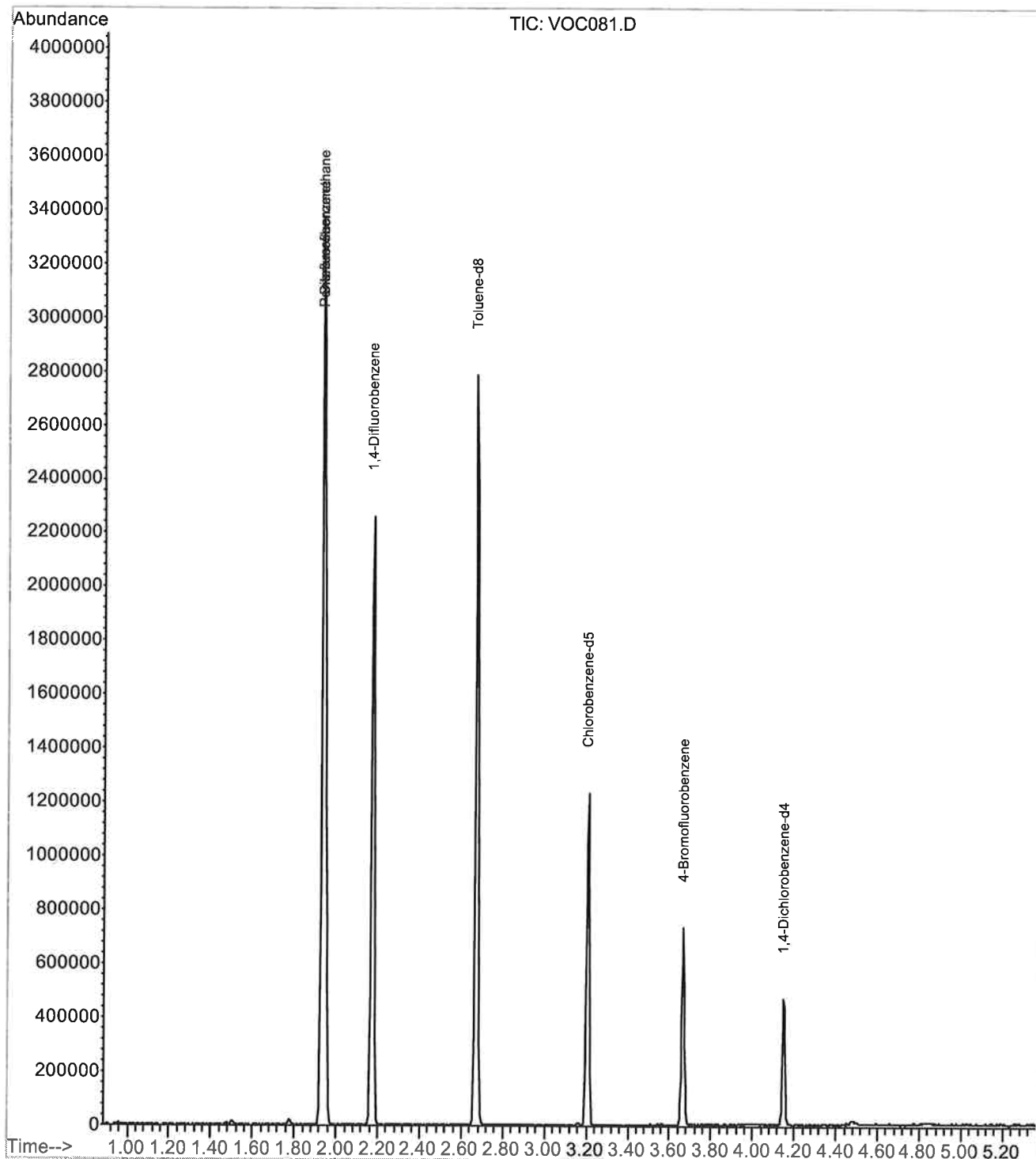


# Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\DATA\112707\  
 Data File : VOC081.D  
 Acq On : 28 Nov 2007 9:23  
 Operator : Alcontrol Labs  
 Sample : 200720613-041  
 Misc : /soil  
 ALS Vial : 81 Sample Multiplier: 2

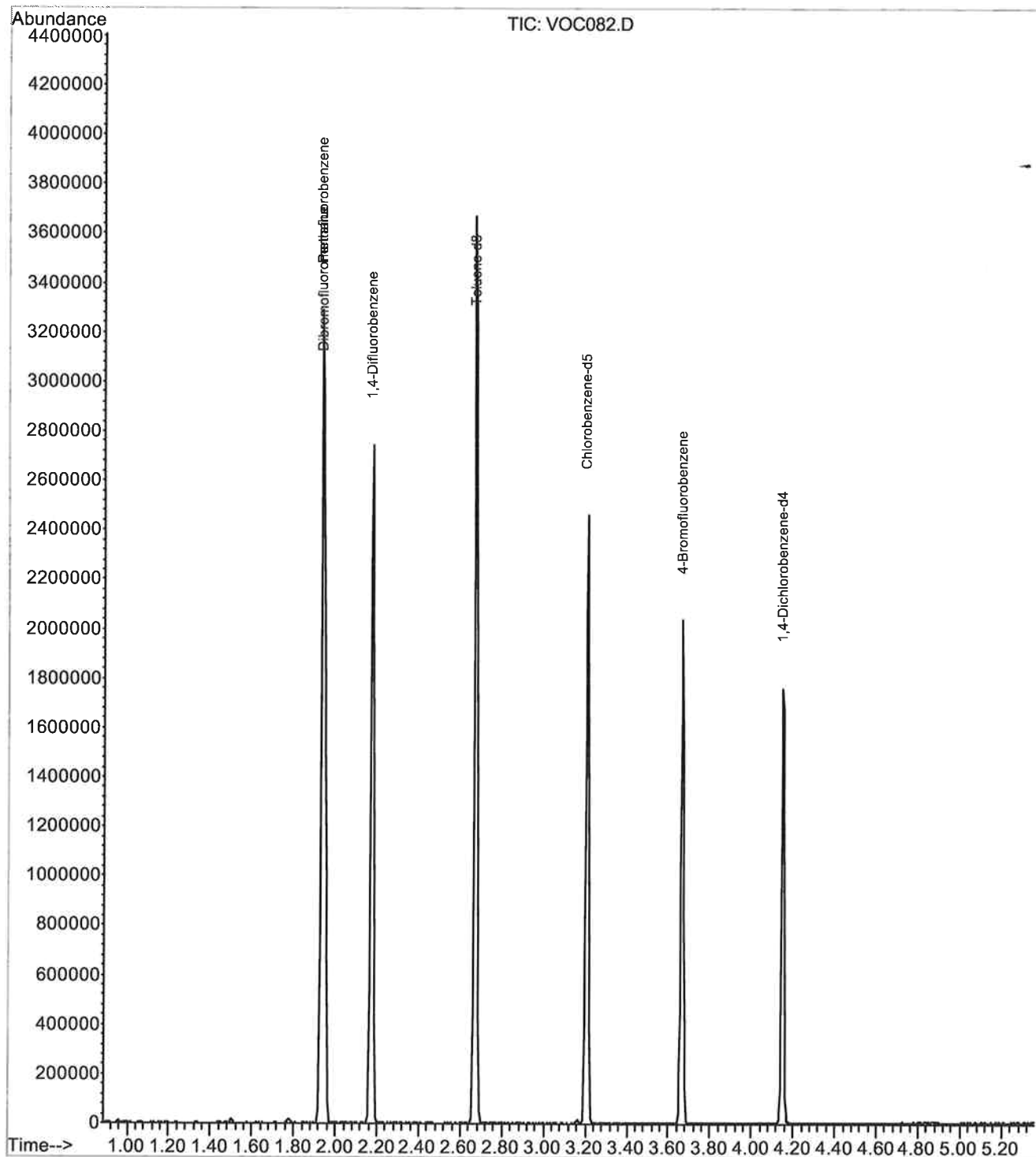
Quant Time: Nov 30 11:24:11 2007  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Wed Nov 28 16:11:58 2007  
 Response via : Initial Calibration



# Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\DATA\112707\  
 Data File : VOC082.D  
 Acq On : 28 Nov 2007 9:34  
 Operator : Alcontrol Labs  
 Sample : 200720613-056  
 Misc : /soil  
 ALS Vial : 82 Sample Multiplier: 2

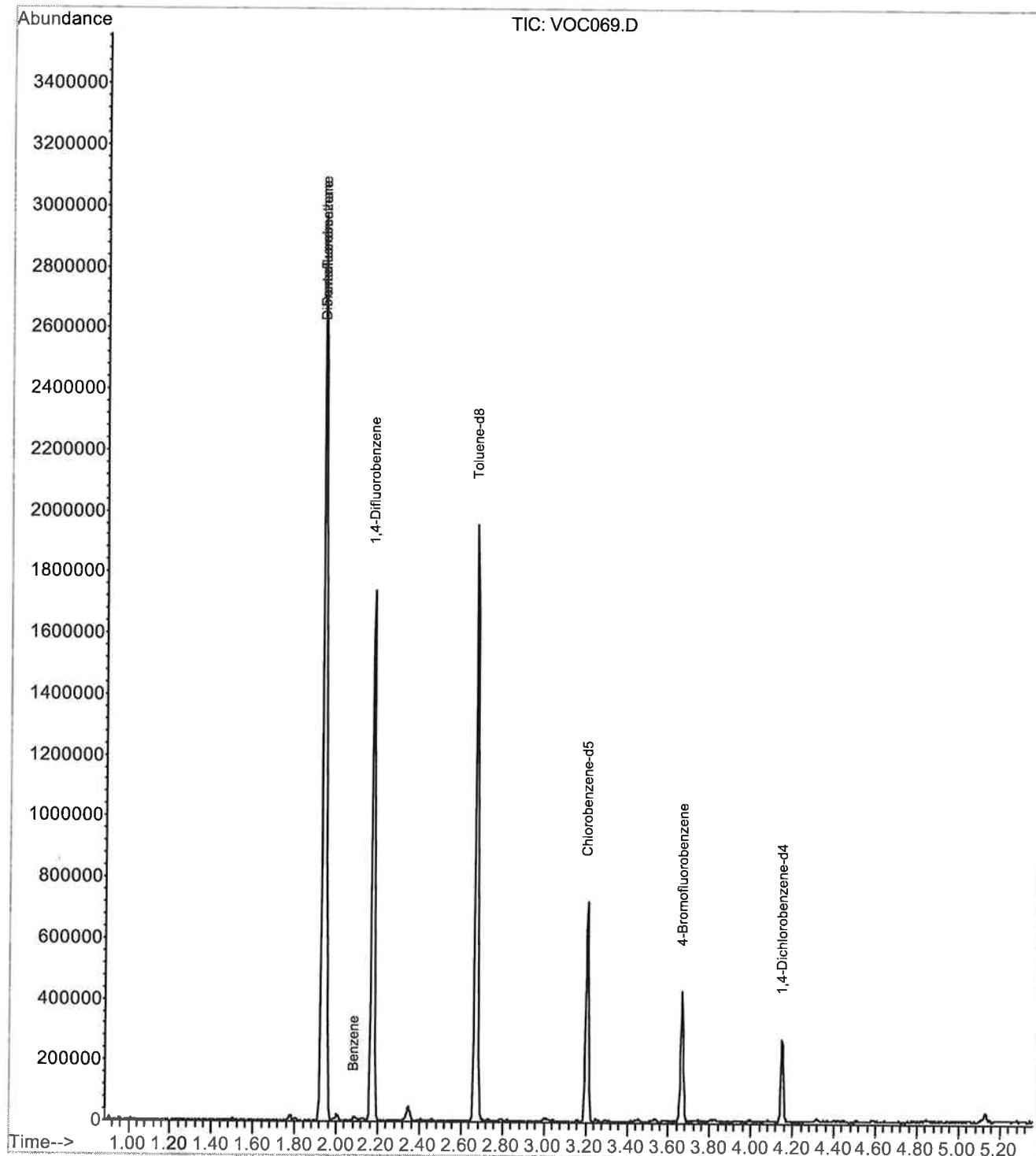
Quant Time: Nov 30 11:24:28 2007  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Wed Nov 28 16:11:58 2007  
 Response via : Initial Calibration



# Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\DATA\112707\  
 Data File : VOC069.D  
 Acq On : 28 Nov 2007 7:13  
 Operator : Alcontrol Labs  
 Sample : 200720613-080  
 Misc : /soil  
 ALS Vial : 69 Sample Multiplier: 2

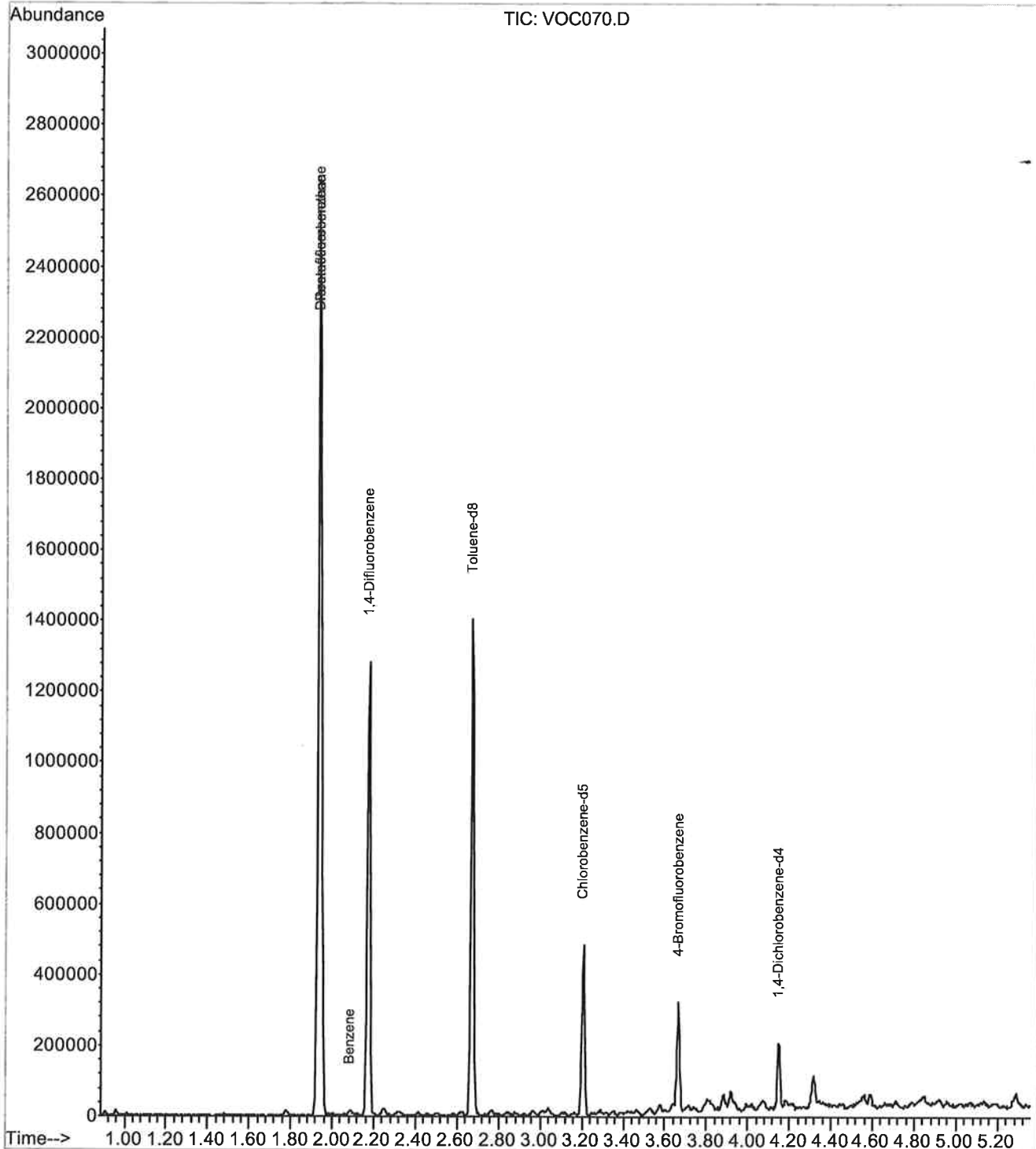
Quant Time: Nov 30 11:19:02 2007  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Wed Nov 28 16:11:58 2007  
 Response via : Initial Calibration



# Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\DATA\112707\  
 Data File : VOC070.D  
 Acq On : 28 Nov 2007 7:24  
 Operator : Alcontrol Labs  
 Sample : 200720613-089  
 Misc : /soil  
 ALS Vial : 70 Sample Multiplier: 2

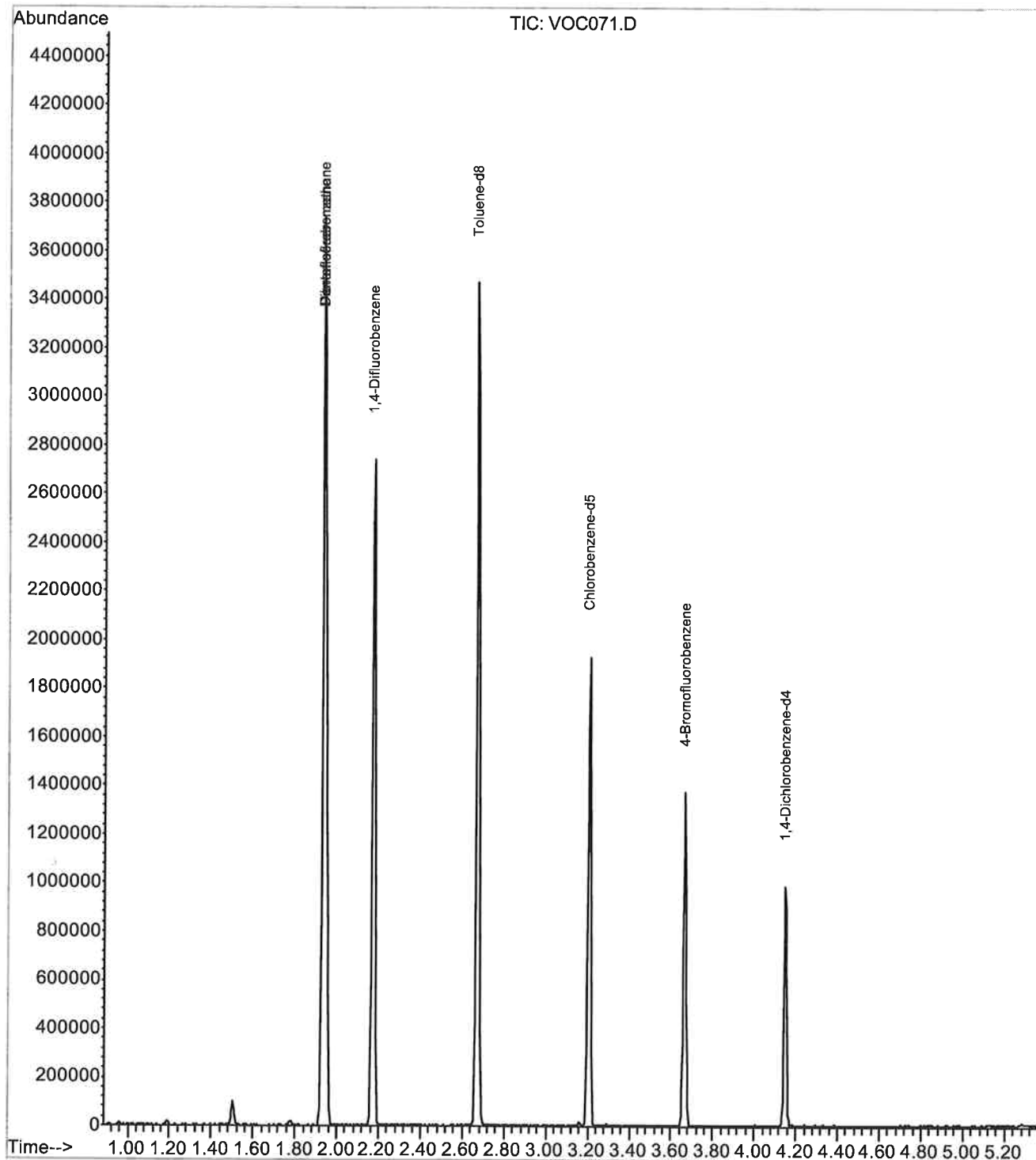
Quant Time: Nov 30 11:19:31 2007  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Wed Nov 28 16:11:58 2007  
 Response via : Initial Calibration



# Quantitation Report (QT Reviewed)

Data Path : D:\MSDCHEM\DATA\112707\  
 Data File : VOC071.D  
 Acq On : 28 Nov 2007 7:35  
 Operator : Alcontrol Labs  
 Sample : 200720613-097  
 Misc : /soil  
 ALS Vial : 71 Sample Multiplier: 2

