCB 118	
								°PCB 138	
								°PCB 153	
								°PCB 180	
								°I.C.7 TOTAL	
NOTES									



# BAE SYSTEMS ENVIRONMENTAL SERVICES GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW08				BISHOPTON		LABORATORY REF:		LN 3851/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS			
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l		
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]			
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide			
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]			
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter			
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]			
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]			
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]			
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons			
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]			
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride			
Picrite	78			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate			
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]			
				°Potassium		°Benzo(a)pyrene					
				°Lithium		°Indeno(1,2,3-cd)pyrene					
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene					
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound [P.C.B.]	mg/l		
2,4 DNT	< 50					°PAH Total		°PCB 28			
								°PCB 52			
								°PCB 101			
								°PCB 118			
								°PCB 138			
								°PCB 153			
								°PCB 180			
								°I.C.7 TOTAL			
NOTES											

**TEST CERTIFICATE**  
**Certificate Number: 3852 / 03**

<b>Client:</b>	S Ridgeway	<b>Date Received:</b>	03/10/03
<b>Address:</b>	BAE SYSTEMS	<b>Date Completed:</b>	09/10/03
	Building 330		
	Westcott Venture Park	<b>Date of Report:</b>	09/10/03
	Westcott		
	Aylesbury, HP18 0NP		
	<b>Sample Taken by:</b>	Sampled by Client	

**CLIENT SAMPLE IDENTIFICATION:**

SW09  
 BISHOPTON  
 P501/OCR2

Non-accredited tests are marked with <sup>Φ</sup> Sub-contracted tests are indicated by #

**TEST METHODS:**  
 HMX, RDX, EGDN, Teteryl, NG, TNT, 2,4-DNT, 2,6-DNT, PETN, Picric Acid and Picrite using ESAL/QC/4r.

**DEPARTURES FROM STANDARD PROCEDURES FOR ACCREDITED TESTS:**

APPROVED.....

Dr. D.G. Malcolm, Mrs S. Marriott or Mr M Lattughi  
 Technical Manager      Quality Manager      Senior Analyst

# BAE SYSTEMS ENVIRONMENTAL SERVICES

## GENERAL WATER ANALYSIS REPORT

SAMPLE REF:		SW09				BISHOPTON		LABORATORY REF:		LN 3852/03	
EXPLOSIVES		METALS				PAHs		GENERAL TESTS			
WATER		Element	mg/l	Element	mg/l	Compound	mg/l	Test	mg/l		
°Colorimetric 1		°Arsenic		°Barium		°Naphthalene		°Sulphate [total]			
°Colorimetric 2		°Cadmium		°Antimony		°Acenaphthylene		°Sulphide			
Explosive	ug/l	°Chromium		°Silver		°Acenaphthene		°Sulphur [free]			
HMX	< 50	°Lead		°Aluminium		°Fluorene		°Toluene extractable matter			
RDX	< 50	°Mercury		°Bismuth		°Phenanthrene		°Chromium [hexavalent]			
EGDN	< 50	°Selenium		°Magnesium		°Anthracene		°Cyanide [total]			
Tetryl	< 50	°Copper		°Manganese		°Fluoranthene		°Cyanide [free]			
NG	< 50	°Nickel		°Molybdenum		°Pyrene		°Total Hydrocarbons			
TNT	< 50	°Zinc		°Titanium		°Benz(a)anthracene		°Phenols [monohydric]			
PETN	< 50	°Boron [water soluble]		°Strontium		°Chrysene		°Chloride			
Picrite	< 50			°Phosphorus		°Benzo(b)fluoranthene		°Thiocyanate			
Picric Acid	< 50			°Sulphur		°Benzo(k)fluoranthene		°PH [pH units]			
				°Potassium		°Benzo(a)pyrene					
				°Lithium		°Indeno(1,2,3-cd)pyrene					
<b>Others:</b>				°Vanadium		°Dibenzo(a,h)anthracene					
2,6 DNT	< 50			°Tin		°Benzo(g,h,i)perylene		Compound	[P.C.B.]	mg/l	
2,4 DNT	< 50					°PAH Total		°PCB 28			
								°PCB 52			
								°PCB 101			
								°PCB 118			
								°PCB 138			
								°PCB 153			
								°PCB 180			
								°I.C.7 TOTAL			
NOTES											

**Mr Priestley  
BAE Systems  
Wescott Venture Park  
Westcott  
Aylesbury HP18 0NP  
Berkshire**

15 January 2004

**Test Report : TH/204729/2003**

Dear Mr Priestley,

For the analysis of your sample(s) submitted on 03/10/2003 please find enclosed a re-issue of the above test report(s).