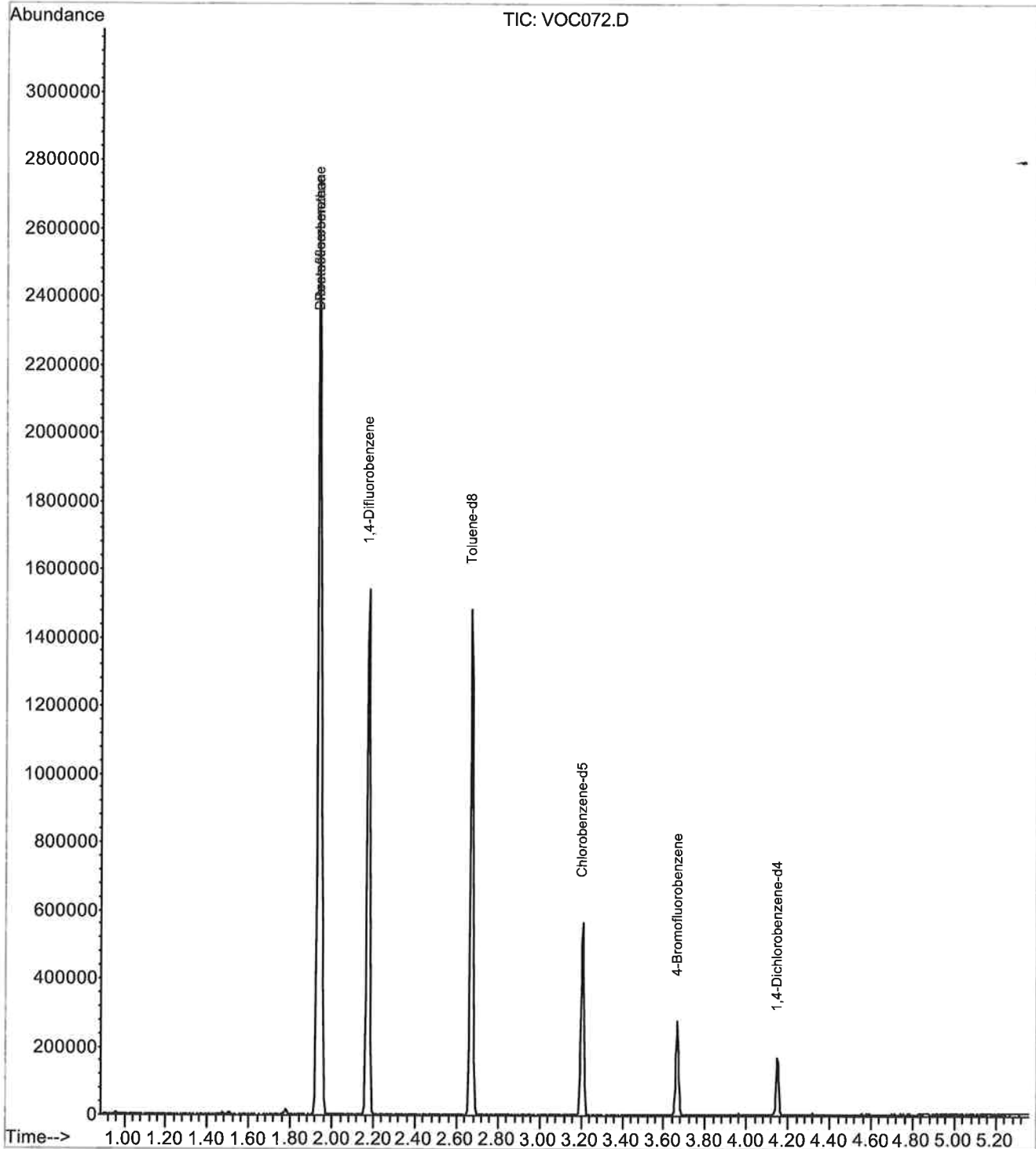
Quant Time: Nov 30 11:19:47 2007  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Wed Nov 28 16:11:58 2007  
 Response via : Initial Calibration



**Quantitation Report (QT Reviewed)**

Data Path : D:\MSDCHEM\DATA\112707\  
 Data File : VOC072.D  
 Acq On : 28 Nov 2007 7:46  
 Operator : Alcontrol Labs  
 Sample : 200720613-108  
 Misc : /soil  
 ALS Vial : 72 Sample Multiplier: 2

Quant Time: Nov 30 11:19:57 2007  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Wed Nov 28 16:11:58 2007  
 Response via : Initial Calibration



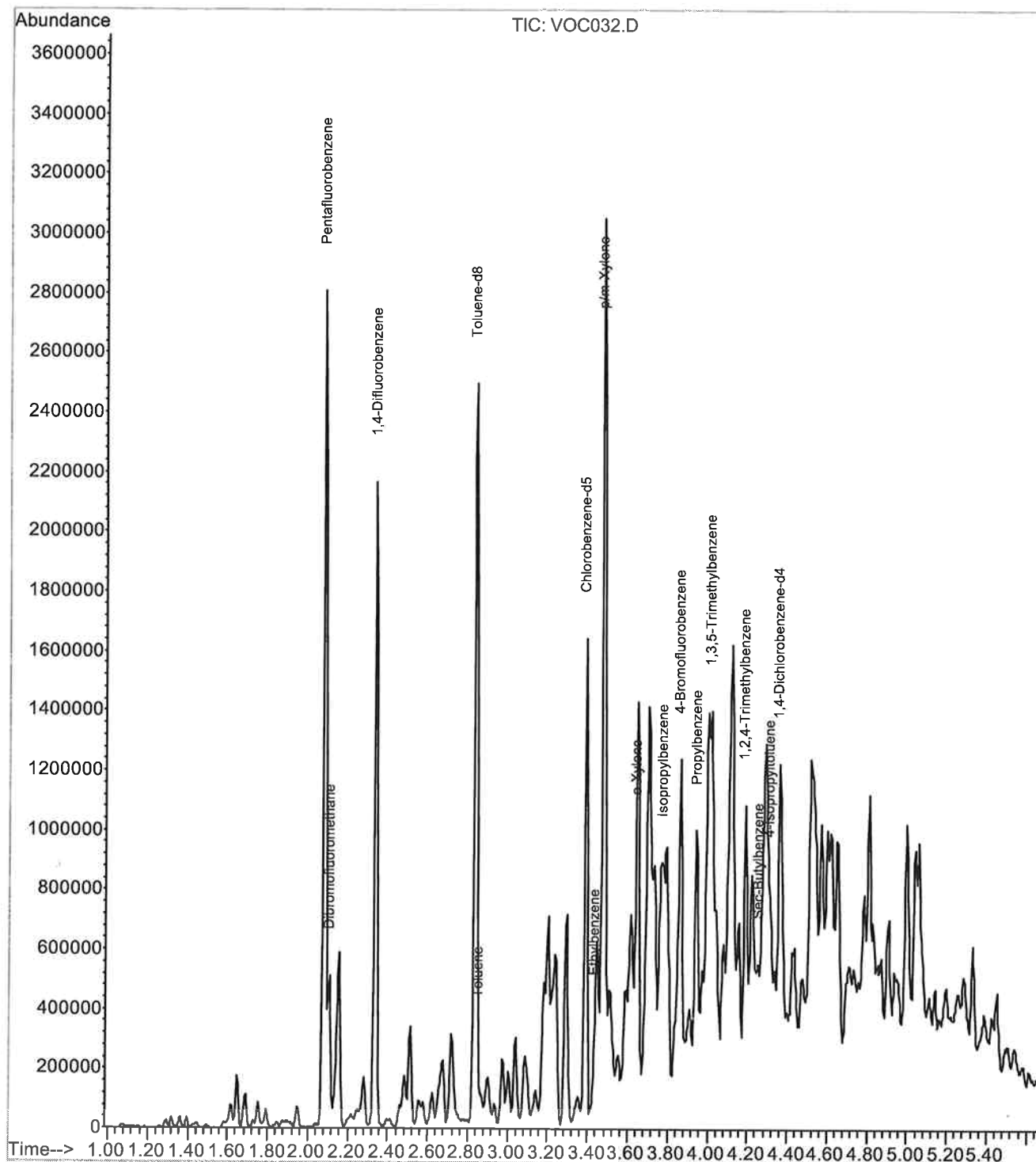
(QT Reviewed)

```

Data Path : C:\OLDMSDCHEM\1\DATA\120507\
Data File : VOC032.D
Acq On    : 6 Dec 2007    8:56
Operator  :
Sample    : 200720613-116
Misc      : /soil
ALS Vial  : 32    Sample Multiplier: 2

```

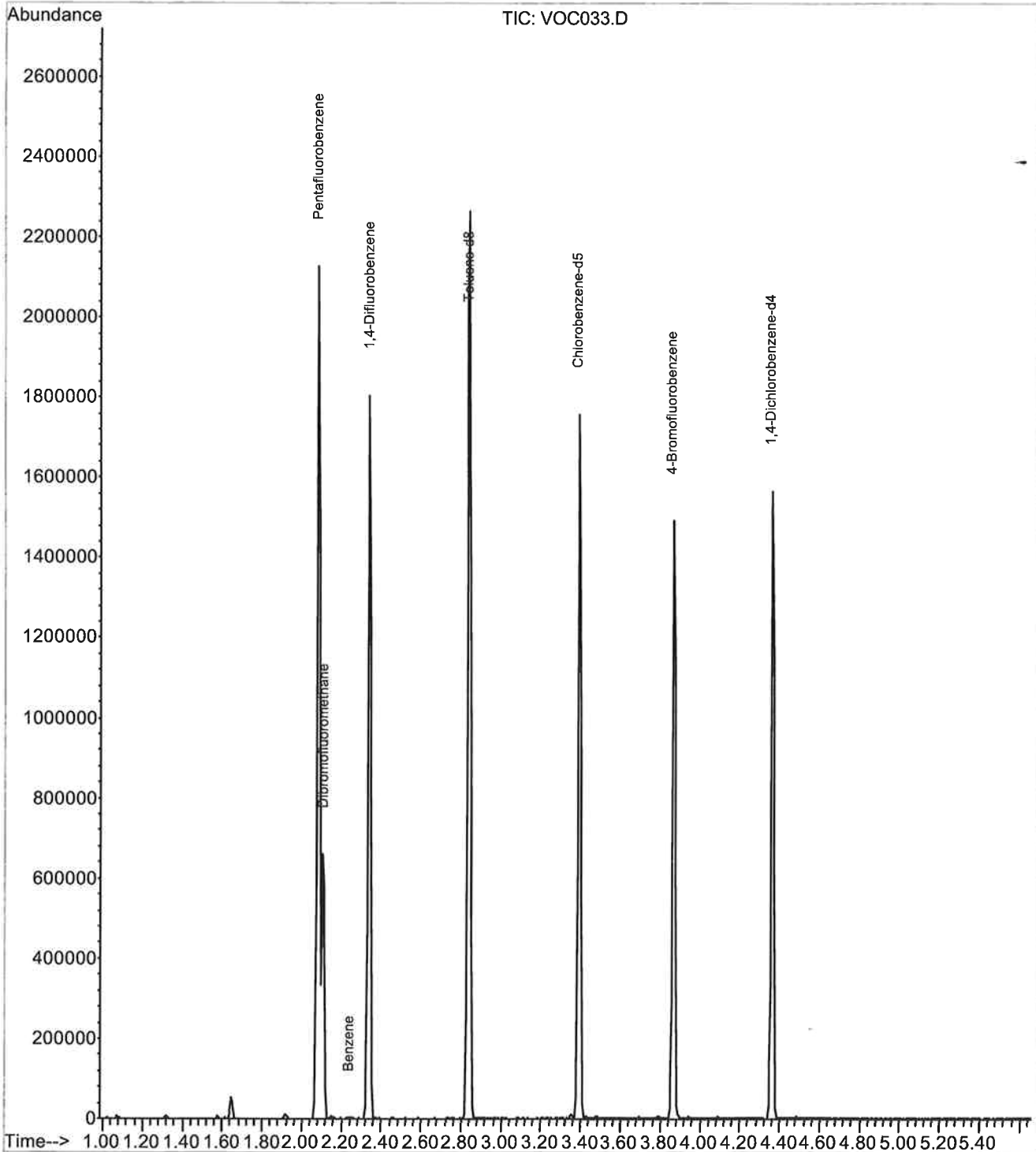
Quant Time: Dec 08 14:08:49 2007  
Quant Method : C:\OLDMSDCHEM\1\METHODS\FASTVOC2.M  
Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
QLast Update : Fri Dec 07 15:09:19 2007  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\OLDMSDCHEM\1\DATA\120507\  
Data File : VOC033.D  
Acq On : 6 Dec 2007 9:36  
Operator :  
Sample : 200720613-120  
Misc : /soil  
ALS Vial : 33 Sample Multiplier: 2

Quant Time: Dec 08 14:08:59 2007  
Quant Method : C:\OLDMSDCHEM\1\METHODS\FASTVOC2.M  
Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
QLast Update : Fri Dec 07 15:09:19 2007  
Response via : Initial Calibration

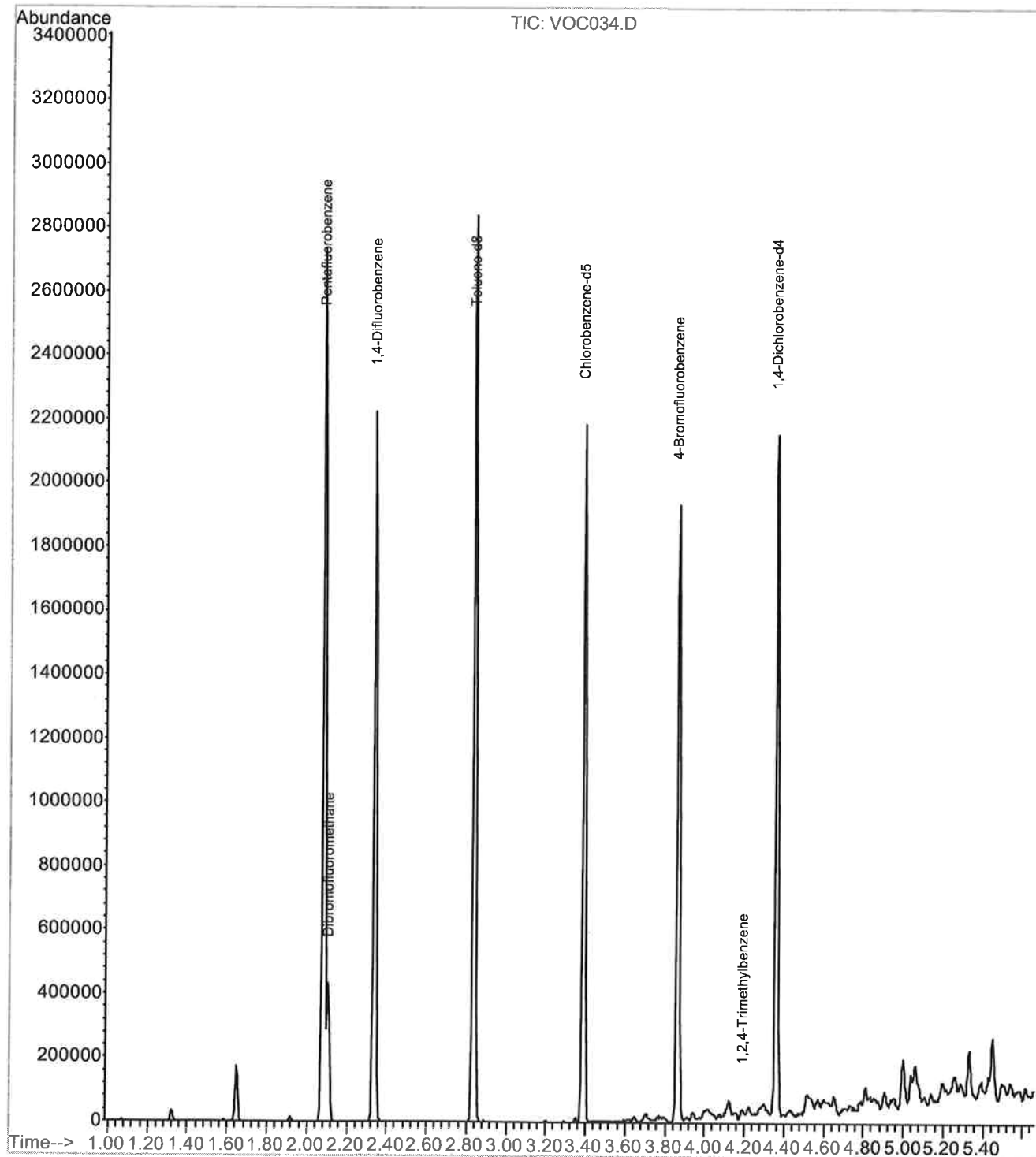




# Quantitation Report (QT Reviewed)

Data Path : C:\OLDMSDCHEM\1\DATA\120507\  
 Data File : VOC034.D  
 Acq On : 6 Dec 2007 9:47  
 Operator :  
 Sample : 200720613-124  
 Misc : /soil  
 ALS Vial : 34 Sample Multiplier: 2

Quant Time: Dec 08 14:09:19 2007  
 Quant Method : C:\OLDMSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Fri Dec 07 15:09:19 2007  
 Response via : Initial Calibration



## **APPENDIX**

# APPENDIX

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following:  
NRA Leach tests, flash point, ammonium as NH<sub>4</sub> by the BRE method, VOC TICS, SVOC TICS, TOF-MS SCAN/SEARCH and TOF-MS TICS.
2. Samples will be run in duplicate upon request, but an additional charge may be incurred.
3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for both soil jars, tubs and volatile jars. All waters and vials will be discarded 10 days after the analysis is completed (e-mailed). All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Geochem reserve the right to charge for samples received and stored but not analysed.
4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.
5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.
6. When requested, an asbestos screen is done in-house on soils and if no fibres are found will be reported as NFD – no fibres detected. If asbestos is detected, then identification is carried out by ALcontrol Shutler. If a sample is suspected of containing asbestos, then further preparation and analysis will be suspended on that sample until the asbestos result is known. If asbestos is present, then no further analysis will be undertaken.
7. If no separate volatile sample is supplied by the client, the integrity of the data may be compromised if the laboratory is required to create a sub-sample from the bulk sample – similarly, if a headspace or sediment is present in the volatile sample. This will be flagged up as an invalid VOC on the test schedule or recorded on the log sheet.
8. If no preserved sample is received for cyanide or phenol analysis (HPLC), the laboratory will preserve on receipt. However, the integrity of the data may be compromised.
9. NDP – No determination possible due to insufficient/unsuitable sample.
10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals – total metals must be requested separately.
11. A table containing the date of analysis for each parameter is not routinely included with the report, but is available upon request.
12. **Surrogate recoveries** – Currently the only analysis, which is surrogate corrected, is PAHs on soils. For EPH on soils the result is not surrogate corrected, but a percentage recovery is quoted.
13. **Product analyses** – Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.
14. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethylphenol, 3,5 Dimethylphenol).
15. Total of 8 speciated phenols by HPLC includes Resorcinol, Catechol, Phenol, Napthol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 14).
16. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.
17. Our MCERTS accreditation for PAHs by GCMS applies to all product types apart from Kerosene, where naphthalene only is not accredited.
18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.
19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
20. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.
21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.
22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials – whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Appendix D  
Groundwater & Surface Water  
Analytical Data



# ALcontrol Laboratories

Unit 7-8 Hawarden Business Park  
Manor Road (off Manor Lane)  
Hawarden  
Deeside  
CH5 3US  
Tel: (01244) 528700  
Fax: (01244) 528701  
email: mkt@alcontrol.co.uk  
website: www.alcontrol.co.uk

RECEIVED

25 FEB 2008

RPS Consultants Ltd  
52 Princess Street  
Manchester  
M1 6JX

ATTN: Aaron Cousins

## CERTIFICATE OF ANALYSIS

**Date:** 31 January, 2008  
**Our Reference:** 08/00436/02/01  
**Your Reference:** RCM 4738  
**Location:** Not Specified

A total of 23 samples was received for analysis on Wednesday, 09 January 2008 and completed on Tuesday, 22 January 2008. Accredited laboratory tests are defined in the log sheet, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation. We are pleased to enclose our final report, it was a pleasure to be of service to you, and we look forward to our continuing association.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials- whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Signed

**Diane Whittlestone** **Jane Seymour**  
Tech. Support Manager Project Manager

**David O'Hare**  
Project Manager

**Caroline Suttie**  
Project Coordinator  
Team Leader

Valid if signed by any of the above signatories.

Compiled By

Laura Parr



# ALcontrol Laboratories

## TEST SCHEDULE

**JOB NUMBER : 08/436/02**

**CLIENT : RPS Consultants Ltd**

**CONTACT:** Aaron Cousins

**DATE OF RECEIPT : 09/01/08**

**LOCATION : Not Specified**

**BATCH NUMBER : 1**

**CLIENT REF/CODE :** RCM 4738

ORDER NUMBER :

**TURNAROUND : 8 days**

Numeric values indicate additional scheduling

\* indicates test subcontracted

[illegible]

# ALcontrol Laboratories

## TEST SCHEDULE

**JOB NUMBER : 08/436/02**

**CLIENT : RPS Consultants Ltd**

**CONTACT :** Aaron Cousins

**DATE OF RECEIPT : 09/01/08**

LOCATION : Not Specified

**BATCH NUMBER: 1**

**CLIENT REF/CODE : RCM 4738**

**ORDER NUMBER :**

**TURNAROUND : 8 days**

Numeric values indicate additional scheduling

\* indicates test subcontracted

[illegible]

ISO 17025 Form			FORM NO:SQS 105	
ALCONTROL LABORATORIES			SHEET 1 OF 1	
			ISSUE NO: 2	
			WRITTEN BY: DOH	
Title of Form			ISSUE DATE: 27/01/05	
Notification of NDP's (No determination possible).			APPROVED BY: DP	
<b>Job Number :</b> 436 <b>Client :</b> RPS <b>Sample Type :</b> Water				
Job No.	Sample No.	Sample ID.	Analyte(s)	Reason
436	21		PH_W, ICP-MS, HG CVAf, EPH, PAH, PCB, SVOC, EC, DISS 02, REDOX	INSUFFICIENT SAMPLE



☒

11

## ALcontrol Laboratories Analytical Services

<sup>M</sup> MCERTS accredited

\* Subcontracted test

» Shown on prev. report

**Matrix:** LIQUID

**Location:** Not Specified

**Client Contact:** Aaron Cousins

[illegible]

**Date** 31.01.2008

☒

11

## Table Of Results

<sup>M</sup> MCERTS accredited

\* Subcontracted test

» Shown on prev. report

Matrix: LIQUID

**Location:** Not Specified

**Client Contact:** Aaron Cousins

[illegible]

**Date** 31.01.2008

- # ISO 17025 accredited
- M MCERTS accredited
- \* Subcontracted test
- » Shown on prev. report

**Matrix:** LIQUID  
**Location:** Not Specified  
**Client Contact:** Aaron Cousins

**Date** 31.01.2008

☒

11

- # ISO 17025 accredited
- M MCERTS accredited
- \* Subcontracted test
- » Shown on prev. report