Should you have any query on the report(s) or any part of our service we will be happy to discuss your requirements.

Thank you for using STL and we look forward to receiving your next samples.

To arrange a container delivery or sample collection please ring the direct line to **COURIERS on 024 7685 6562.**

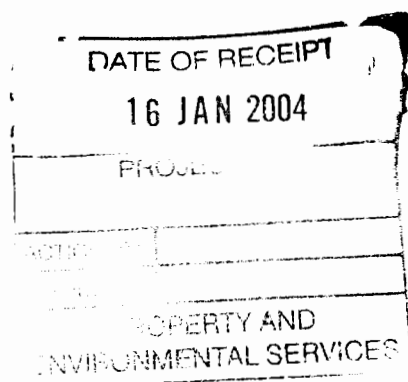
Reissued with analyte description amended - Ammonia KCl soluble as N previously reported as Ammonia Water Soluble as NH3. For any organic reports, please see issue 1.

Yours Sincerely,

Signed : 

Name : J. Fell

Title : Section Manager



# Report Summary



1314  
0897  
1229



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# STL

**Mr Andrew Priestley**  
**BAE Systems**  
**Wescott Venture Park**  
**Westcott**

**Aylesbury**  
**Berkshire**  
**HP18 0NP**

**Report Number : TH/204729/2003 Issue 2**

**Job Location :** Bishopton Monitoring P501-00--R2

**Number of Samples**  
**included in report**      **23**

**Job Received :**      **03 October 2003**

**Number of test results**      **1027**  
**included in report**

**Analysis Commenced**      **06 October 2003**

Signed :

Name : **J. Fell**

Date : 15 January 2004

Title : **Production Manager**

STL was not responsible for sampling unless otherwise stated. Sampling is not covered by our UKAS accreditation. Information on the methods of analysis and performance characteristics are available on request. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory.

# Certificate of Analysis



1314  
0897  
1229

SEVERN  
TRENT

Environmental Leadership

# STL

Sample 1 Laboratory Number : 979279  
of 23 Report Number : TH /204729/2003 Issue 2

Sample Source : BAE Systems  
Sample Point Description : BAE Systems  
Sample Description : SW01

Sample Date : 01 October 2003 Sample Received : 03 October 2003 Analysis Complete : 04 November 2003

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.07	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.032	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	30	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.26	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	6.5	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.005	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	1.8	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	11	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.022	mg/l	C	WAS049
Sulphide as S	0.03	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.5		C	WAS039
Conductivity- Electrical 20deg	214	uS/cm	C	WAS039
Alkalinity as CaCO3	83.3	mg/l	C	WAS025
Total Hardness as CaCO3	104	mg/l	C	WAS049
Ammoniacal Nitrogen as N	5.4	mg/l	C	WAS036
Chloride as Cl	322	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.2	mg/l	C	WAS049
Sulphate as SO4	113	mg/l	C	WAS036
Solids, Suspended	20	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	<1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	56	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