**Matrix:** LIQUID

**Location:** Not Specified

**Client Contact:** Aaron Cousins

**Date** 31.01.2008

Validated ☒  
Preliminary ☐

# ALcontrol Laboratories Analytical Services

## Table Of Results

# ISO 17025 accredited  
M MCERTS accredited  
\* Subcontracted test  
» Shown on prev. report

Job Number: 08/00436/02/01

Matrix: LIQUID

Client: RPS Consultants Ltd

Location: Not Specified

Client Ref. No.: RCM 4738

Client Contact: Aaron Cousins

Sample Identity	BH01	BH02	BH03	BH04	BH06	BH07					
Depth (m)											
Sample Type	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID					
Sampled Date	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08					
Sample Received Date	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08					
Batch	1	1	1	1	1	1					
Sample Number(s)	1-4	5-8	9-12	13-16	17-20	21-23					
<b>SVOC by GCMS</b>											
<b>Phenols</b>											
2-Chlorophenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2-Methylphenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2-Nitrophenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2,4-Dichlorophenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2,4-Dimethylphenol	5	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2,4,5-Trichlorophenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2,4,6-Trichlorophenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
4-Chloro-3-methylphenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
4-Methylphenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
4-Nitrophenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Pentachlorophenol	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Phenol	1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
<b>PAHs</b>											
2-Chloronaphthalene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2-Methylnaphthalene	<1	<1	<1	3	<1	NDP				TM176	<1 ug/l
Acenaphthene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Acenaphthylene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Anthracene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Benzo(a)anthracene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Benzo(a)pyrene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Benzo(b)fluoranthene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Benzo(ghi)perylene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Benzo(k)fluoranthene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Chrysene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Dibenzo(a,h)anthracene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Fluoranthene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Fluorene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Indeno(1,2,3-cd)pyrene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l

Date 31.01.2008

Validated ☒  
Preliminary ☐

# ALcontrol Laboratories Analytical Services

## Table Of Results

# ISO 17025 accredited  
M MCERTS accredited  
\* Subcontracted test  
» Shown on prev. report

Job Number: 08/00436/02/01

Matrix: LIQUID

Client: RPS Consultants Ltd

Location: Not Specified

Client Ref. No.: RCM 4738

Client Contact: Aaron Cousins

Sample Identity	BH01	BH02	BH03	BH04	BH06	BH07				Method Code	LoD/Units
Depth (m)											
Sample Type	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID					
Sampled Date	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08					
Sample Received Date	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08					
Batch	1	1	1	1	1	1					
Sample Number(s)	1-4	5-8	9-12	13-16	17-20	21-23					
<b>PAHs (cont)</b>											
Naphthalene	31	<1	<1	3	<1	NDP				TM176	<1 ug/l
Phenanthrene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Pyrene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
<b>Phthalates</b>											
Bis(2-ethylhexyl) phthalate	<2	<2	<2	<2	<2	NDP				TM176	<2 ug/l
Butylbenzyl phthalate	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Di-n-butyl phthalate	<1	<1	<1	1	<1	NDP				TM176	<1 ug/l
Di-n-Octyl phthalate	<5	<5	<5	<5	<5	NDP				TM176	<5 ug/l
Diethyl phthalate	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Dimethyl phthalate	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
<b>Other Semi-volatiles</b>											
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
1,2,4-Trichlorobenzene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
1,3-Dichlorobenzene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2-Nitroaniline	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2,4-Dinitrotoluene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
2,6-Dinitrotoluene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
3-Nitroaniline	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
4-Bromophenylphenylether	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
4-Chloroaniline	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
4-Chlorophenylphenylether	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
4-Nitroaniline	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Azobenzene	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Bis(2-chloroethoxy)methane	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Bis(2-chloroethyl)ether	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Carbazole	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l
Dibenzofuran	<1	<1	<1	<1	<1	NDP				TM176	<1 ug/l

Date 31.01.2008

☒

11

- # ISO 17025 accredited
- M MCERTS accredited
- \* Subcontracted test
- » Shown on prev. report

**Matrix:** LIQUID  
**Location:** Not Specified  
**Client Contact:** Aaron Cousins

**Date** 31.01.2008

Validated ☒  
Preliminary ☐

# ALcontrol Laboratories Analytical Services

## Table Of Results

# ISO 17025 accredited  
M MCERTS accredited  
\* Subcontracted test  
» Shown on prev. report

Job Number: 08/00436/02/01

Matrix: LIQUID

Client: RPS Consultants Ltd

Location: Not Specified

Client Ref. No.: RCM 4738

Client Contact: Aaron Cousins

Sample Identity	BH01	BH02	BH03	BH04	BH06	BH07				Method Code	Lob/Units
Depth (m)											
Sample Type	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID					
Sampled Date	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08					
Sample Received Date	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08					
Batch	1	1	1	1	1	1					
Sample Number(s)	1-4	5-8	9-12	13-16	17-20	21-23					
<b>Volatile Organic Compounds</b>											
Dichlorodifluoromethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Chloromethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Vinyl Chloride	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Bromomethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Chloroethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
trans-1-2-Dichloroethene	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Dichloromethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Carbon Disulphide	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Methyl Tertiary Butyl Ether	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
cis-1-2-Dichloroethene	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Bromochloromethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Chloroform	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
2,2-Dichloropropane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,1-Dichloropropene	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Benzene	170	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Carbontetrachloride	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Dibromomethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Bromodichloromethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Trichloroethene	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
cis-1-3-Dichloropropene	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
trans-1-3-Dichloropropene	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
Toluene	24	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l
1,3-Dichloropropane	<1	<1	<1	<1	<1	<1				TM208 <sup>#</sup>	<1 ug/l

Date 31.01.2008



Validated ☒  
Preliminary ☐

# ALcontrol Laboratories Analytical Services

## Table Of Results

# ISO 17025 accredited  
M MCERTS accredited  
\* Subcontracted test  
» Shown on prev. report

Job Number: 08/00436/02/01  
Client: RPS Consultants Ltd  
Client Ref. No.: RCM 4738

Matrix: LIQUID  
Location: Not Specified  
Client Contact: Aaron Cousins

Sample Identity	BH01	BH02	BH03	BH04	BH06	BH07					Method Code	LoD/Units
Depth (m)												
Sample Type	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID						
Sampled Date	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08	08.01.08						
Sample Received Date	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08	09.01.08						
Batch	1	1	1	1	1	1						
Sample Number(s)	1-4	5-8	9-12	13-16	17-20	21-23						
<b>Volatile Organic Compounds (cont)</b>												
Dibromochloromethane	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,2-Dibromoethane	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Tetrachloroethene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Chlorobenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Ethylbenzene	80	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
p/m-Xylene	8	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Bromoform	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Styrene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
o-Xylene	7	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Isopropylbenzene	8	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Bromobenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
2-Chlorotoluene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Propylbenzene	6	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
4-Chlorotoluene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,2,4-Trimethylbenzene	3	<1	<1	14	<1	<1					TM208 <sup>#</sup>	<1 ug/l
4-Isopropyltoluene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
sec-Butylbenzene	<1	<1	<1	6	<1	<1					TM208 <sup>#</sup>	<1 ug/l
tert-Butylbenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,3-Dichlorobenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
n-Butylbenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,2-Dibromo-3-chloropropane	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,2,4-Trichlorobenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
Naphthalene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l
1,2,3-Trichlorobenzene	<1	<1	<1	<1	<1	<1					TM208 <sup>#</sup>	<1 ug/l

Date 31.01.2008

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11

## ALcontrol Laboratories Analytical Services

# ISO 17025 accredited

<sup>M</sup> MCERTS accredited

\* Subcontracted test

» Shown on prev. report

**Matrix:** LIQUID

**Location:** Not Specified

**Client Contact:** Aaron Cousins

[illegible]

**Date** 31.01.2008

# ALcontrol Laboratories Analytical Services

## Table Of Results - Appendix

**Job Number:** 08/00436/02/01  
**Client:** RPS Consultants Ltd  
**Client Ref. No.:** RCM 4738

### Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03x10<sup>-7</sup>

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

### Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample <sup>1</sup>	Surrogate Corrected
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter			NA	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection	✓		NA	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)			NA	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)	✓		NA	
TM110	BS 1377: Part 3 1990	Redox Potential			NA	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		NA	
TM133	BS 1377: Part 3 1990	Determination of pH in Soil and Water using the GLpH pH Meter	✓		NA	
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS	✓		NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser	✓		NA	
TM174		Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID			NA	
TM176		Determination of SVOCs in Water by GCMS			NA	
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters			NA	
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry	✓		NA	
TM198	Modified: US EPA Method 8082. EA Method 174 and 5109631	Determination of Total Polychlorinated Biphenyls (PCBs) as Aroclor 1254 by GC-MS in Waters	✓		NA	

<sup>1</sup> Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.

## ALcontrol Laboratories Analytical Services Table Of Results - Appendix

**Job Number:** 08/00436/02/01  
**Client:** RPS Consultants Ltd  
**Client Ref. No.:** RCM 4738

**Report Key :**

Results expressed as (e.g.) 1.03E-07 is equivalent to  $1.03 \times 10^{-7}$

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

**Summary of Method Codes contained within report :**

[illegible]

<sup>1</sup> Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

**ALcontrol Laboratories Analytical Services**  
**Table Of Results - Appendix**

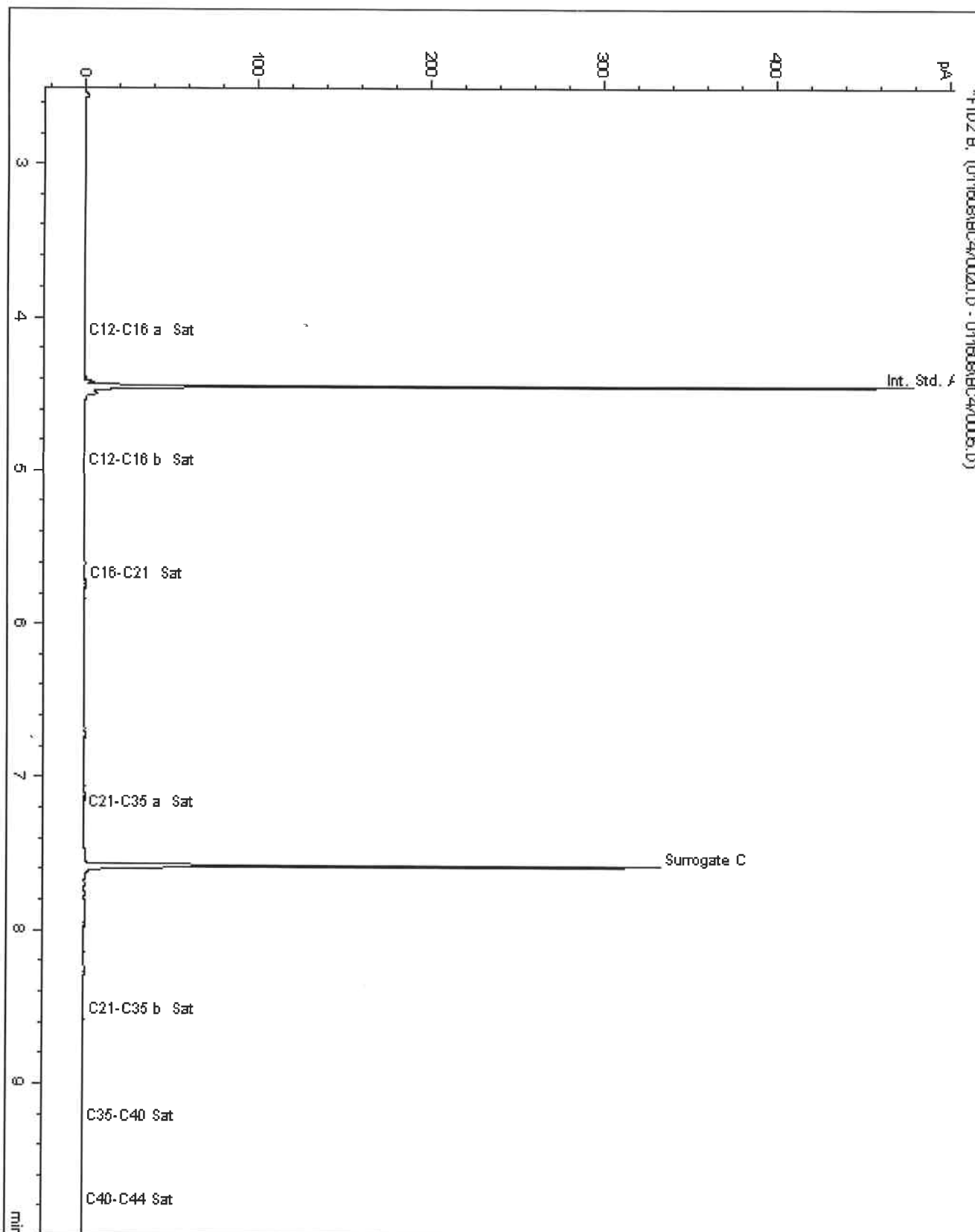
**Job Number:** 08/00436/02/01  
**Client:** RPS Consultants Ltd  
**Client Ref. No.:** RCM 4738

**Summary of Coolbox temperatures**

Batch No.	Coolbox Temperature (°C)
1	16,6

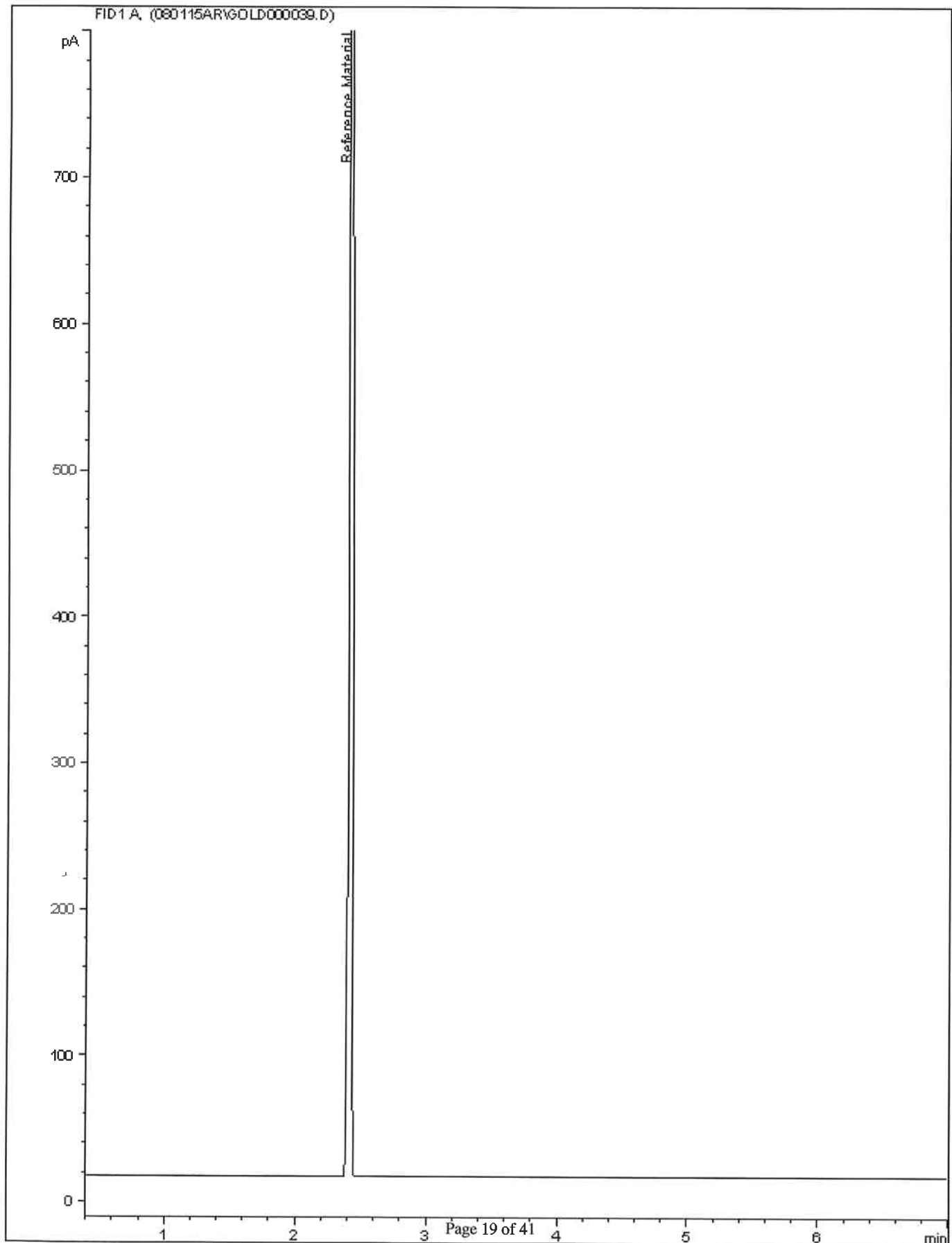
Alcontrol/Geochem Analytical Services  
Speciated TPH - SATS ( C12 - C40 )

Sample Identity: 200800436-9/W  
Date Acquired : 16/01/08 23:14:59 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



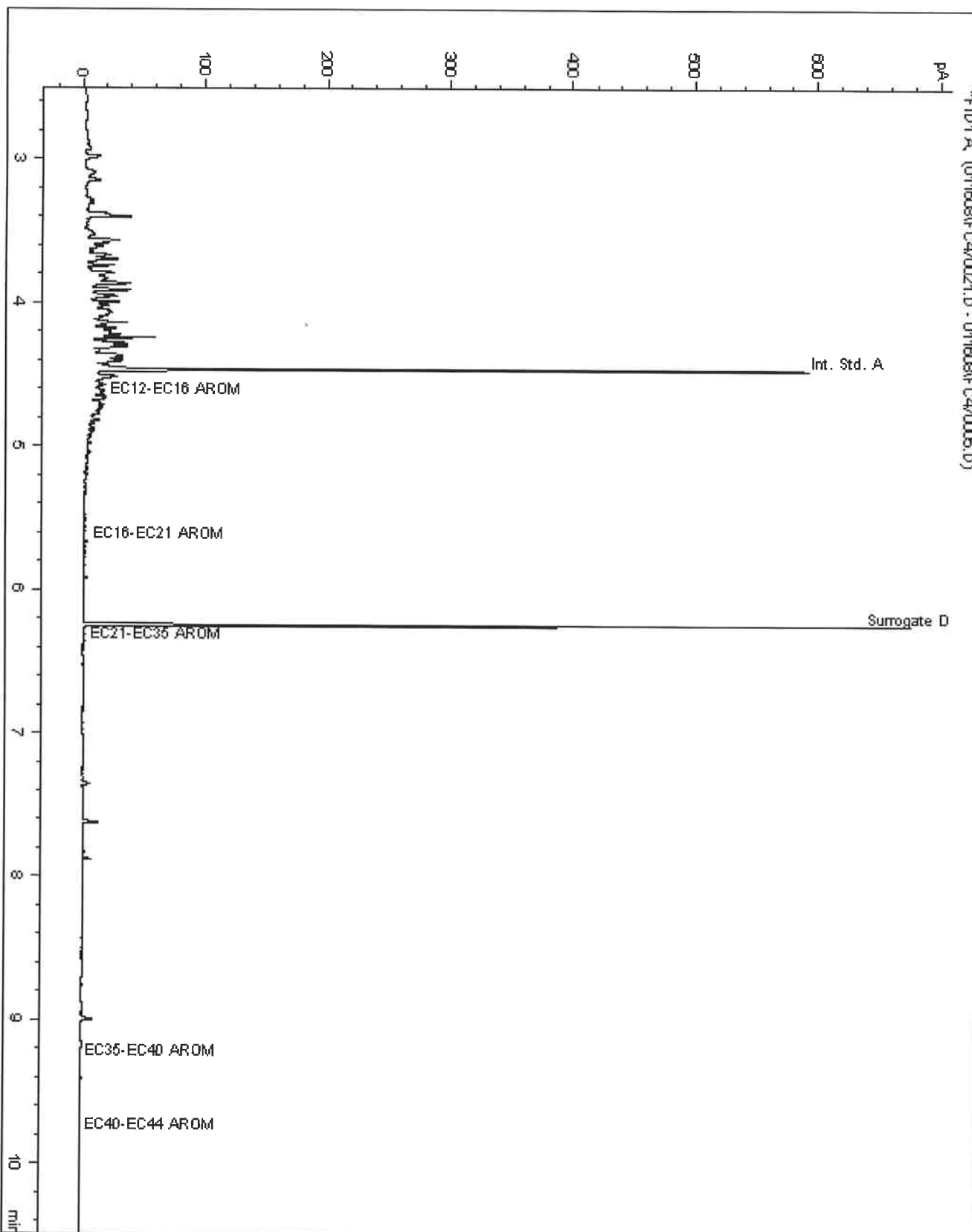
ALcontrol Geochem Analytical Services  
Gasoline Range Organics

Sample Identity : 200800436-11/W  
Date Acquired : 16/01/08 02:13:01  
Units : ppb  
Dilution : 1



Alcontrol/Geochem Analytical Services  
Speciated TPH - AROM ( C12 - C40 )

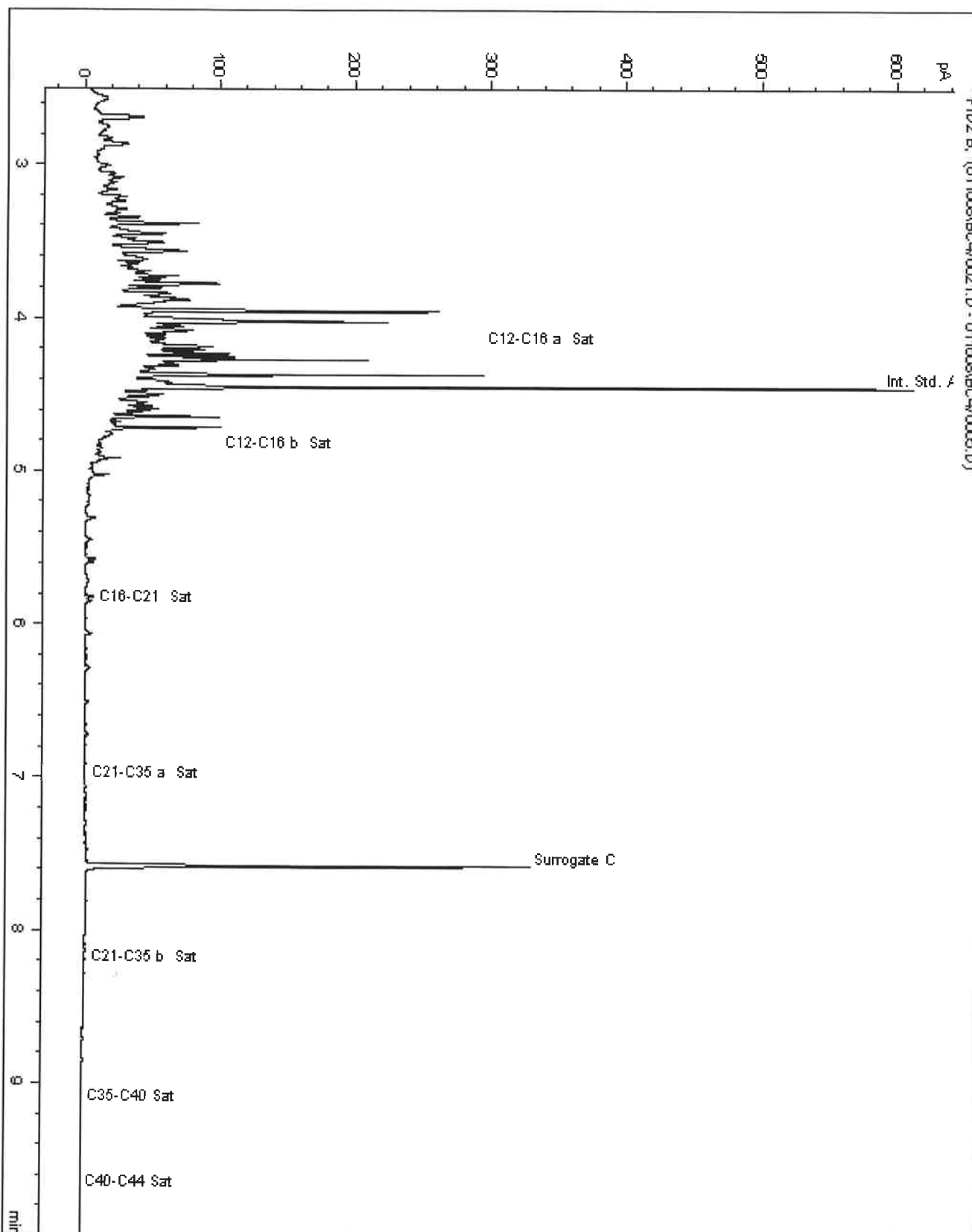
Sample Identity: 200800436-13/W  
Date Acquired : 16/01/08 23:33:54 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017





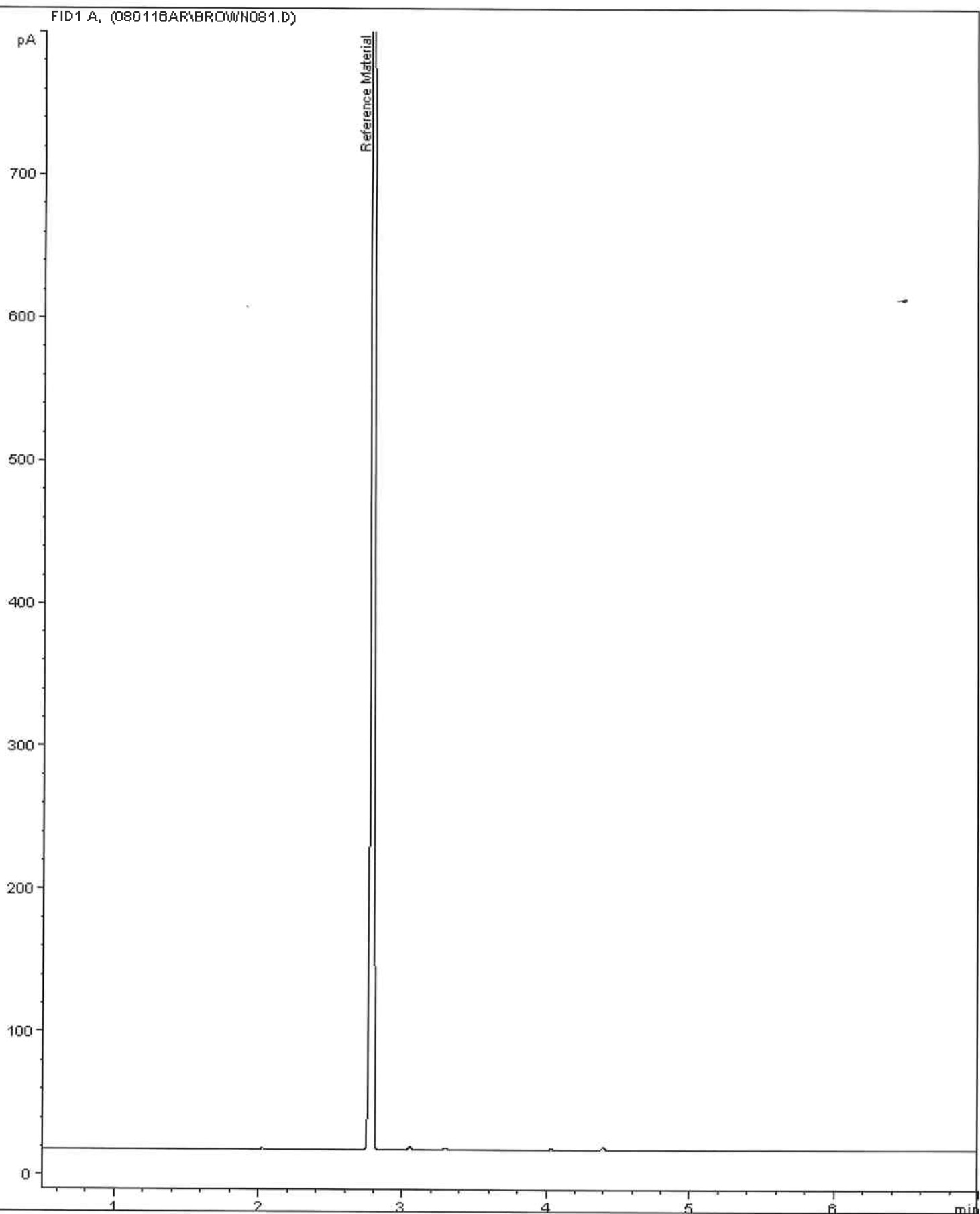
Alcontrol/Geochem Analytical Services  
Speciated TPH - SATS ( C12 - C40 )

Sample Identity: 200800436-13/W  
Date Acquired : 16/01/08 23:33:55 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



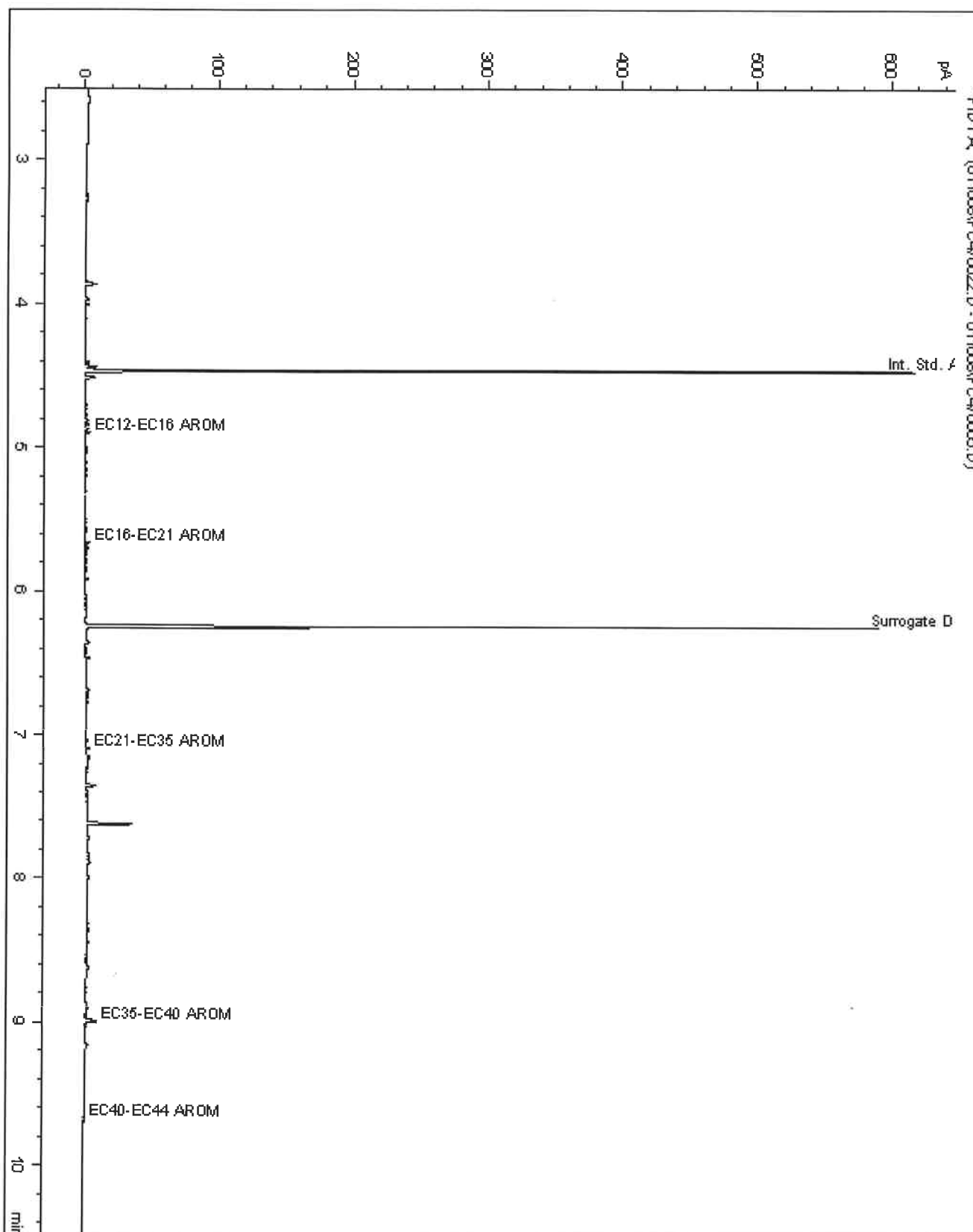
ALcontrol Geochem Analytical Services  
Gasoline Range Organics

Sample Identity : BLANK  
Date Acquired : 17/01/08 18:27:20 PM  
Units : ppb  
Dilution : 1



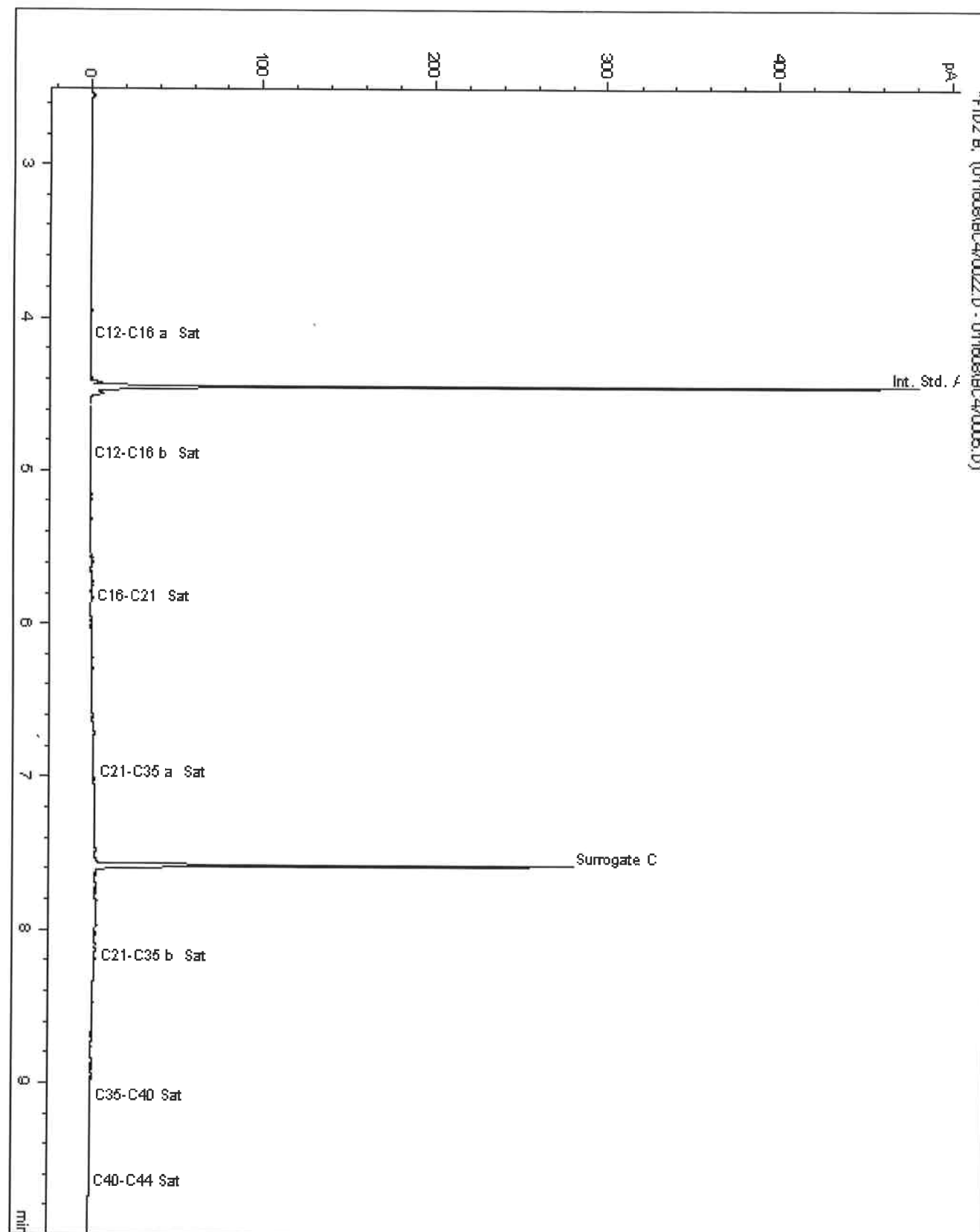
Alcontrol/Geochem Analytical Services  
Speciated TPH - AROM ( C12 - C40 )

Sample Identity: 200800436-17/W  
Date Acquired : 16/01/08 23:52:38 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



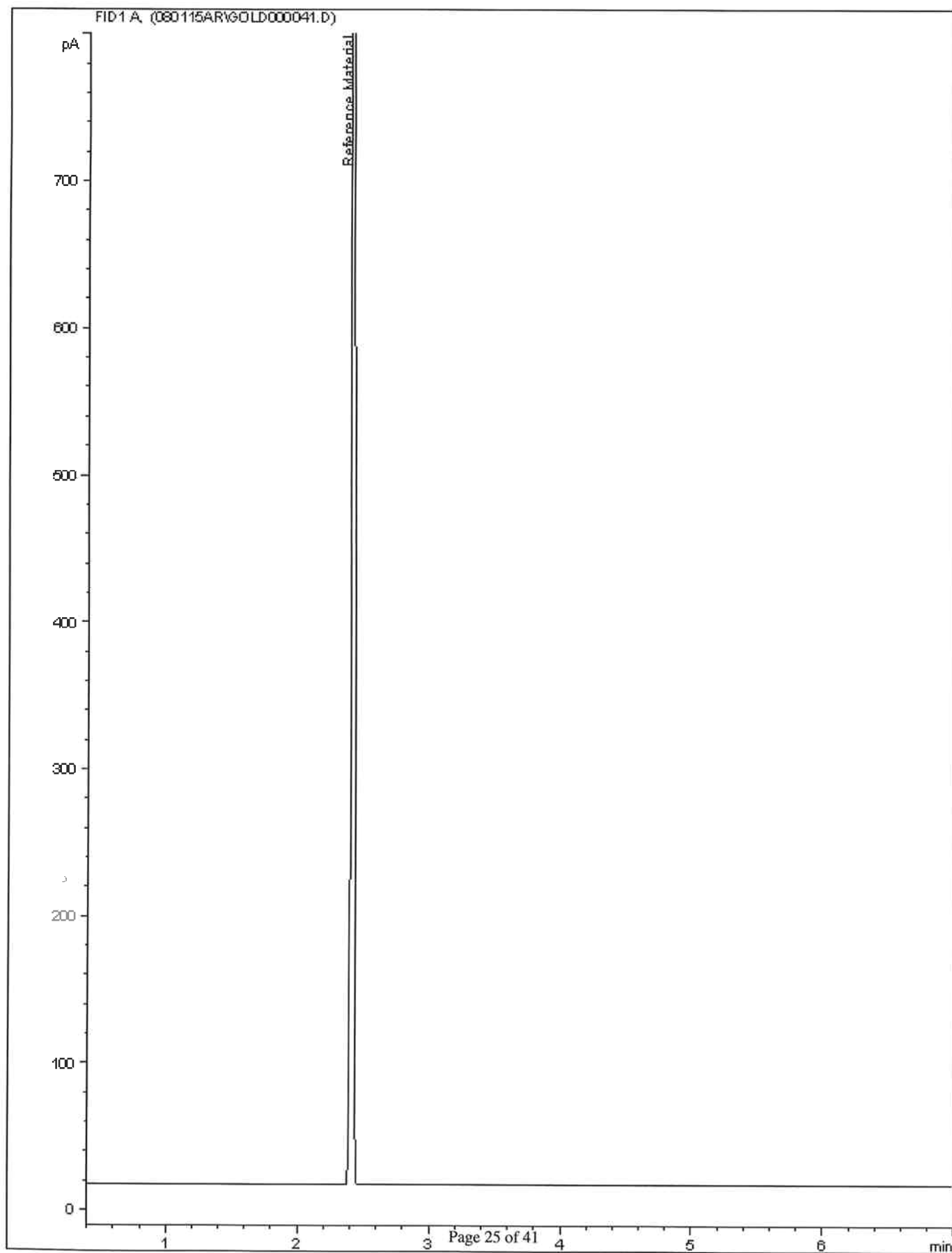
Alcontrol/Geochem Analytical Services  
Speciated TPH - SATS ( C12 - C40 )

Sample Identity: 200800436-17/W  
Date Acquired : 16/01/08 23:52:39 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



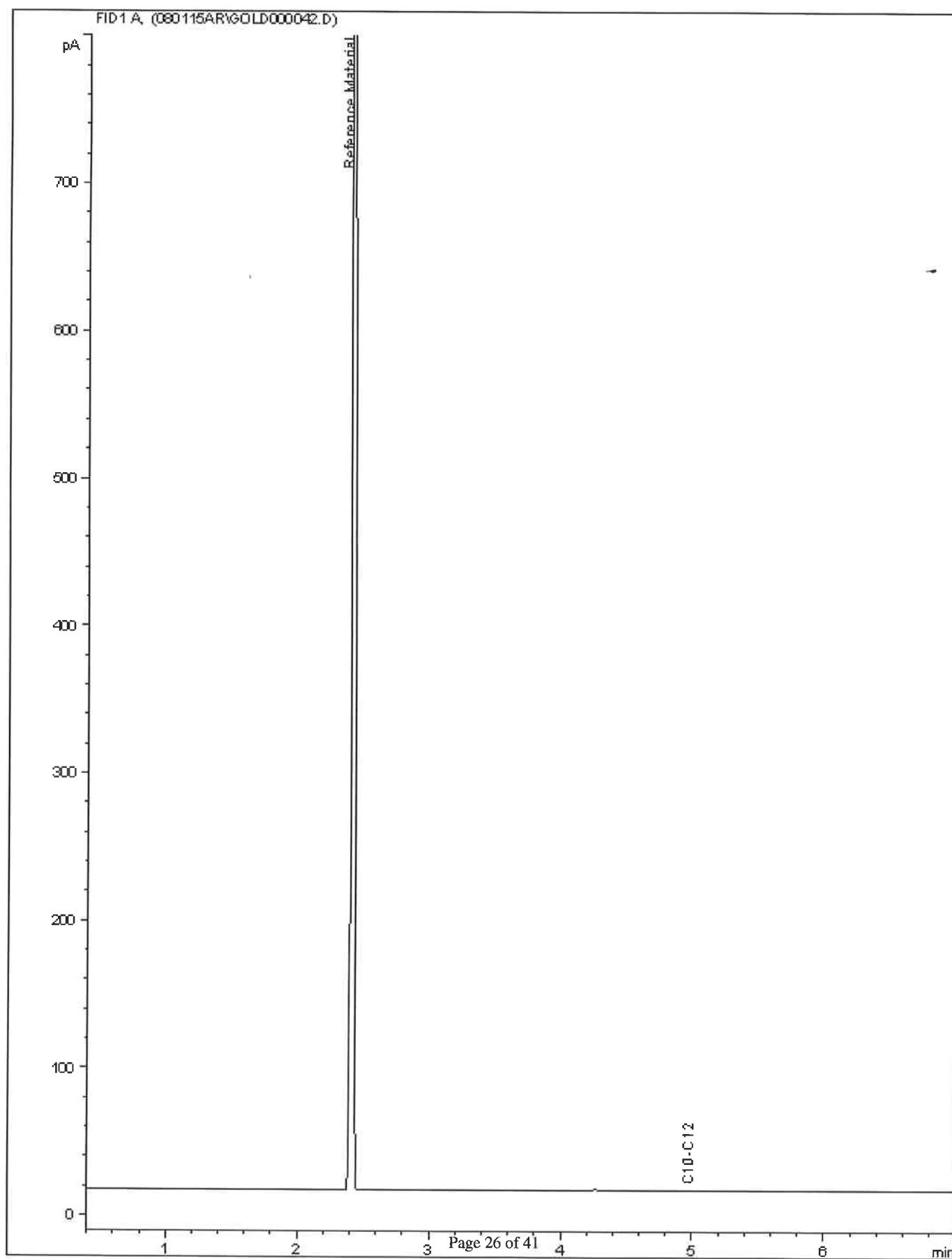
ALcontrol Geochem Analytical Services  
Gasoline Range Organics

Sample Identity : 200800436-19/W  
Date Acquired : 16/01/08 02:41:07  
Units : ppb  
Dilution : 1