# Certificate of Analysis



1314  
0897  
1229



# STL

Environmental Leadership

Sample **1** Laboratory Number : **979279**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW01**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	42	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	42	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979279 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH. Please see attached report for SVOC results- sample required re-extraction due to multiple surrogate failure, reporting limit raised due to limited sample availability for the re-extraction. Please see attached report for VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **2** Laboratory Number : **979280**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW02**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.05	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.078	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	38	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.33	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	7.4	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.010	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0005	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	2.3	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	17	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.009	mg/l	C	WAS049
Sulphide as S	0.02	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.5		C	WAS039
Conductivity- Electrical 20deg	283	uS/cm	C	WAS039
Alkalinity as CaCO3	101	mg/l	C	WAS025
Total Hardness as CaCO3	132	mg/l	C	WAS049
Ammoniacal Nitrogen as N	<0.3	mg/l	C	WAS036
Chloride as Cl	24	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	<0.1	mg/l	C	WAS049
Sulphate as SO4	18	mg/l	C	WAS036
Solids, Suspended	14	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **2** Laboratory Number : **979280**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW02**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979280 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **3** Laboratory Number : **979281**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW03**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.077	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	45	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.18	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	8.4	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.009	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0004	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	2.1	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	15	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.011	mg/l	C	WAS049
Sulphide as S	0.02	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.6		C	WAS039
Conductivity- Electrical 20deg	291	uS/cm	C	WAS039
Alkalinity as CaCO3	119	mg/l	C	WAS025
Total Hardness as CaCO3	146	mg/l	C	WAS049
Ammoniacal Nitrogen as N	<0.3	mg/l	C	WAS036
Chloride as Cl	20	mg/l	C	WAS036
Nitrate as N	0.4	mg/l	C	WAS036
Phosphorus , Total as P	0.1	mg/l	C	WAS049
Sulphate as SO4	19	mg/l	C	WAS036
Solids, Suspended	80	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	<1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **3** Laboratory Number : **979281**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW03**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979281 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **4** Laboratory Number : **979282**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW04**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.04	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.10	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	46	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.16	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	8.3	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.016	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0017	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	2.2	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	20	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.010	mg/l	C	WAS049
Sulphide as S	0.01	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.2		C	WAS039
Conductivity- Electrical 20deg	389	uS/cm	C	WAS039
Alkalinity as CaCO3	114	mg/l	C	WAS025
Total Hardness as CaCO3	162	mg/l	C	WAS049
Ammoniacal Nitrogen as N	0.3	mg/l	C	WAS036
Chloride as Cl	40	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	<0.1	mg/l	C	WAS049
Sulphate as SO4	26	mg/l	C	WAS036
Solids, Suspended	51	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **4** Laboratory Number : **979282**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW04**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979282 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **5** Laboratory Number : **979283**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW06**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.14	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	53	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.14	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	9.4	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.030	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	2.4	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	24	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.018	mg/l	C	WAS049
Sulphide as S	0.04	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.1		C	WAS039
Conductivity- Electrical 20deg	419	uS/cm	C	WAS039
Alkalinity as CaCO3	123	mg/l	C	WAS025
Total Hardness as CaCO3	183	mg/l	C	WAS049
Ammoniacal Nitrogen as N	0.3	mg/l	C	WAS036
Chloride as Cl	52	mg/l	C	WAS036
Nitrate as N	0.5	mg/l	C	WAS036
Phosphorus , Total as P	0.1	mg/l	C	WAS049
Sulphate as SO4	26	mg/l	C	WAS036
Solids, Suspended	59	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	<1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **5** Laboratory Number : **979283**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW06**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979283 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **6** Laboratory Number : **979284**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW07**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.04	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.070	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	0.0010	mg/l	C	WAS049
Calcium in Filtrate as Ca	69	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.15	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	9.0	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.033	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0007	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.005	mg/l	C	WAS049
Potassium in filtrate as K	3.2	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	20	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.011	mg/l	C	WAS049
Sulphide as S	0.03	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.3		C	WAS039
Conductivity- Electrical 20deg	474	uS/cm	C	WAS039
Alkalinity as CaCO3	90.3	mg/l	C	WAS025
Total Hardness as CaCO3	236	mg/l	C	WAS049
Ammoniacal Nitrogen as N	<0.3	mg/l	C	WAS036
Chloride as Cl	29	mg/l	C	WAS036
Nitrate as N	4.5	mg/l	C	WAS036
Phosphorus , Total as P	0.2	mg/l	C	WAS049
Sulphate as SO4	108	mg/l	C	WAS036
Solids, Suspended	82	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **6** Laboratory Number : **979284**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW07**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979284 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **7** Laboratory Number : **979285**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW08**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.092	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	44	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.20	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	8.3	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.014	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	2.5	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	20	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.010	mg/l	C	WAS049
Sulphide as S	0.12	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.2		C	WAS039
Conductivity- Electrical 20deg	372	uS/cm	C	WAS039
Alkalinity as CaCO3	107	mg/l	C	WAS025
Total Hardness as CaCO3	156	mg/l	C	WAS049
Ammoniacal Nitrogen as N	<0.3	mg/l	C	WAS036
Chloride as Cl	38	mg/l	C	WAS036
Nitrate as N	0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.1	mg/l	C	WAS049
Sulphate as SO4	23	mg/l	C	WAS036
Solids, Suspended	27	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	<1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **7** Laboratory Number : **979285**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW08**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	24	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	24	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979285 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **8** Laboratory Number : **979286**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW09**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.03	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.14	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	74	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.13	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	19	ug/l	C	WAS049
Magnesium in filtrate as Mg	10	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.61	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0003	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	3.7	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	26	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.016	mg/l	C	WAS049
Sulphide as S	0.09	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.1		C	WAS039
Conductivity- Electrical 20deg	501	uS/cm	C	WAS039
Alkalinity as CaCO3	104	mg/l	C	WAS025
Total Hardness as CaCO3	278	mg/l	C	WAS049
Ammoniacal Nitrogen as N	<0.3	mg/l	C	WAS036
Chloride as Cl	44	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	1.1	mg/l	C	WAS049
Sulphate as SO4	90	mg/l	C	WAS036
Solids, Suspended	1980	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	1	mg/l	C	WAS002
COD (Filtered)	21	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **8** Laboratory Number : **979286**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **SW09**

Sample Date : **01 October 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979286 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **9** Laboratory Number : **979287**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG F**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.080	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	39	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.07	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	9.2	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.039	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0002	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	1.7	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	68	mg/l	C	WAS049
Zinc in Filtrate as Zn	<0.005	mg/l	C	WAS049
Sulphide as S	<0.01	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.7		C	WAS039
Conductivity- Electrical 20deg	456	uS/cm	C	WAS039
Alkalinity as CaCO3	221	mg/l	C	WAS025
Total Hardness as CaCO3	155	mg/l	C	WAS049
Ammoniacal Nitrogen as N	0.3	mg/l	C	WAS036
Chloride as Cl	11	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.2	mg/l	C	WAS049
Sulphate as SO4	18	mg/l	C	WAS036
Solids, Suspended	357	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	<1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **9** Laboratory Number : **979287**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG F**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979287 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **12** Laboratory Number : **979290**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **P 23**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979290 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcom S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **10** Laboratory Number : **979288**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **P 21**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.16	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	61	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.06	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	12	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.049	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	1.1	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	18	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.006	mg/l	C	WAS049
Sulphide as S	0.06	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	6.8		C	WAS039
Conductivity- Electrical 20deg	410	uS/cm	C	WAS039
Alkalinity as CaCO3	161	mg/l	C	WAS025
Total Hardness as CaCO3	220	mg/l	C	WAS049
Ammoniacal Nitrogen as N	0.4	mg/l	C	WAS036
Chloride as Cl	18	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.3	mg/l	C	WAS049
Sulphate as SO4	44	mg/l	C	WAS036
Solids, Suspended	704	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	<1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **10** Laboratory Number : **979288**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **P 21**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979288 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **11** Laboratory Number : **979289**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **P 24**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.076	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	35	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.05	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	7	ug/l	C	WAS049
Magnesium in filtrate as Mg	7.7	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.009	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0002	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	2.9	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	11	mg/l	C	WAS049
Zinc in Filtrate as Zn	<0.005	mg/l	C	WAS049
Sulphide as S	<0.01	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	6.5		C	WAS039
Conductivity- Electrical 20deg	250	uS/cm	C	WAS039
Alkalinity as CaCO3	114	mg/l	C	WAS025
Total Hardness as CaCO3	192	mg/l	C	WAS049
Ammoniacal Nitrogen as N	0.3	mg/l	C	WAS036
Chloride as Cl	19	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	1.5	mg/l	C	WAS049
Sulphate as SO4	10	mg/l	C	WAS036
Solids, Suspended	3680	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	<1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **11** Laboratory Number : **979289**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **P 24**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979289 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis  
For Microbiological determinands 0 = Not Detected