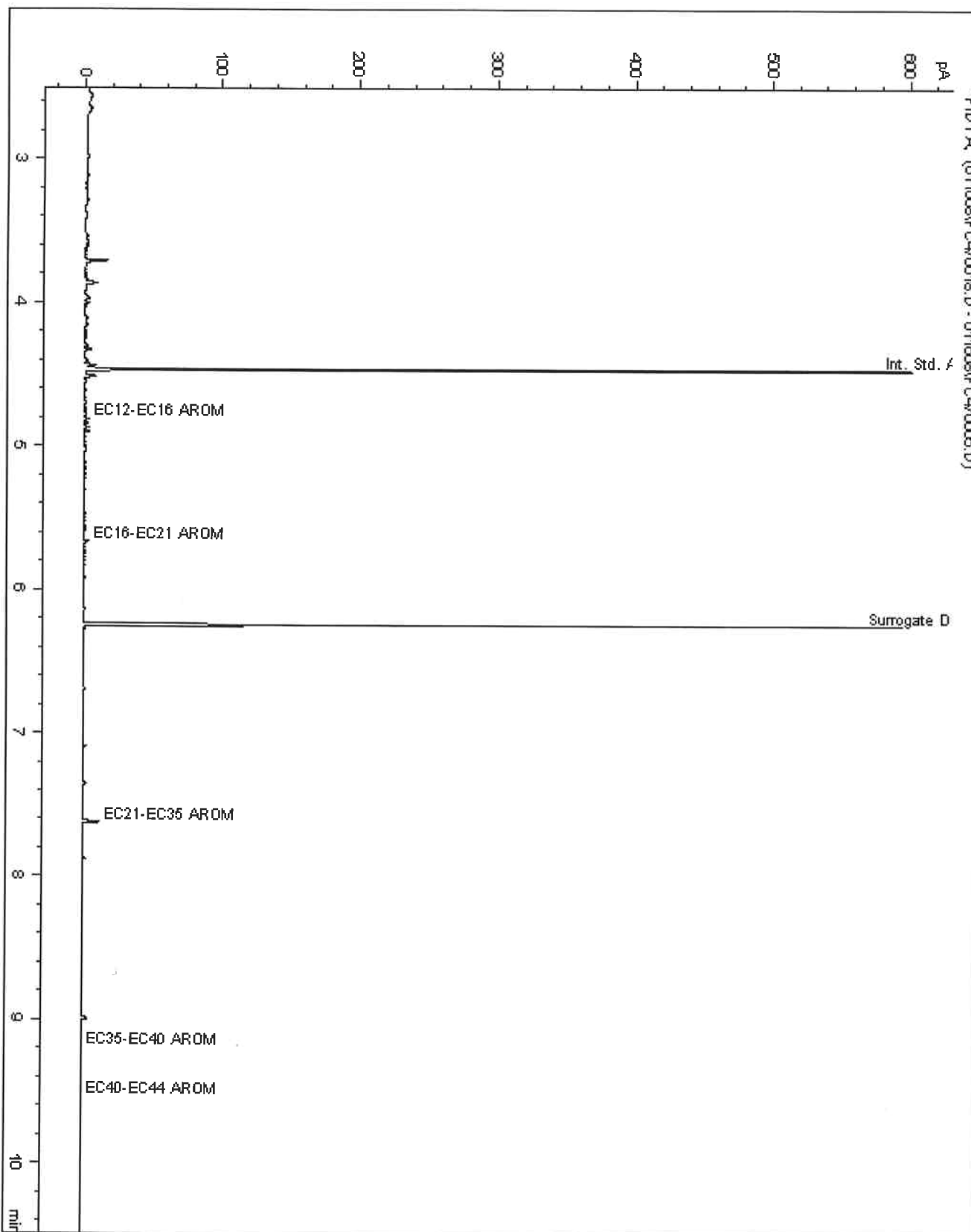
Alcontrol Geochem Analytical Services  
Gasoline Range Organics

Sample Identity : 200800436-22/W  
Date Acquired : 16/01/08 02:55:14  
Units : ppb  
Dilution : 1



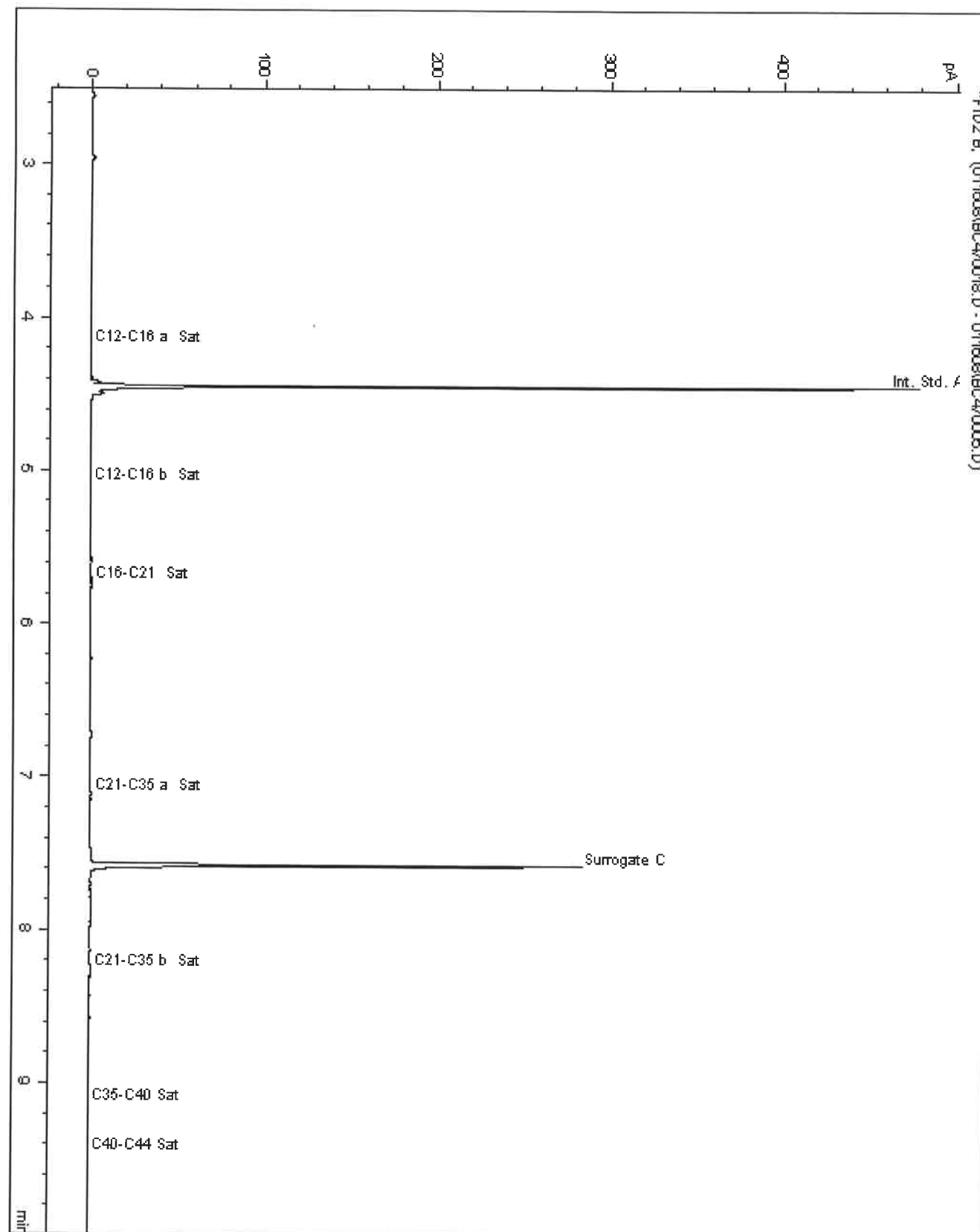
Alcontrol/Geochem Analytical Services  
Speciated TPH - AROM ( C12 - C40 )

Sample Identity: 200800436-1/W  
Date Acquired : 16/01/08 22:37:32 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



Alcontrol/Geochem Analytical Services  
Speciated TPH - SATS ( C12 - C40 )

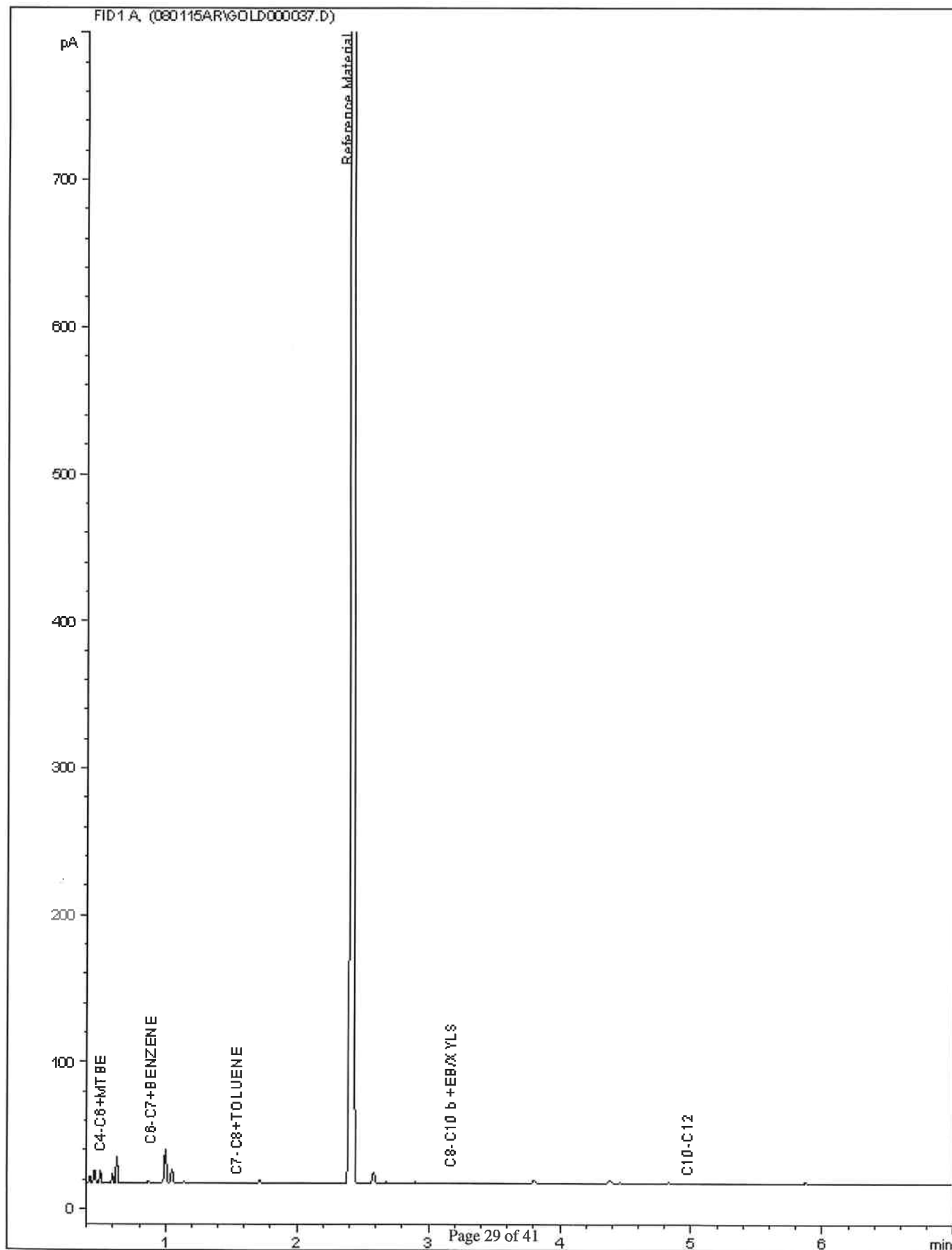
Sample Identity: 200800436-1/W  
Date Acquired : 16/01/08 22:37:32 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017





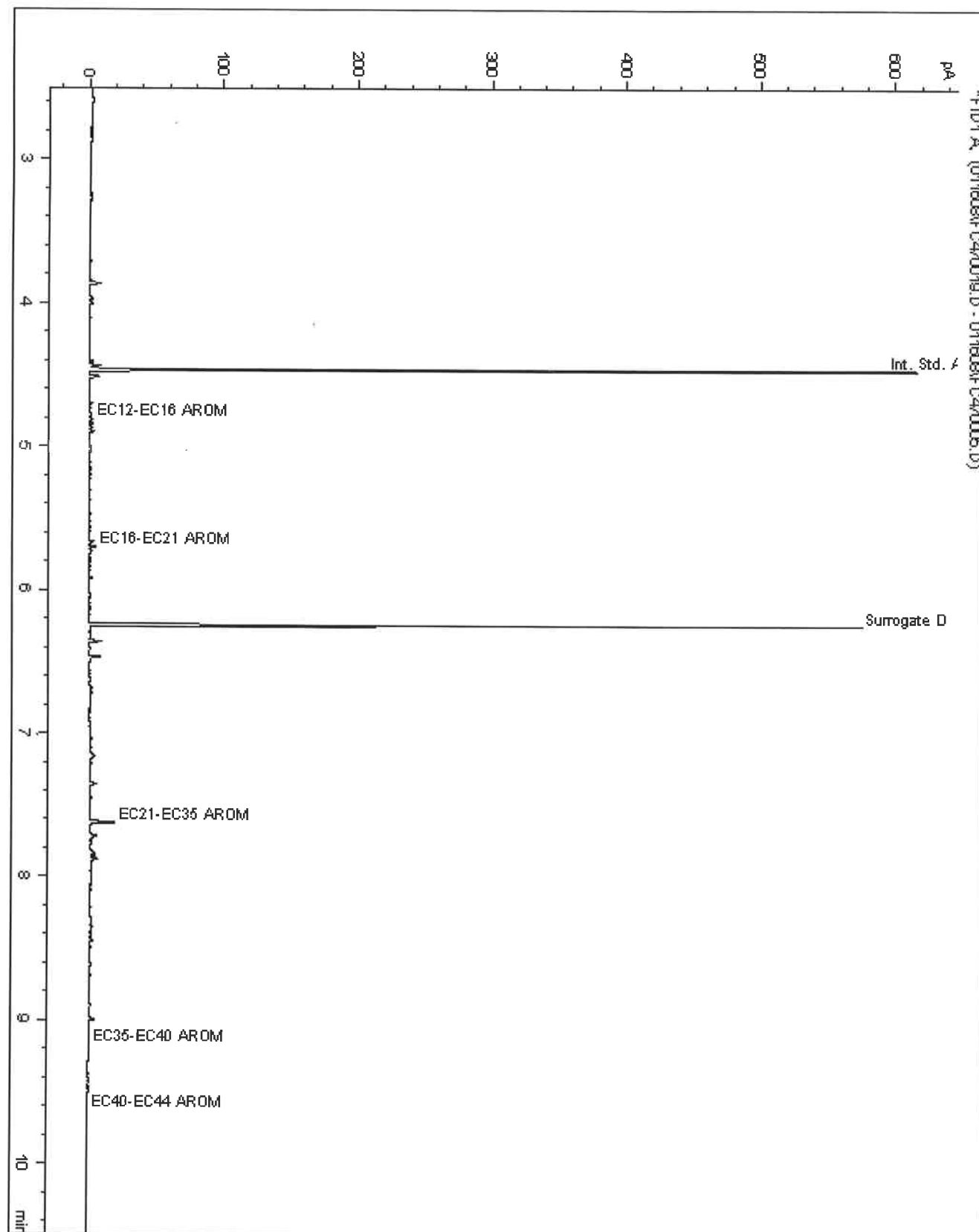
Alcontrol Geochem Analytical Services  
Gasoline Range Organics

Sample Identity : 200800436-3/W  
Date Acquired : 16/01/08 01:44:52  
Units : ppb  
Dilution : 1



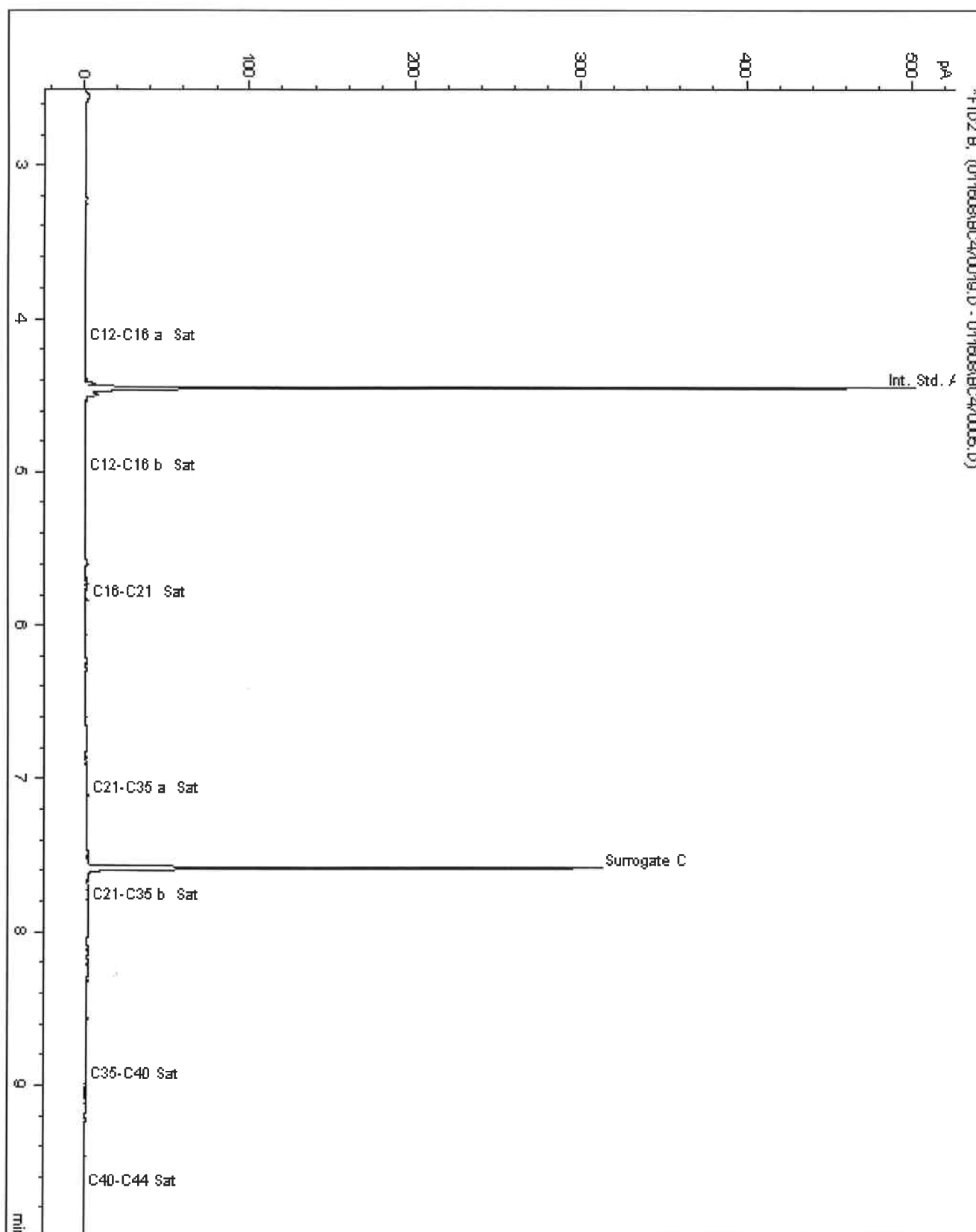
Alcontrol/Geochem Analytical Services  
Speciated TPH - AROM ( C12 - C40 )

Sample Identity: 200800436-5/W  
Date Acquired : 16/01/08 22:56:18 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



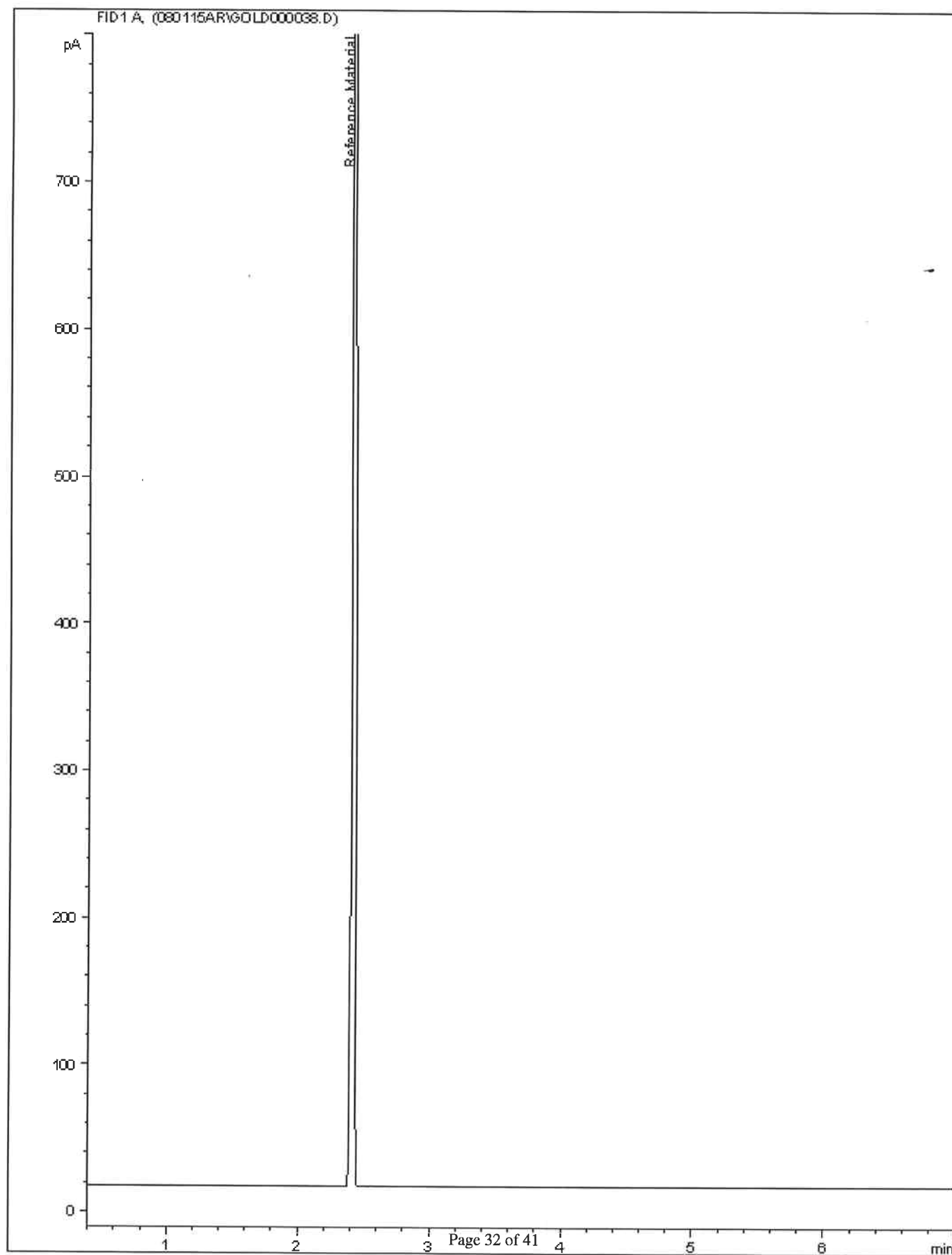
Alcontrol/Geochem Analytical Services  
Speciated TPH - SATS ( C12 - C40 )