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Sample **12** Laboratory Number : **979290**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **P 23**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.048	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	27	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.50	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	5.1	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.012	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0002	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	0.9	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	17	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.005	mg/l	C	WAS049
Sulphide as S	<0.01	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.0		C	WAS039
Conductivity- Electrical 20deg	213	uS/cm	C	WAS039
Alkalinity as CaCO3	79.4	mg/l	C	WAS025
Total Hardness as CaCO3	116	mg/l	C	WAS049
Ammoniacal Nitrogen as N	<0.3	mg/l	C	WAS036
Chloride as Cl	15	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.7	mg/l	C	WAS049
Sulphate as SO4	13	mg/l	C	WAS036
Solids, Suspended	1480	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	1	mg/l	C	WAS002
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **19** Laboratory Number : **979297**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **GT 10**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.03	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.002	mg/l	C	WAS014
Barium in Filtrate as Ba	0.27	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	51	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.98	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	7.5	mg/l	C	WAS049
Manganese in Filtrate as Mn	1.13	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0002	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	3.2	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	38	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.038	mg/l	C	WAS049
Sulphide as S	0.03	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	6.5		C	WAS039
Conductivity- Electrical 20deg	443	uS/cm	C	WAS039
Alkalinity as CaCO3	188	mg/l	C	WAS025
Total Hardness as CaCO3	192	mg/l	C	WAS049
Ammoniacal Nitrogen as N	1.6	mg/l	C	WAS036
Chloride as Cl	44	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.3	mg/l	C	WAS049
Sulphate as SO4	8	mg/l	C	WAS036
Solids, Suspended	892	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	1	mg/l	C	WAS002
COD (Filtered)	31	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **13** Laboratory Number : **979291**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG H**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.023	mg/l	C	WAS014
Barium in Filtrate as Ba	0.15	mg/l	C	WAS049
Boron in Filtrate as B	0.8	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	34	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.63	mg/l	C	WAS049
Lead in Filtrate as Pb	0.007	mg/l	C	WAS049
Lithium , Total as Li	85	ug/l	C	WAS049
Magnesium in filtrate as Mg	24	mg/l	C	WAS049
Manganese in Filtrate as Mn	1.41	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.007	mg/l	C	WAS049
Potassium in filtrate as K	24	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	376	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.015	mg/l	C	WAS049
Sulphide as S	0.05	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.3		C	WAS039
Conductivity- Electrical 20deg	2040	uS/cm	C	WAS039
Alkalinity as CaCO3	472	mg/l	C	WAS025
Total Hardness as CaCO3	561	mg/l	C	WAS049
Ammoniacal Nitrogen as N	11.6	mg/l	C	WAS036
Chloride as Cl	533	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	7.4	mg/l	C	WAS049
Sulphate as SO4	124	mg/l	C	WAS036
Solids, Suspended	13700	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	4	mg/l	C	WAS002
COD (Filtered)	82	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **13** Laboratory Number : **979291**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG H**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979291 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **14** Laboratory Number : **979292**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG I**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.004	mg/l	C	WAS014
Barium in Filtrate as Ba	0.55	mg/l	C	WAS049
Boron in Filtrate as B	0.4	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	55	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.21	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	34	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.99	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.006	mg/l	C	WAS049
Potassium in filtrate as K	16	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	171	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.005	mg/l	C	WAS049
Sulphide as S	0.11	mg/l	C	WAS033
Thiocyanate as SCN	0.3	mg/l	C	WAS034
pH	7.9		C	WAS039
Conductivity- Electrical 20deg	1010	uS/cm	C	WAS039
Alkalinity as CaCO3	565	mg/l	C	WAS025
Total Hardness as CaCO3	362	mg/l	C	WAS049
Ammoniacal Nitrogen as N	4.9	mg/l	C	WAS036
Chloride as Cl	53	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.6	mg/l	C	WAS049
Sulphate as SO4	<5	mg/l	C	WAS036
Solids, Suspended	4660	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	4	mg/l	C	WAS002
COD (Filtered)	52	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **14** Laboratory Number : **979292**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**

Sample Point Description : **BAE Systems**

Sample Description : **ESG I**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979292 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **15** Laboratory Number : **979293**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **P 22**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium as Al, dry wt.	14000	mg/kg	C	52
Antimony as Sb, dry weight	< 1.0	mg/kg	C	30C
Arsenic as As, dry weight	8.0	mg/kg	C	30/30C
Barium as Ba, dry wt.	120	mg/kg	C	52
Boron as B, hot water sol dw	2.4	mg/kg	C	6
Cadmium as Cd, dry weight	< 0.50	mg/kg	C	30
Calcium as Ca, dry weight	5900	mg/kg	* C	CASQ
Chromium as Cr, dry weight	41	mg/kg	C	30
Copper as Cu, dry weight	23	mg/kg	C	30
Iron as Fe, dry weight	42000	mg/kg	C	52
Lead as Pb, dry weight	9.3	mg/kg	C	30
Magnesium as Mg dry weight	9300	mg/kg	C	52
Manganese as Mn, dry weight	860	mg/kg	C	52
Mercury as Hg, dry weight	<0.1	mg/kg	C	30C
Nickel as Ni, dry weight	48	mg/kg	C	30
Potassium, Total as K, dry wt	2600	mg/kg	* C	CASQ
Selenium as Se, dry weight	0.25	mg/kg	C	30C
Sodium as Na, dry weight	1300	mg/kg	* C	CASQ
Zinc as Zn, dry weight	70	mg/kg	C	30
Sulphide, dry weight	< 5.0	mg/kg	C	47
Thiocyanate as SCN, dry weight	5.0	mg/kg	C	16a
Alkalinity as CaCO3	4090	mg/l	C	WAS025
Ammonia KCl sol as N	60	mg/kg	C	03A
Nitrate as NO3 Water Sol A/R	< 4.0	mg/kg	* C	63
Phosphorus as P, dry weight	893	mg/kg	C	CON18
Sulphate as SO4, water sol dw	< 120	mg/kg	C	46
BOD + ATU (5 day)	2	mg/l	C	WAS001
BOD + ATU (filtered, 5 day)	Analyst Comment	mg/l	C	WAS002
COD (Total)	<20	mg/l	C	WAS040
COD (Filtered)	<20	mg/l	C	WAS040
Cyanide as CN, total dry weight	< 1.07	mg/kg	C	14
NRA Leachate	Extracted		* C	PREP
VOC	Analyst Comment	ug/kg	C	315
SVOC	Analyst Comment	mg/kg	C	316
Lithium, Dry Weight	16	mg/kg	C	CASQ
pH	8.7		C	39
Conductivity @ 20 C	640	uS/cm	* C	19A

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **16** Laboratory Number : **979294**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ASP D**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.004	mg/l	C	WAS014
Barium in Filtrate as Ba	0.41	mg/l	C	WAS049
Boron in Filtrate as B	0.3	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	43	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	1.00	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	38	mg/l	C	WAS049
Manganese in Filtrate as Mn	2.96	mg/l	C	WAS049
Mercury in Filtrate as Hg	Analyst Comment	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.005	mg/l	C	WAS049
Potassium in filtrate as K	14	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	61	mg/l	C	WAS049
Zinc in Filtrate as Zn	<0.005	mg/l	C	WAS049
Sulphide as S	0.03	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.0		C	WAS039
Conductivity- Electrical 20deg	707	uS/cm	C	WAS039
Alkalinity as CaCO3	404	mg/l	C	WAS025
Total Hardness as CaCO3	325	mg/l	C	WAS049
Ammoniacal Nitrogen as N	9.1	mg/l	C	WAS036
Chloride as Cl	21	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.8	mg/l	C	WAS049
Sulphate as SO4	<5	mg/l	C	WAS036
Solids, Suspended	650	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	6	mg/l	C	WAS002
COD (Filtered)	39	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	60	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **16** Laboratory Number : **979294**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**

Sample Point Description : **BAE Systems**

Sample Description : **ASP D**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	50	ug/l	* C	GE035
TPH >C6-C40	50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979294 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.  
Mercury sample solid, unable to perform required analysis.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

# Certificate of Analysis



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Sample **17** Laboratory Number : **979295**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG J**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.03	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.013	mg/l	C	WAS014
Barium in Filtrate as Ba	0.091	mg/l	C	WAS049
Boron in Filtrate as B	1.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	28	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	1.48	mg/l	C	WAS049
Lead in Filtrate as Pb	0.007	mg/l	C	WAS049
Lithium , Total as Li	18	ug/l	C	WAS049
Magnesium in filtrate as Mg	29	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.77	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.008	mg/l	C	WAS049
Potassium in filtrate as K	27	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	475	mg/l	C	WAS049
Zinc in Filtrate as Zn	<0.005	mg/l	C	WAS049
Sulphide as S	<0.01	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.2		C	WAS039
Conductivity- Electrical 20deg	2190	uS/cm	C	WAS039
Alkalinity as CaCO3	522	mg/l	C	WAS025
Total Hardness as CaCO3	301	mg/l	C	WAS049
Ammoniacal Nitrogen as N	8.1	mg/l	C	WAS036
Chloride as Cl	576	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	4.3	mg/l	C	WAS049
Sulphate as SO4	12	mg/l	C	WAS036
Solids, Suspended	13400	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	7	mg/l	C	WAS002
COD (Filtered)	65	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **17** Laboratory Number : **979295**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG J**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GE031
VOC	Analyst Comment	ug/l	C	GE032

**Analyst Comment for 979295 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

# Certificate of Analysis



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Sample **18** Laboratory Number : **979296**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG D**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.15	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	0.003	mg/l	C	WAS014
Barium in Filtrate as Ba	0.11	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	34	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	1.87	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	13	ug/l	C	WAS049
Magnesium in filtrate as Mg	3.7	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.56	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	<0.005	mg/l	C	WAS049
Potassium in filtrate as K	1.4	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	5.4	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.033	mg/l	C	WAS049
Sulphide as S	0.11	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	6.0		C	WAS039
Conductivity- Electrical 20deg	192	uS/cm	C	WAS039
Alkalinity as CaCO3	80.5	mg/l	C	WAS025
Total Hardness as CaCO3	146	mg/l	C	WAS049
Ammoniacal Nitrogen as N	1.0	mg/l	C	WAS036
Chloride as Cl	10	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.8	mg/l	C	WAS049
Sulphate as SO4	14	mg/l	C	WAS036
Solids, Suspended	2100	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	1	mg/l	C	WAS002
COD (Filtered)	38	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Environmental Leadership