Sample Identity: 200800436-5/W  
Date Acquired : 16/01/08 22:56:17 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



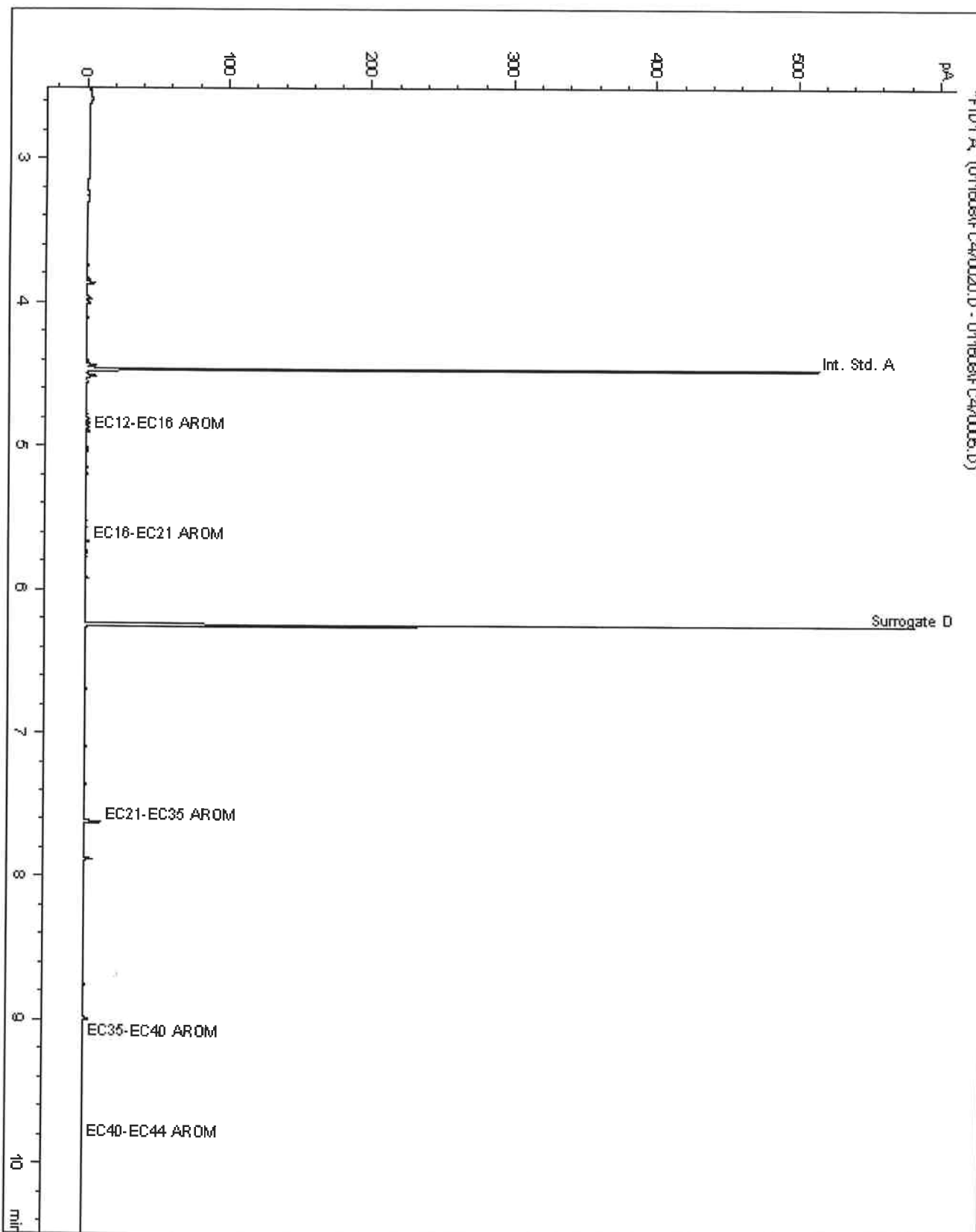
ALcontrol Geochem Analytical Services  
Gasoline Range Organics

Sample Identity : 200800436-7/W  
Date Acquired : 16/01/08 01:59:00  
Units : ppb  
Dilution : 1



Alcontrol/Geochem Analytical Services  
Speciated TPH - AROM ( C12 - C40 )

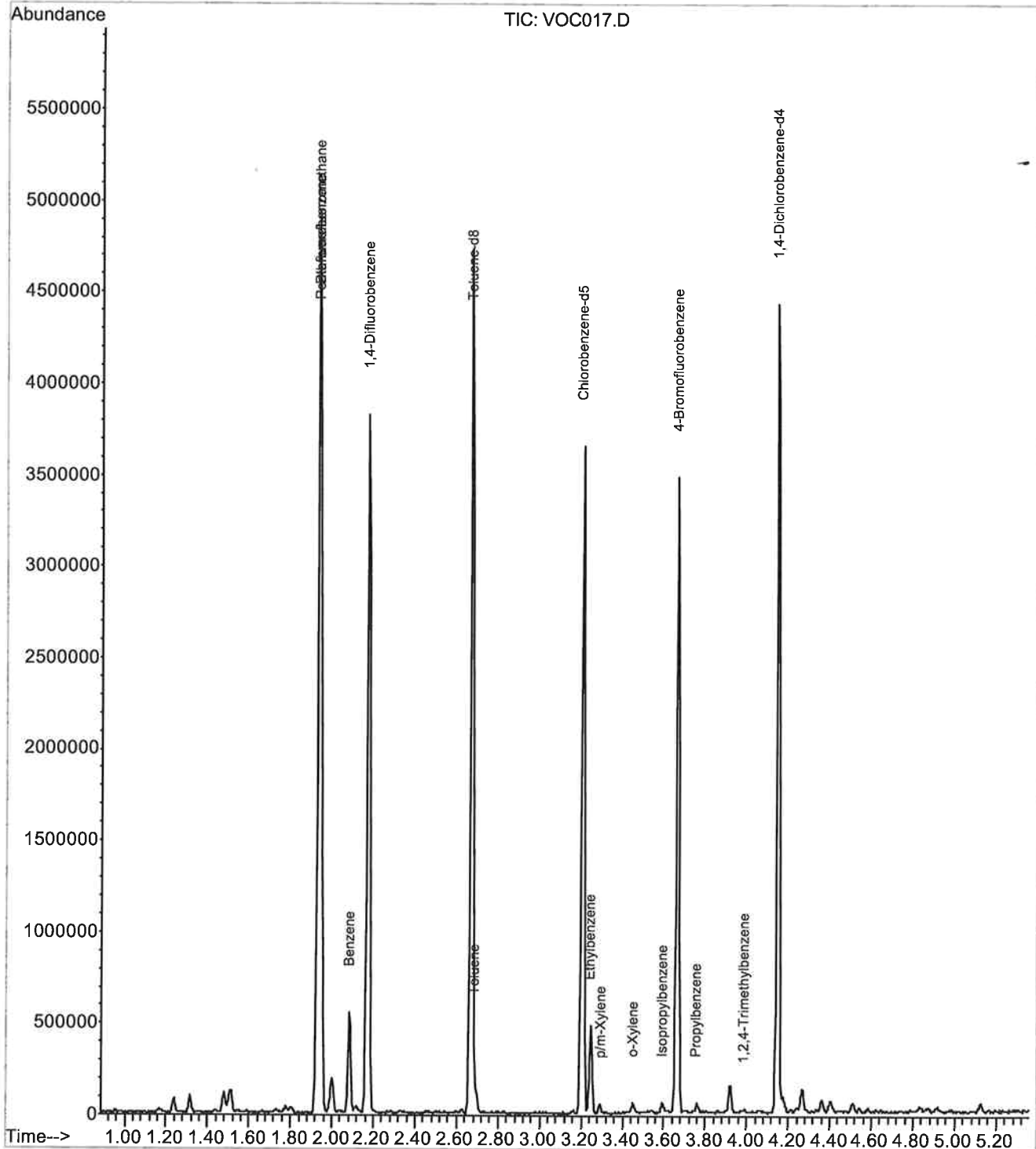
Sample Identity: 200800436-9/W  
Date Acquired : 16/01/08 23:14:59 PM  
Units : ppb  
Dilution :  
CF : 1000  
Multiplier : 0.017



# Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\011608\  
 Data File : VOC017.D  
 Acq On : 16 Jan 2008 20:33  
 Operator : Alcontrol Labs  
 Sample : 200800436-004  
 Misc : /water  
 ALS Vial : 17 Sample Multiplier: 1

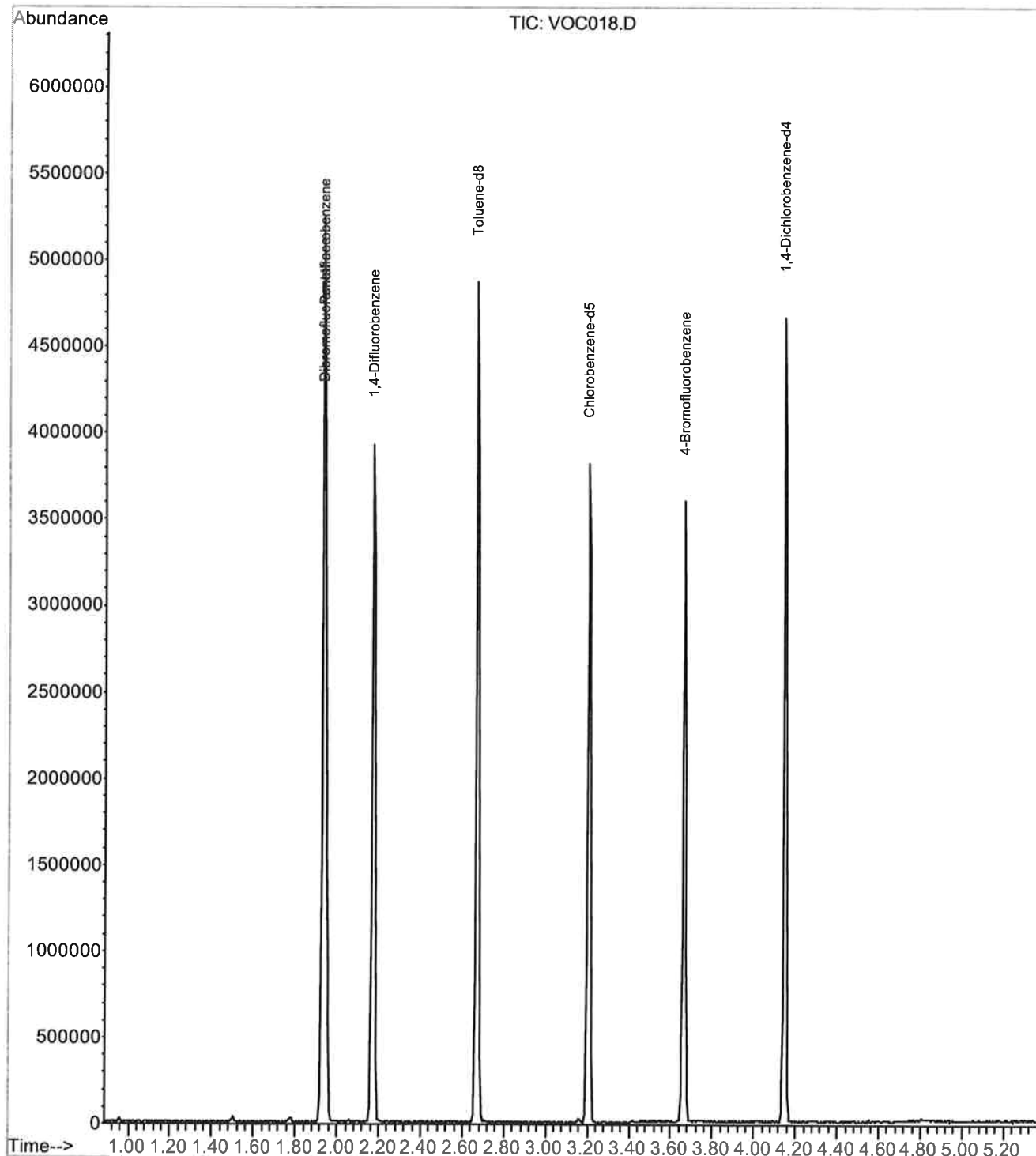
Quant Time: Jan 17 13:51:31 2008  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Thu Jan 17 13:20:20 2008  
 Response via : Initial Calibration



# Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\011608\  
 Data File : VOC018.D  
 Acq On : 16 Jan 2008 20:43  
 Operator : Alcontrol Labs  
 Sample : 200800436-008  
 Misc : /water  
 ALS Vial : 18 Sample Multiplier: 1

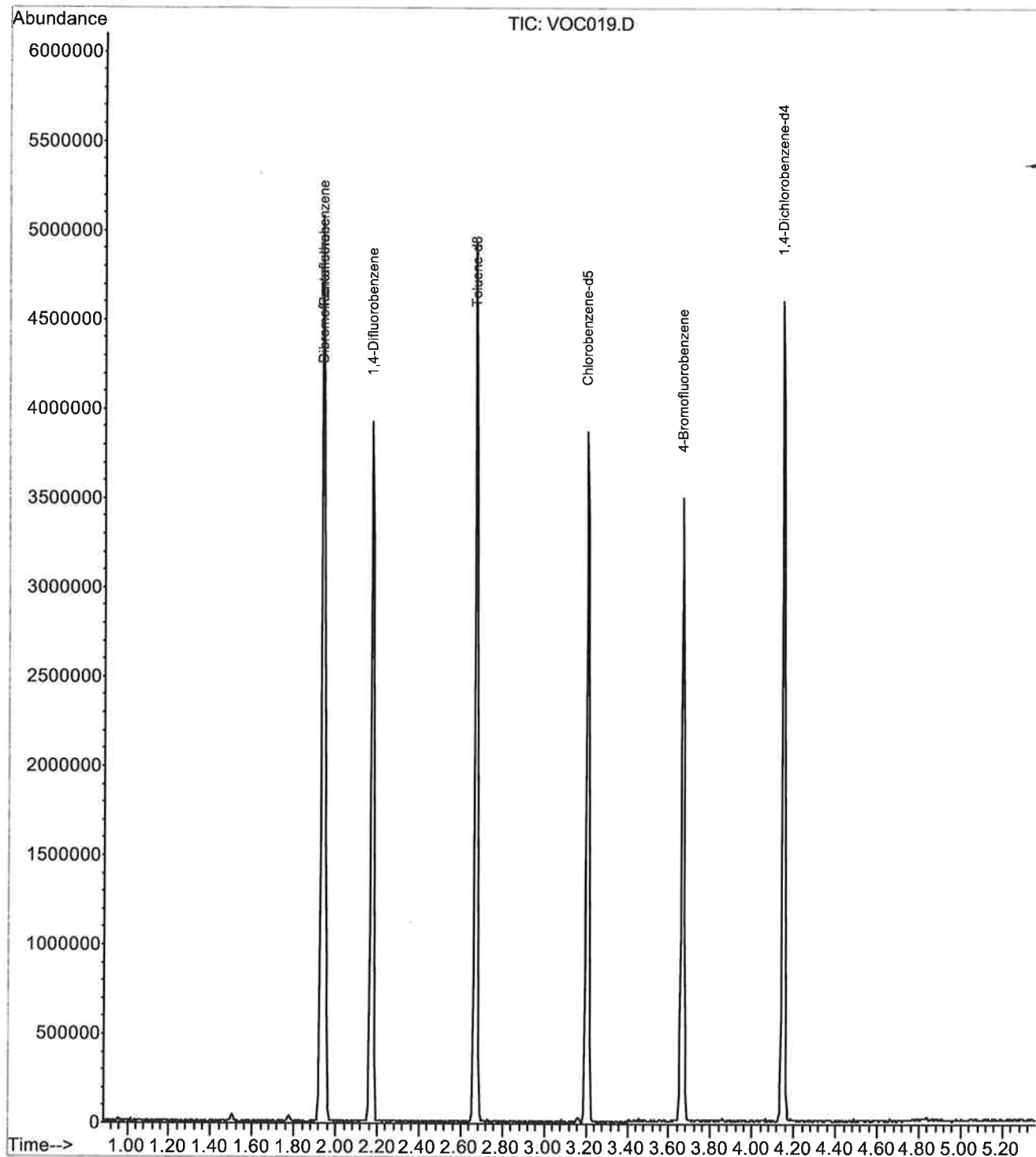
Quant Time: Jan 17 13:21:34 2008  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Thu Jan 17 13:20:20 2008  
 Response via : Initial Calibration



# Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\011608\  
 Data File : VOC019.D  
 Acq On : 16 Jan 2008 20:54  
 Operator : Alcontrol Labs  
 Sample : 200800436-012  
 Misc : /water  
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 17 13:21:36 2008  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Thu Jan 17 13:20:20 2008  
 Response via : Initial Calibration

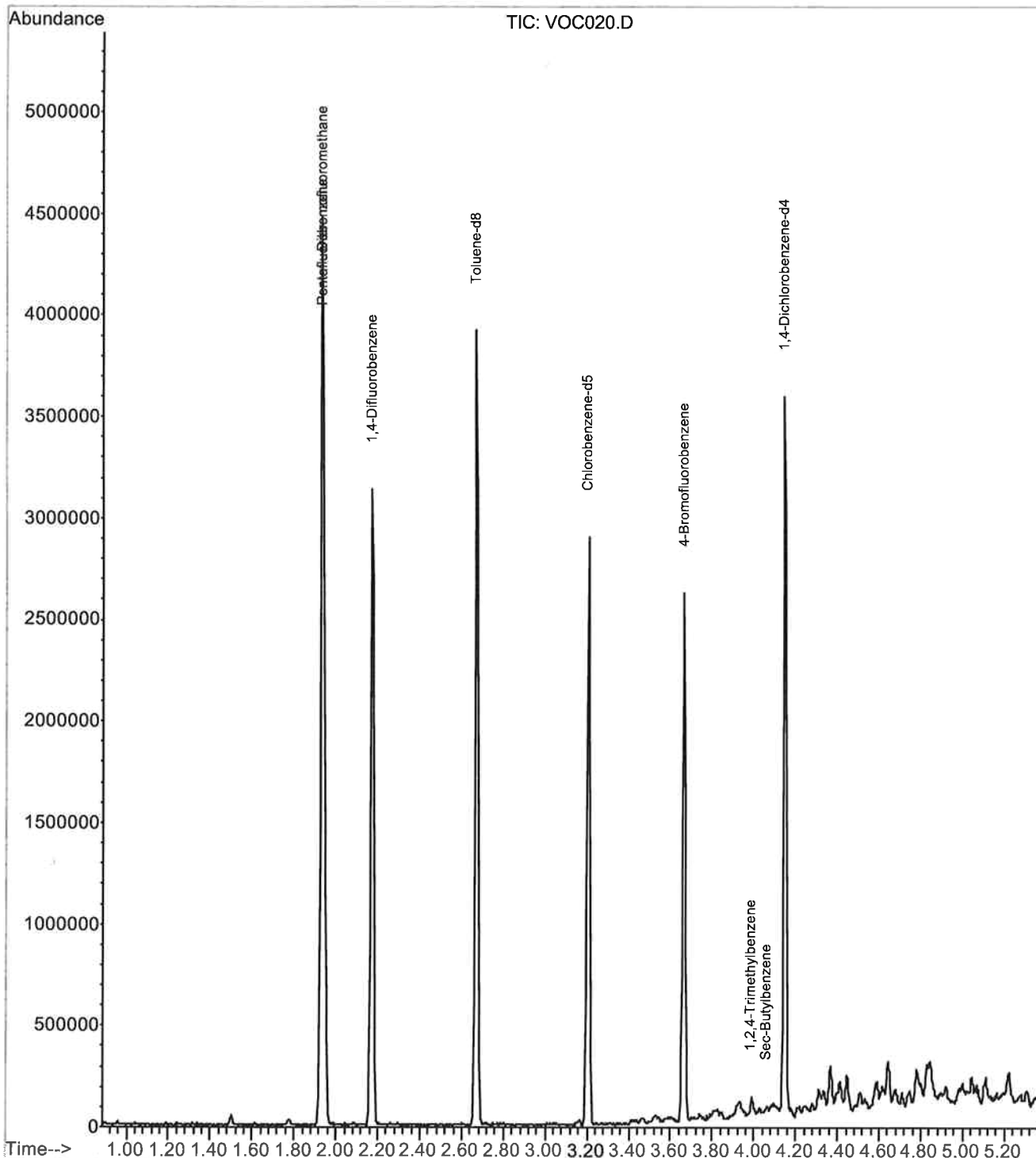




# Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\011608\  
 Data File : VOC020.D  
 Acq On : 16 Jan 2008 21:05  
 Operator : Alcontrol Labs  
 Sample : 200800436-016  
 Misc : /water  
 ALS Vial : 20 Sample Multiplier: 1