Sample **18** Laboratory Number : **979296**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG D**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	21	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	21	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979296 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Environmental Leadership

Sample **19** Laboratory Number : **979297**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **GT 10**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979297 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis  
For Microbiological determinands 0 = Not Detected

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Sample **20** Laboratory Number : **979298**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG A**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.54	mg/l	C	WAS049
Boron in Filtrate as B	0.8	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	57	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	5.40	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	28	ug/l	C	WAS049
Magnesium in filtrate as Mg	46	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.83	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.007	mg/l	C	WAS049
Potassium in filtrate as K	29	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	397	mg/l	C	WAS049
Zinc in Filtrate as Zn	<0.005	mg/l	C	WAS049
Sulphide as S	0.04	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.0		C	WAS039
Conductivity- Electrical 20deg	2210	uS/cm	C	WAS039
Alkalinity as CaCO3	462	mg/l	C	WAS025
Total Hardness as CaCO3	393	mg/l	C	WAS049
Ammoniacal Nitrogen as N	9.9	mg/l	C	WAS036
Chloride as Cl	585	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	1.7	mg/l	C	WAS049
Sulphate as SO4	<5	mg/l	C	WAS036
Solids, Suspended	3130	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	2	mg/l	C	WAS002
COD (Filtered)	50	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **20** Laboratory Number : **979298**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG A**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979298 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcom S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **21** Laboratory Number : **979299**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG B**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.73	mg/l	C	WAS049
Boron in Filtrate as B	0.2	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	77	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	4.87	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	34	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.87	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.005	mg/l	C	WAS049
Potassium in filtrate as K	13	mg/l	C	WAS049
Selenium in Filtrate as Se	<0.001	mg/l	C	WAS015
Sodium is filtrate as Na	142	mg/l	C	WAS049
Zinc in Filtrate as Zn	<0.005	mg/l	C	WAS049
Sulphide as S	0.11	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.0		C	WAS039
Conductivity- Electrical 20deg	1060	uS/cm	C	WAS039
Alkalinity as CaCO3	414	mg/l	C	WAS025
Total Hardness as CaCO3	411	mg/l	C	WAS049
Ammoniacal Nitrogen as N	5.1	mg/l	C	WAS036
Chloride as Cl	143	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.8	mg/l	C	WAS049
Sulphate as SO4	<5	mg/l	C	WAS036
Solids, Suspended	6680	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	4	mg/l	C	WAS002
COD (Filtered)	37	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **21** Laboratory Number : **979299**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG B**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979299 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **22** Laboratory Number : **979300**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG C**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.058	mg/l	C	WAS049
Boron in Filtrate as B	<0.1	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	111	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.26	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	18	ug/l	C	WAS049
Magnesium in filtrate as Mg	19	mg/l	C	WAS049
Manganese in Filtrate as Mn	1.16	mg/l	C	WAS049
Mercury in Filtrate as Hg	0.0006	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.007	mg/l	C	WAS049
Potassium in filtrate as K	3.3	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	32	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.017	mg/l	C	WAS049
Sulphide as S	0.09	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	6.4		C	WAS039
Conductivity- Electrical 20deg	777	uS/cm	C	WAS039
Alkalinity as CaCO3	198	mg/l	C	WAS025
Total Hardness as CaCO3	426	mg/l	C	WAS049
Ammoniacal Nitrogen as N	10.3	mg/l	C	WAS036
Chloride as Cl	52	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.8	mg/l	C	WAS049
Sulphate as SO4	188	mg/l	C	WAS036
Solids, Suspended	963	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	2	mg/l	C	WAS002
COD (Filtered)	25	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **22** Laboratory Number : **979300**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ESG C**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	<20	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	<50	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979300 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

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Sample **23** Laboratory Number : **979301**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ASP C**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
Aluminium in Filtrate as Al	<0.02	mg/l	C	WAS049
Antimony in Filt. as Sb	<0.001	mg/l	C	WAS016
Arsenic in Filtrate as As	<0.001	mg/l	C	WAS014
Barium in Filtrate as Ba	0.14	mg/l	C	WAS049
Boron in Filtrate as B	1.0	mg/l	C	WAS049
Cadmium in Filtrate as Cd	<0.0005	mg/l	C	WAS049
Calcium in Filtrate as Ca	25	mg/l	C	WAS049
Chromium in Filtrate as Cr	<0.005	mg/l	C	WAS049
Copper in Filtrate as Cu	<0.005	mg/l	C	WAS049
Iron in Filtrate as Fe	0.20	mg/l	C	WAS049
Lead in Filtrate as Pb	<0.005	mg/l	C	WAS049
Lithium , Total as Li	<5	ug/l	C	WAS049
Magnesium in filtrate as Mg	23	mg/l	C	WAS049
Manganese in Filtrate as Mn	0.85	mg/l	C	WAS049
Mercury in Filtrate as Hg	<0.0001	mg/l	C	WAS013
Nickel in Filtrate as Ni	0.005	mg/l	C	WAS049
Potassium in filtrate as K	19	mg/l	C	WAS049
Selenium in Filtrate as Se	0.001	mg/l	C	WAS015
Sodium is filtrate as Na	359	mg/l	C	WAS049
Zinc in Filtrate as Zn	0.028	mg/l	C	WAS049
Sulphide as S	0.03	mg/l	C	WAS033
Thiocyanate as SCN	<0.1	mg/l	C	WAS034
pH	7.6		C	WAS039
Conductivity- Electrical 20deg	1510	uS/cm	C	WAS039
Alkalinity as CaCO3	599	mg/l	C	WAS025
Total Hardness as CaCO3	173	mg/l	C	WAS049
Ammoniacal Nitrogen as N	5.4	mg/l	C	WAS036
Chloride as Cl	213	mg/l	C	WAS036
Nitrate as N	<0.3	mg/l	C	WAS036
Phosphorus , Total as P	0.7	mg/l	C	WAS049
Sulphate as SO4	7	mg/l	C	WAS036
Solids, Suspended	48	mg/l	C	WAS006
BOD + ATU (filtered, 5 day)	6	mg/l	C	WAS002
COD (Filtered)	34	mg/l	C	WAS040
Cyanide Free as CN	<0.1	mg/l	* C	WAS048
Cyanide , Total as CN	<0.1	mg/l	C	WAS018
TPH >C6-C40 6 split	<50	ug/l	* C	GE035
TPH >C6-C8	<10	ug/l	C	GE035
TPH >C8-C10	<10	ug/l	* C	GE035
TPH >C10-C16	<20	ug/l	* C	GE035

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Sample **23** Laboratory Number : **979301**  
of **23** Report Number : **TH /204729/2003** Issue **2**

Sample Source : **BAE Systems**  
Sample Point Description : **BAE Systems**  
Sample Description : **ASP C**

Sample Date : **30 September 2003** Sample Received : **03 October 2003** Analysis Complete : **04 November 2003**

Test Description	Result	Units	Accreditation	Method
TPH >C16-C24	36	ug/l	* C	GE035
TPH >C24-C40	<50	ug/l	* C	GE035
TPH >C6-C40	36	ug/l	C	GE035
SVOC	Analyst Comment	ug/l	C	GEO31
VOC	Analyst Comment	ug/l	C	GEO32

**Analyst Comment for 979301 :** Interferences in extracted blank and QCs at 7.28 and 7.67min removed from sample results for TPH.  
Please see attached report for SVOC/VOC results.

Accreditation Codes : \* = Not UKAS accredited B = Analysed at Bridgend C = Analysed at Coventry R = Analysed at Runcorn S = Sub-contracted analysis

For Microbiological determinands 0 = Not Detected

Signed :

Name : **J. Fell**

Date : 15 January 2004

Title : **Production Manager**

13 October 2003

A Tranter  
Property and Environmental Services  
Building 330  
Westcott Venture Park, Westcott  
Aylesbury  
BUCKS HP18 0NP

DATE OF RECEIPT	
16 OCT 2003	
PROJ	NO
ACTN	
PROPERTY AND ENVIRONMENTAL SERVICES	

P501/00/06

Dear Andrew,

**RESULT FOR BISHOPTON WATER SAMPLE TESTED AS A SOLID FOR EXPLOSIVES**

Please find enclosed result sheet for sample tested for explosives as requested on the 3<sup>rd</sup> October 2003.

The sample had very little water and was mainly mud. We therefore treated the sample as a soil sample and tested it for open space explosives.

If you have any queries regarding this work, please do not hesitate to contact.

Yours sincerely,



**DAVE MALCOLM**  
**Laboratory Manager**  
**BAE SYSTEMS Environmental Services**

Direct Line +44 (0) 1257 242227 Direct Fax +44 (0) 1257 242599 Email [david.malcolm@baesystems.com](mailto:david.malcolm@baesystems.com)