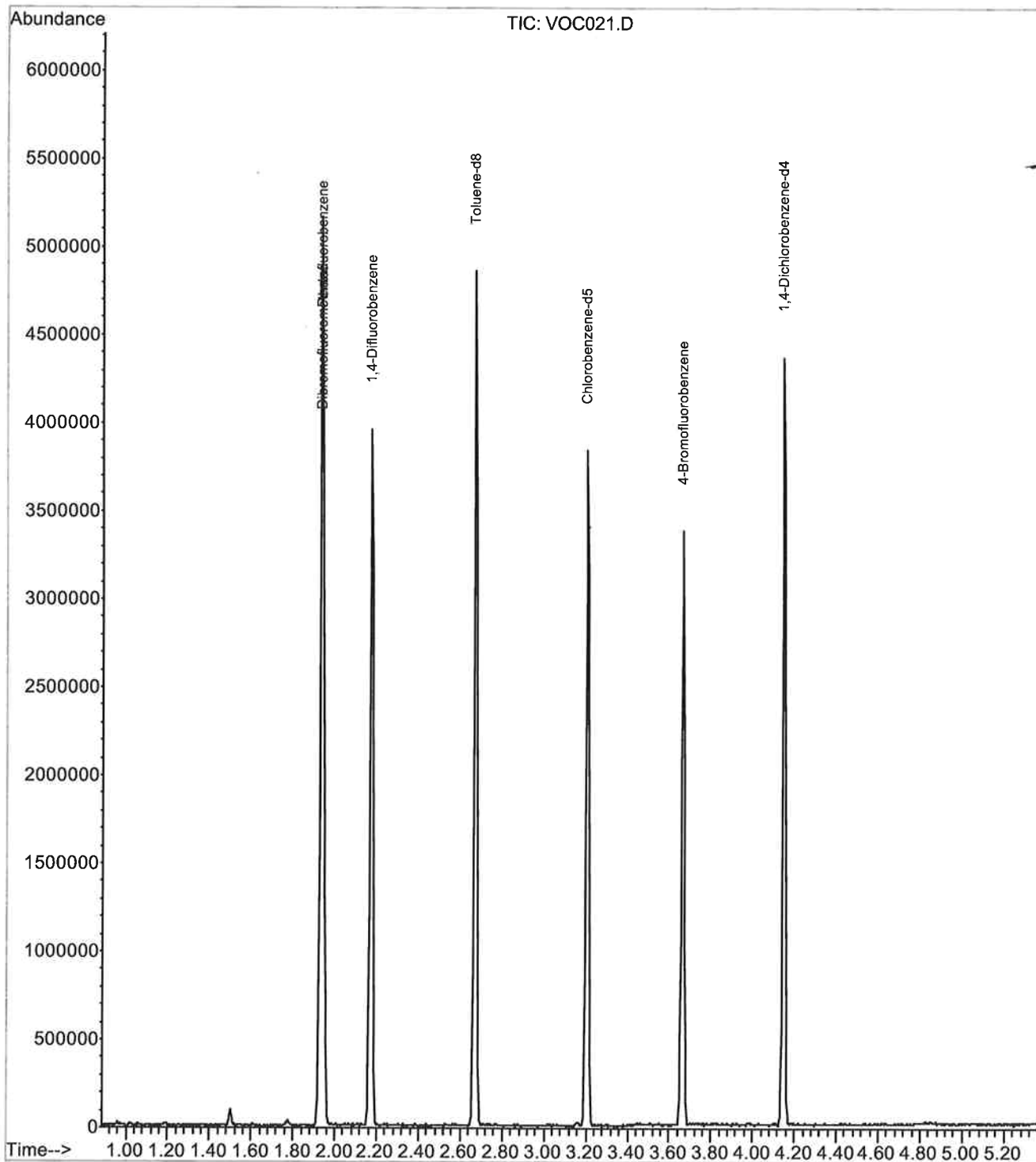
Quant Time: Jan 17 13:52:08 2008  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Thu Jan 17 13:20:20 2008  
 Response via : Initial Calibration



# Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\011608\  
 Data File : VOC021.D  
 Acq On : 16 Jan 2008 21:16  
 Operator : Alcontrol Labs  
 Sample : 200800436-020  
 Misc : /water  
 ALS Vial : 21 Sample Multiplier: 1

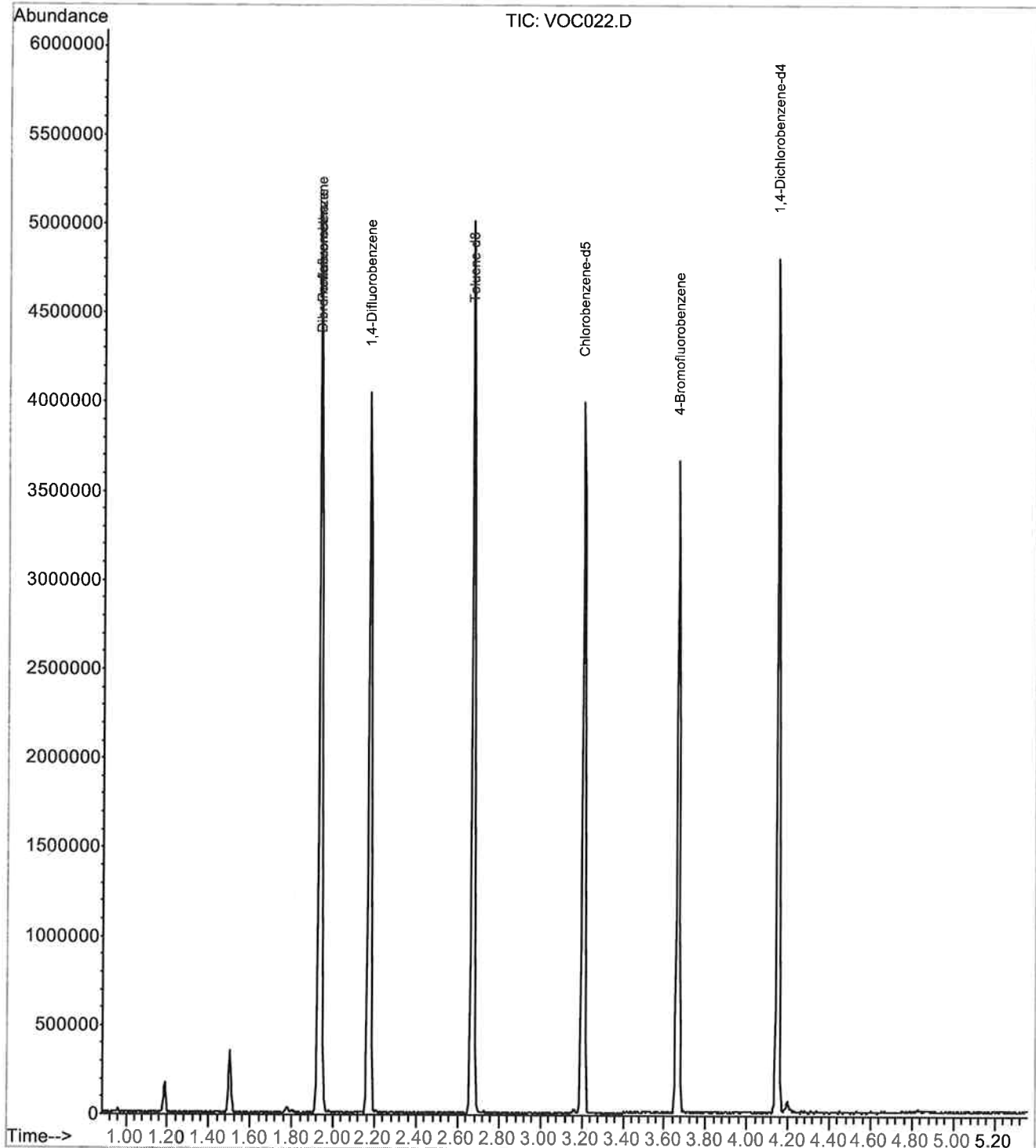
Quant Time: Jan 17 13:21:40 2008  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Thu Jan 17 13:20:20 2008  
 Response via : Initial Calibration



**Quantitation Report (QT Reviewed)**

Data Path : C:\MSDCHEM\1\DATA\011608\  
 Data File : VOC022.D  
 Acq On : 16 Jan 2008 21:27  
 Operator : Alcontrol Labs  
 Sample : 200800436-023  
 Misc : /water  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 17 13:54:30 2008  
 Quant Method : C:\MSDCHEM\1\METHODS\FASTVOC2.M  
 Quant Title : Volatile Organic Compounds ( EPA 624/8260 )  
 QLast Update : Thu Jan 17 13:20:20 2008  
 Response via : Initial Calibration



## **APPENDIX**

## APPENDIX

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA Leach tests, flash point, ammonium as NH<sub>4</sub> by the BRE method, VOC TICS, SVOC TICS, TOF-MS SCAN/SEARCH and TOF-MS TICS.
2. Samples will be run in duplicate upon request, but an additional charge may be incurred.
3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for both soil jars, tubs and volatile jars. All waters and vials will be discarded 10 days after the analysis is completed (e-mailed). All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALcontrol Geochem reserve the right to charge for samples received and stored but not analysed.
4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.
5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.
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15. Total of 8 speciated phenols by HPLC includes Resorcinol, Catechol, Phenol, Napthol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 14).
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21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.
22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials – whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.



# ALcontrol Laboratories

Unit 7-8 Hawarden Business Park  
Manor Road (off Manor Lane)  
Hawarden  
Deeside  
CH5 3US  
Tel: (01244) 528700  
Fax: (01244) 528701  
email: mkt@alcontrol.co.uk  
website: www.alcontrol.co.uk

RECEIVED

- 4 MAR 2007

RPS Consultants Ltd  
52 Princess Street  
Manchester  
M1 6JX

ATTN: Aaron Cousins

## CERTIFICATE OF ANALYSIS

**Date:** 27 February, 2008  
**Our Reference:** 08/00436/02/02  
**Your Reference:** RCM 4738  
**Location:** QE2 JETTY

Supplement 002 to report number 08/00436/02/01

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials- whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Signed

**Diane Whittlestone** **Jane Seymour**  
Tech. Support Manager Project Manager

**David O'Hare**  
Project Manager

**Caroline Suttie**  
Project Coordinator  
Team Leader

Valid if signed by any of the above signatories.

**Compiled By**

Laura Parr



# ALcontrol Laboratories TEST SCHEDULE

**JOB NUMBER :** 08/436/02      **BATCH NUMBER :** 2      **CLIENT REF/CODE :** RCM 4738      **ORDER NUMBER :**      **TURNAROUND :** 5 days  
**CLIENT :** RPS Consultants Ltd      **CONTACT :** Aaron Cousins      **DATE OF RECEIPT :** 26/01/08      **LOCATION :** JETTY  
 Numeric values indicate additional scheduling  
 \* indicates test subcontracted

Sample Number	Sample Identity	P / V	Depth	Sample Type	UKAS Accredited ?	pH (W)	Oxygen Dissolved (W)	Redox Potential (W)	Conductivity (W)	Metals ICP-MS 9 (W)	Mercury Dissolved (W) (CVAF)	Barium ICP-MS (W)	Beryllium (ICP-MS) (W)	Vanadium ICP-MS (W)	PAH Spec MS Aqueous (W)	EPH CWG GC Aqueous (W)	GRO CWG GC (W)	Take NaOH (W)	Cyanide Free (W)	Cyanide Total (W)	Phenols HPLC (W)	PCB Total MS (W)	SVOC excl PAH MS (W)	VOC MS (W)
24	BH01	1glass	UNKNOWN	LIQUID																				
25	BH01	1plastic	UNKNOWN	LIQUID		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	
26	BH01	Vial	UNKNOWN	LIQUID													X							
27	BH01	Vial	UNKNOWN	LIQUID																				
28	BH02	1glass	UNKNOWN	LIQUID							X				X	X								X
29	BH02	1plastic	UNKNOWN	LIQUID		X	X	X	X	X		X	X	X	X									
30	BH02	Vial	UNKNOWN	LIQUID													X							
31	BH02	Vial	UNKNOWN	LIQUID																				
32	BH03	1glass	UNKNOWN	LIQUID							X				X									
33	BH03	1plastic	UNKNOWN	LIQUID		X	X	X	X	X		X	X	X	X									
34	BH03	Vial	UNKNOWN	LIQUID													X							
35	BH03	Vial	UNKNOWN	LIQUID																				
36	BH04	1glass	UNKNOWN	LIQUID							X				X				X	X	X	X	X	
37	BH04	1plastic	UNKNOWN	LIQUID		X	X	X	X	X		X	X	X	X		X		X	X	X	X	X	
38	BH04	Vial	UNKNOWN	LIQUID													X							
39	BH04	Vial	UNKNOWN	LIQUID																				X
40	BH06	1glass	UNKNOWN	LIQUID							X				X									
41	BH06	1plastic	UNKNOWN	LIQUID		X	X	X	X	X		X	X	X	X									
42	BH06	Vial	UNKNOWN	LIQUID													X							
43	BH06	Vial	UNKNOWN	LIQUID																				
44	BH07	1glass	UNKNOWN	LIQUID							X				X			X	X	X	X	X	X	
45	BH07	1plastic	UNKNOWN	LIQUID		X	X	X	X	X		X	X	X										

# ALcontrol Laboratories

## TEST SCHEDULE

JOB NUMBER : 08/436/02

CLIENT : RPS Consultants Ltd

CONTACT : Aaron Cousins

DATE OF RECEIPT : 26/01/08

LOCATION : JETTY

BATCH NUMBER : 2

CLIENT REF/CODE : RCM 4738

ORDER NUMBER :

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		Sample Type	Depth	P / V																										
46	BH07	LIQUID	UNKNOWN	Vial												X														
47	BH07	LIQUID	UNKNOWN	Vial														X												
48	SW1	LIQUID	UNKNOWN	1glass						X				X				X		X										
49	SW1	LIQUID	UNKNOWN	1plastic					X			X	X					X												
50	SW1	LIQUID	UNKNOWN	Vial												X														
51	SW1	LIQUID	UNKNOWN	Vial																										
52	SW2	LIQUID	UNKNOWN	1glass						X				X				X		X										
53	SW2	LIQUID	UNKNOWN	1plastic					X			X	X					X												
54	SW2	LIQUID	UNKNOWN	Vial												X														
55	SW2	LIQUID	UNKNOWN	Vial																										
					Total Number of Tests			8	8	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5



ISO 17025 Form				FORM NO:SQS 105
ALCONTROL LABORATORIES				SHEET 1 OF 1
				ISSUE NO: 2
				WRITTEN BY: DOH
Title of Form				ISSUE DATE: 27/01/05
Notification of NDP's (No determination possible).				APPROVED BY: DP
<b>Job Number :</b> 436 <b>Client :</b> <b>Sample Type :</b> Water				
Job No.	Sample No.	Sample ID.	Analyte(s)	Reason
436	49		EC(LIQUID)	NO SAMPLE AVAILABLE FOR ANALYSIS

ISO 17025 Form				FORM NO:SQS 105
ALCONTROL LABORATORIES				SHEET 1 OF 1
				ISSUE NO: 2
				WRITTEN BY: DOH
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<b>Job Number :</b> 436 <b>Client :</b> <b>Sample Type :</b> Water				
Job No.	Sample No.	Sample ID.	Analyte(s)	Reason
436	45			NO SAMPLE AVAILABLE FOR ANALYSIS
436	49			NO SAMPLE AVAILABLE FOR ANALYSIS
436	53			NO SAMPLE AVAILABLE FOR ANALYSIS



Validated ☒  
Preliminary ☐

# ALcontrol Laboratories Analytical Services

## Table Of Results

# ISO 17025 accredited  
M MCERTS accredited  
\* Subcontracted test  
» Shown on prev. report

Job Number: 08/00436/02/01

Matrix: LIQUID

Client: RPS Consultants Ltd

Location: QE2 JETTY

Client Ref. No.: RCM 4738

Client Contact: Aaron Cousins

Sample Identity	BH01	BH02	BH03	BH04	BH06	BH07	SW1	SW2		Method Code	LoD/Units
Depth (m)											
Sample Type	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID			
Sampled Date	25.01.08	25.01.08	25.01.08	25.01.08	25.01.08	25.01.08	25.01.08	25.01.08			
Sample Received Date	26.01.08	26.01.08	26.01.08	26.01.08	26.01.08	26.01.08	26.01.08	26.01.08			
Batch	2	2	2	2	2	2	2	2			
Sample Number(s)	24-27	28-31	32-35	36-39	40-43	44-47	48-51	52-55			
<b>Volatile Organic Compounds (cont)</b>											
Dibromochloromethane	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,2-Dibromoethane	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Tetrachloroethene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,1,1,2-Tetrachloroethane	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Chlorobenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Ethylbenzene	17	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
p/m-Xylene	1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Bromoform	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Styrene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,1,2,2-Tetrachloroethane	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
o-Xylene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,2,3-Trichloropropane	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Isopropylbenzene	5	-	-	3	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Bromobenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
2-Chlorotoluene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Propylbenzene	2	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
4-Chlorotoluene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,2,4-Trimethylbenzene	<1	-	-	6	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
4-Isopropyltoluene	<1	-	-	2	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,3,5-Trimethylbenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,2-Dichlorobenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,4-Dichlorobenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
sec-Butylbenzene	<1	-	-	2	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
tert-Butylbenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,3-Dichlorobenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
n-Butylbenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,2-Dibromo-3-chloropropane	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,2,4-Trichlorobenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
Naphthalene	23	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l
1,2,3-Trichlorobenzene	<1	-	-	<1	-	<1	<1	<1		TM208 <sup>#</sup>	<1 ug/l

Date 15.02.2008



# ALcontrol Laboratories Analytical Services

## Table Of Results - Appendix

**Job Number:** 08/00436/02/01  
**Client:** RPS Consultants Ltd  
**Client Ref. No.:** RCM 4738

### Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03x10<sup>-7</sup>

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

### Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample <sup>1</sup>	Surrogate Corrected
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter			NA	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection	✓		NA	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)			NA	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)	✓		NA	
TM110	BS 1377: Part 3 1990	Redox Potential			NA	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		NA	
TM133	BS 1377: Part 3 1990	Determination of pH in Soil and Water using the GLpH pH Meter	✓		NA	
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS	✓		NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser	✓		NA	
TM174		Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID			NA	
TM176		Determination of SVOCs in Water by GCMS			NA	
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters			NA	
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry	✓		NA	
TM198	Modified: US EPA Method 8082. EA Method 174 and 5109631	Determination of Total Polychlorinated Biphenyls (PCBs) as Aroclor 1254 by GC-MS in Waters	✓		NA	

<sup>1</sup> Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.

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**ALcontrol Laboratories Analytical Services**  
**Table Of Results - Appendix**

**Job Number:** 08/00436/02/01  
**Client:** RPS Consultants Ltd  
**Client Ref. No.:** RCM 4738

**Summary of Coolbox temperatures**

Batch No.	Coolbox Temperature (°C)
2	5.0



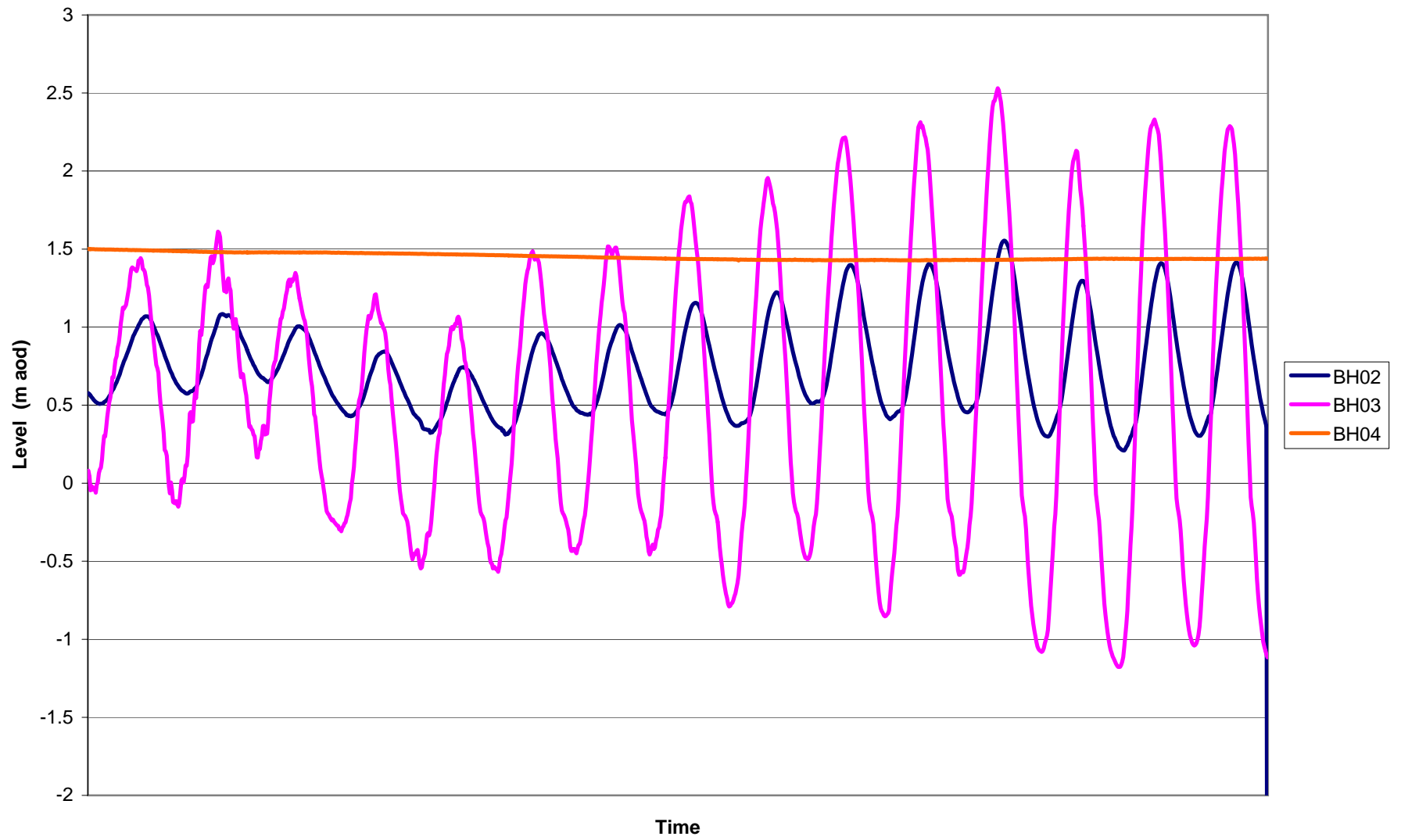
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Appendix E  
Groundwater Level Monitoring Data

# Groundwater Levels



Serial Number  
1016589  
Project ID  
RCM4738  
Location  
BH03  
Channel 1  
Identification  
LEVEL  
Unit  
m  
Offset  
0.00 m 4.887  
Altitude  
0 m  
Channel 2  
Identification  
TEMPERATURE  
Unit  
Deg C

	Date	Time	100 ms	LEVEL	TEMPERATURE	
16	31/01/2008	14:30:00	0	-4.8064	7.876	0.0806
17	31/01/2008	14:40:00	0	-4.8442	7.905	0.0428
18	31/01/2008	14:50:00	0	-4.932	7.934	-0.045
19	31/01/2008	15:00:00	0	-4.9046	7.961	-0.0176
20	31/01/2008	15:10:00	0	-4.9293	7.98	-0.0423
21	31/01/2008	15:20:00	0	-4.916	7.997	-0.029
22	31/01/2008	15:30:00	0	-4.9175	8.026	-0.0305
23	31/01/2008	15:40:00	0	-4.9479	8.027	-0.0609
24	31/01/2008	15:50:00	0	-4.8968	8.016	-0.0098
25	31/01/2008	16:00:00	0	-4.8826	8.038	0.0044
26	31/01/2008	16:10:00	0	-4.8229	8.046	0.0641
27	31/01/2008	16:20:00	0	-4.7986	8.06	0.0884
28	31/01/2008	16:30:00	0	-4.7886	8.074	0.0984
29	31/01/2008	16:40:00	0	-4.7357	8.09	0.1513
30	31/01/2008	16:50:00	0	-4.6514	8.101	0.2356
31	31/01/2008	17:00:00	0	-4.5836	8.073	0.3034
32	31/01/2008	17:10:00	0	-4.5883	8.06	0.2987
33	31/01/2008	17:20:00	0	-4.5341	8.049	0.3529
34	31/01/2008	17:30:00	0	-4.4617	8.019	0.4253
35	31/01/2008	17:40:00	0	-4.4124	7.837	0.4746
36	31/01/2008	17:50:00	0	-4.3686	7.68	0.5184
37	31/01/2008	18:00:00	0	-4.3367	7.515	0.5503
38	31/01/2008	18:10:00	0	-4.2822	7.422	0.6048
39	31/01/2008	18:20:00	0	-4.2075	7.316	0.6795
40	31/01/2008	18:30:00	0	-4.2082	7.254	0.6788
41	31/01/2008	18:40:00	0	-4.1478	7.221	0.7392
42	31/01/2008	18:50:00	0	-4.0958	7.178	0.7912
43	31/01/2008	19:00:00	0	-4.0732	7.15	0.8138
44	31/01/2008	19:10:00	0	-4.0194	7.109	0.8676
45	31/01/2008	19:20:00	0	-3.9877	7.097	0.8993
46	31/01/2008	19:30:00	0	-3.9366	7.087	0.9504
47	31/01/2008	19:40:00	0	-3.8657	7.066	1.0213
48	31/01/2008	19:50:00	0	-3.8141	7.041	1.0729
49	31/01/2008	20:00:00	0	-3.7621	7.03	1.1249
50	31/01/2008	20:10:00	0	-3.7696	7.023	1.1174
51	31/01/2008	20:20:00	0	-3.7567	7.024	1.1303
52	31/01/2008	20:30:00	0	-3.7444	7.026	1.1426
53	31/01/2008	20:40:00	0	-3.7085	7.024	1.1785
54	31/01/2008	20:50:00	0	-3.6662	7.02	1.2208
55	31/01/2008	21:00:00	0	-3.6291	7.01	1.2579
56	31/01/2008	21:10:00	0	-3.5646	7.001	1.3224
57	31/01/2008	21:20:00	0	-3.5144	6.99	1.3726
58	31/01/2008	21:30:00	0	-3.5046	6.986	1.3824
59	31/01/2008	21:40:00	0	-3.5101	6.985	1.3769
60	31/01/2008	21:50:00	0	-3.5149	6.987	1.3721
61	31/01/2008	22:00:00	0	-3.5188	6.988	1.3682
62	31/01/2008	22:10:00	0	-3.528	6.987	1.359
63	31/01/2008	22:20:00	0	-3.5079	6.983	1.3791
64	31/01/2008	22:30:00	0	-3.4601	6.985	1.4269
65	31/01/2008	22:40:00	0	-3.462	6.987	1.425
66	31/01/2008	22:50:00	0	-3.4446	6.989	1.4424
67	31/01/2008	23:00:00	0	-3.4592	6.988	1.4278
68	31/01/2008	23:10:00	0	-3.5146	6.981	1.3724
69	31/01/2008	23:20:00	0	-3.5198	6.997	1.3672
70	31/01/2008	23:30:00	0	-3.5324	7.002	1.3546
71	31/01/2008	23:40:00	0	-3.5727	7.01	1.3143
72	31/01/2008	23:50:00	0	-3.6184	7.028	1.2686
73	01/02/2008	00:00:00	0	-3.6332	7.045	1.2538
74	01/02/2008	00:10:00	0	-3.6843	7.067	1.2027
75	01/02/2008	00:20:00	0	-3.7559	7.11	1.1311
76	01/02/2008	00:30:00	0	-3.8388	7.151	1.0482
77	01/02/2008	00:40:00	0	-3.8968	7.204	0.9902
78	01/02/2008	00:50:00	0	-3.945	7.253	0.942
79	01/02/2008	01:00:00	0	-4.0146	7.302	0.8724
80	01/02/2008	01:10:00	0	-4.0747	7.35	0.8123
81	01/02/2008	01:20:00	0	-4.1296	7.391	0.7574
82	01/02/2008	01:30:00	0	-4.1514	7.434	0.7356
83	01/02/2008	01:40:00	0	-4.1812	7.476	0.7058
84	01/02/2008	01:50:00	0	-4.2936	7.515	0.5934
85	01/02/2008	02:00:00	0	-4.3807	7.565	0.5063
86	01/02/2008	02:10:00	0	-4.4286	7.608	0.4572
87	01/02/2008	02:20:00	0	-4.4897	7.65	0.3973
88	01/02/2008	02:30:00	0	-4.5647	7.695	0.3223
89	01/02/2008	02:40:00	0	-4.6748	7.736	0.2122
90	01/02/2008	02:50:00	0	-4.6845	7.774	0.2025
91	01/02/2008	03:00:00	0	-4.7118	7.807	0.1752
92	01/02/2008	03:10:00	0	-4.8068	7.844	0.0802
93	01/02/2008	03:20:00	0	-4.9078	7.877	-0.0208
94	01/02/2008	03:30:00	0	-4.9523	7.913	-0.0653
95	01/02/2008	03:40:00	0	-4.8823	7.938	0.0047
96	01/02/2008	03:50:00	0	-4.9347	7.967	-0.0477
97	01/02/2008	04:00:00	0	-5.0081	7.988	-0.1211
98	01/02/2008	04:10:00	0	-5.013	8.023	-0.126
99	01/02/2008	04:20:00	0	-5.0155	8.057	-0.1285
100	01/02/2008	04:30:00	0	-5.001	8.083	-0.114
101	01/02/2008	04:40:00	0	-5.022	8.093	-0.135
102	01/02/2008	04:50:00	0	-5.0378	8.112	-0.1508
103	01/02/2008	05:00:00	0	-5.0138	8.131	-0.1268
104	01/02/2008	05:10:00	0	-4.9383	8.147	-0.0513
105	01/02/2008	05:20:00	0	-4.8696	8.172	0.0174

106	01/02/2008	05:30:00	0	-4.8596	8.178	0.0274
107	01/02/2008	05:40:00	0	-4.8823	8.185	0.0047
108	01/02/2008	05:50:00	0	-4.8425	8.207	0.0445
109	01/02/2008	06:00:00	0	-4.7738	8.239	0.1132
110	01/02/2008	06:10:00	0	-4.7752	8.25	0.1118
111	01/02/2008	06:20:00	0	-4.7087	8.268	0.1783
112	01/02/2008	06:30:00	0	-4.5795	8.238	0.3075
113	01/02/2008	06:40:00	0	-4.4406	8.151	0.4464
114	01/02/2008	06:50:00	0	-4.4314	7.875	0.4556
115	01/02/2008	07:00:00	0	-4.4943	7.91	0.3927
116	01/02/2008	07:10:00	0	-4.4903	8.126	0.3967
117	01/02/2008	07:20:00	0	-4.3884	8.12	0.4986
118	01/02/2008	07:30:00	0	-4.3124	7.824	0.5746
119	01/02/2008	07:40:00	0	-4.3419	7.671	0.5451
120	01/02/2008	07:50:00	0	-4.2662	7.629	0.6208
121	01/02/2008	08:00:00	0	-4.1392	7.432	0.7478
122	01/02/2008	08:10:00	0	-3.9923	7.259	0.8947
123	01/02/2008	08:20:00	0	-3.9114	7.145	0.9756
124	01/02/2008	08:30:00	0	-3.9378	7.124	0.9492
125	01/02/2008	08:40:00	0	-3.8757	7.131	1.0113
126	01/02/2008	08:50:00	0	-3.7803	7.113	1.1067
127	01/02/2008	09:00:00	0	-3.6932	7.092	1.1938
128	01/02/2008	09:10:00	0	-3.6267	7.078	1.2603
129	01/02/2008	09:20:00	0	-3.6159	7.071	1.2711
130	01/02/2008	09:30:00	0	-3.6301	7.073	1.2569
131	01/02/2008	09:40:00	0	-3.5776	7.069	1.3064
132	01/02/2008	09:50:00	0	-3.5088	7.063	1.3782
133	01/02/2008	10:00:00	0	-3.4396	7.06	1.4474
134	01/02/2008	10:10:00	0	-3.4329	7.053	1.4541
135	01/02/2008	10:20:00	0	-3.4778	7.061	1.4092
136	01/02/2008	10:30:00	0	-3.4592	7.067	1.4278
137	01/02/2008	10:40:00	0	-3.4243	7.065	1.4627
138	01/02/2008	10:50:00	0	-3.3702	7.064	1.5168
139	01/02/2008	11:00:00	0	-3.32	7.057	1.567
140	01/02/2008	11:10:00	0	-3.2748	7.057	1.6122
141	01/02/2008	11:20:00	0	-3.2834	7.055	1.6036
142	01/02/2008	11:30:00	0	-3.3108	7.06	1.5762
143	01/02/2008	11:40:00	0	-3.3954	7.069	1.4916
144	01/02/2008	11:50:00	0	-3.489	7.077	1.398
145	01/02/2008	12:00:00	0	-3.5748	7.087	1.3122
146	01/02/2008	12:10:00	0	-3.6555	7.11	1.2315
147	01/02/2008	12:20:00	0	-3.6488	7.127	1.2382
148	01/02/2008	12:30:00	0	-3.6635	7.167	1.2235
149	01/02/2008	12:40:00	0	-3.5915	7.176	1.2955
150	01/02/2008	12:50:00	0	-3.5745	7.131	1.3125
151	01/02/2008	13:00:00	0	-3.6304	7.133	1.2566
152	01/02/2008	13:10:00	0	-3.6521	7.152	1.2349
153	01/02/2008	13:20:00	0	-3.7603	7.19	1.1267
154	01/02/2008	13:30:00	0	-3.8479	7.244	1.0391
155	01/02/2008	13:40:00	0	-3.8967	7.305	0.9903
156	01/02/2008	13:50:00	0	-3.8553	7.34	1.0317
157	01/02/2008	14:00:00	0	-3.835	7.356	1.052
158	01/02/2008	14:10:00	0	-3.8988	7.373	0.9882
159	01/02/2008	14:20:00	0	-3.9839	7.426	0.9031
160	01/02/2008	14:30:00	0	-4.0772	7.471	0.8098
161	01/02/2008	14:40:00	0	-4.1521	7.515	0.7349
162	01/02/2008	14:50:00	0	-4.2087	7.563	0.6763
163	01/02/2008	15:00:00	0	-4.1859	7.593	0.7011
164	01/02/2008	15:10:00	0	-4.1898	7.623	0.6972
165	01/02/2008	15:20:00	0	-4.2388	7.652	0.6482
166	01/02/2008	15:30:00	0	-4.2891	7.682	0.5979
167	01/02/2008	15:40:00	0	-4.3239	7.717	0.5631
168	01/02/2008	15:50:00	0	-4.3922	7.76	0.4948
169	01/02/2008	16:00:00	0	-4.4682	7.791	0.4188
170	01/02/2008	16:10:00	0	-4.5266	7.817	0.3604
171	01/02/2008	16:20:00	0	-4.5225	7.86	0.3645
172	01/02/2008	16:30:00	0	-4.5417	7.884	0.3453
173	01/02/2008	16:40:00	0	-4.5481	7.912	0.3389
174	01/02/2008	16:50:00	0	-4.5757	7.936	0.3113
175	01/02/2008	17:00:00	0	-4.5855	7.965	0.3015
176	01/02/2008	17:10:00	0	-4.6466	7.979	0.2404
177	01/02/2008	17:20:00	0	-4.7204	7.998	0.1666
178	01/02/2008	17:30:00	0	-4.7225	8.02	0.1645
179	01/02/2008	17:40:00	0	-4.6728	8.045	0.2142
180	01/02/2008	17:50:00	0	-4.6674	8.056	0.2196
181	01/02/2008	18:00:00	0	-4.616	8.062	0.271
182	01/02/2008	18:10:00	0	-4.5887	8.083	0.2983
183	01/02/2008	18:20:00	0	-4.5202	8.091	0.3668
184	01/02/2008	18:30:00	0	-4.5192	8.087	0.3678
185	01/02/2008	18:40:00	0	-4.5756	8.115	0.3114
186	01/02/2008	18:50:00	0	-4.572	8.135	0.315
187	01/02/2008	19:00:00	0	-4.5698	8.149	0.3172
188	01/02/2008	19:10:00	0	-4.4961	8.165	0.3909
189	01/02/2008	19:20:00	0	-4.3772	8.145	0.5098
190	01/02/2008	19:30:00	0	-4.3133	8.075	0.5737
191	01/02/2008	19:40:00	0	-4.237	7.898	0.65
192	01/02/2008	19:50:00	0	-4.1943	7.747	0.6927
193	01/02/2008	20:00:00	0	-4.1397	7.578	0.7473
194	01/02/2008	20:10:00	0	-4.1136	7.488	0.7734
195	01/02/2008	20:20:00	0	-4.1001	7.465	0.7869
196	01/02/2008	20:30:00	0	-4.049	7.416	0.838
197	01/02/2008	20:40:00	0	-3.9821	7.36	0.9049
198	01/02/2008	20:50:00	0	-3.9395	7.302	0.9475
199	01/02/2008	21:00:00	0	-3.8888	7.226	0.9982
200	01/02/2008	21:10:00	0	-3.8338	7.193	1.0532
201	01/02/2008	21:20:00	0	-3.8278	7.174	1.0592
202	01/02/2008	21:30:00	0	-3.7882	7.16	1.0988
203	01/02/2008	21:40:00	0	-3.7689	7.148	1.1181
204	01/02/2008	21:50:00	0	-3.7267	7.133	1.1603
205	01/02/2008	22:00:00	0	-3.6836	7.121	1.2034
206	01/02/2008	22:10:00	0	-3.6532	7.108	1.2338
207	01/02/2008	22:20:00	0	-3.6004	7.094	1.2866
208	01/02/2008	22:30:00	0	-3.5824	7.086	1.3046
209	01/02/2008	22:40:00	0	-3.6243	7.09	1.2627
210	01/02/2008	22:50:00	0	-3.5822	7.084	1.3048
211	01/02/2008	23:00:00	0	-3.5948	7.09	1.2922
212	01/02/2008	23:10:00	0	-3.5805	7.082	1.3065
213	01/02/2008	23:20:00	0	-3.5686	7.081	1.3184
214	01/02/2008	23:30:00	0	-3.5394	7.08	1.3476
215	01/02/2008	23:40:00	0	-3.5587	7.082	1.3283
216	01/02/2008	23:50:00	0	-3.61	7.087	1.277

217	02/02/2008	00:00:00	0	-3.662	7.102	1.225
218	02/02/2008	00:10:00	0	-3.703	7.13	1.184
219	02/02/2008	00:20:00	0	-3.7328	7.165	1.1542
220	02/02/2008	00:30:00	0	-3.7722	7.208	1.1148
221	02/02/2008	00:40:00	0	-3.803	7.26	1.084
222	02/02/2008	00:50:00	0	-3.8318	7.31	1.0552
223	02/02/2008	01:00:00	0	-3.8471	7.352	1.0399
224	02/02/2008	01:10:00	0	-3.8667	7.391	1.0003
225	02/02/2008	01:20:00	0	-3.9342	7.445	0.9528
226	02/02/2008	01:30:00	0	-4.0105	7.508	0.8765
227	02/02/2008	01:40:00	0	-4.092	7.564	0.795
228	02/02/2008	01:50:00	0	-4.1679	7.625	0.7191
229	02/02/2008	02:00:00	0	-4.2262	7.674	0.6608
230	02/02/2008	02:10:00	0	-4.2644	7.721	0.6226
231	02/02/2008	02:20:00	0	-4.3424	7.767	0.5446
232	02/02/2008	02:30:00	0	-4.4462	7.812	0.4408
233	02/02/2008	02:40:00	0	-4.4613	7.858	0.4257
234	02/02/2008	02:50:00	0	-4.5299	7.893	0.3571
235	02/02/2008	03:00:00	0	-4.5973	7.935	0.2897
236	02/02/2008	03:10:00	0	-4.6676	7.97	0.2194
237	02/02/2008	03:20:00	0	-4.7351	8.001	0.1519
238	02/02/2008	03:30:00	0	-4.7951	8.039	0.0919
239	02/02/2008	03:40:00	0	-4.8376	8.075	0.0494
240	02/02/2008	03:50:00	0	-4.8719	8.109	0.0151
241	02/02/2008	04:00:00	0	-4.918	8.143	-0.031
242	02/02/2008	04:10:00	0	-4.9664	8.169	-0.0794
243	02/02/2008	04:20:00	0	-5.0234	8.191	-0.1364
244	02/02/2008	04:30:00	0	-5.066	8.218	-0.179
245	02/02/2008	04:40:00	0	-5.081	8.239	-0.194
246	02/02/2008	04:50:00	0	-5.0884	8.264	-0.2014
247	02/02/2008	05:00:00	0	-5.102	8.292	-0.215
248	02/02/2008	05:10:00	0	-5.1155	8.287	-0.2285
249	02/02/2008	05:20:00	0	-5.1255	8.283	-0.2385
250	02/02/2008	05:30:00	0	-5.1197	8.282	-0.2327
251	02/02/2008	05:40:00	0	-5.1335	8.292	-0.2465
252	02/02/2008	05:50:00	0	-5.1426	8.249	-0.2556
253	02/02/2008	06:00:00	0	-5.1513	8.226	-0.2643
254	02/02/2008	06:10:00	0	-5.1589	8.195	-0.2719
255	02/02/2008	06:20:00	0	-5.1598	8.178	-0.2728
256	02/02/2008	06:30:00	0	-5.1832	8.161	-0.2962
257	02/02/2008	06:40:00	0	-5.1777	8.129	-0.2907
258	02/02/2008	06:50:00	0	-5.1952	8.124	-0.3082
259	02/02/2008	07:00:00	0	-5.1701	8.123	-0.2831
260	02/02/2008	07:10:00	0	-5.1621	8.126	-0.2751
261	02/02/2008	07:20:00	0	-5.1456	8.18	-0.2586
262	02/02/2008	07:30:00	0	-5.1372	8.237	-0.2502
263	02/02/2008	07:40:00	0	-5.1093	8.314	-0.2223
264	02/02/2008	07:50:00	0	-5.0897	8.402	-0.2027
265	02/02/2008	08:00:00	0	-5.0511	8.429	-0.1641
266	02/02/2008	08:10:00	0	-5.0158	8.442	-0.1288
267	02/02/2008	08:20:00	0	-4.9846	8.455	-0.0976
268	02/02/2008	08:30:00	0	-4.8937	8.453	-0.0067
269	02/02/2008	08:40:00	0	-4.8474	8.443	0.0396
270	02/02/2008	08:50:00	0	-4.7832	8.442	0.1038
271	02/02/2008	09:00:00	0	-4.6819	8.383	0.2051
272	02/02/2008	09:10:00	0	-4.6114	8.296	0.2756
273	02/02/2008	09:20:00	0	-4.5079	8.041	0.3791
274	02/02/2008	09:30:00	0	-4.4114	7.694	0.4756
275	02/02/2008	09:40:00	0	-4.3593	7.495	0.5277
276	02/02/2008	09:50:00	0	-4.334	7.418	0.553
277	02/02/2008	10:00:00	0	-4.3046	7.382	0.5824
278	02/02/2008	10:10:00	0	-4.2397	7.35	0.6473
279	02/02/2008	10:20:00	0	-4.1427	7.288	0.7443
280	02/02/2008	10:30:00	0	-4.0506	7.232	0.8364
281	02/02/2008	10:40:00	0	-3.971	7.144	0.916
282	02/02/2008	10:50:00	0	-3.9082	7.1	0.9788
283	02/02/2008	11:00:00	0	-3.8646	7.079	1.0224
284	02/02/2008	11:10:00	0	-3.8149	7.068	1.0721
285	02/02/2008	11:20:00	0	-3.8353	7.062	1.0517
286	02/02/2008	11:30:00	0	-3.8267	7.061	1.0603
287	02/02/2008	11:40:00	0	-3.7935	7.068	1.0935
288	02/02/2008	11:50:00	0	-3.7754	7.068	1.1116
289	02/02/2008	12:00:00	0	-3.7239	7.07	1.1631
290	02/02/2008	12:10:00	0	-3.6805	7.058	1.2065
291	02/02/2008	12:20:00	0	-3.6764	7.038	1.2106
292	02/02/2008	12:30:00	0	-3.7166	7.041	1.1704
293	02/02/2008	12:40:00	0	-3.7731	7.06	1.1139
294	02/02/2008	12:50:00	0	-3.8029	7.079	1.0841
295	02/02/2008	13:00:00	0	-3.8318	7.092	1.0552
296	02/02/2008	13:10:00	0	-3.8615	7.118	1.0255
297	02/02/2008	13:20:00	0	-3.8641	7.135	1.0229
298	02/02/2008	13:30:00	0	-3.892	7.151	0.995
299	02/02/2008	13:40:00	0	-3.8996	7.178	0.9874
300	02/02/2008	13:50:00	0	-3.9242	7.202	0.9628
301	02/02/2008	14:00:00	0	-3.9826	7.248	0.9044
302	02/02/2008	14:10:00	0	-4.0698	7.318	0.8172
303	02/02/2008	14:20:00	0	-4.1599	7.413	0.7271
304	02/02/2008	14:30:00	0	-4.2243	7.49	0.6627
305	02/02/2008	14:40:00	0	-4.2583	7.55	0.6287
306	02/02/2008	14:50:00	0	-4.3398	7.602	0.5472
307	02/02/2008	15:00:00	0	-4.4217	7.673	0.4653
308	02/02/2008	15:10:00	0	-4.4875	7.735	0.3995
309	02/02/2008	15:20:00	0	-4.5629	7.796	0.3241
310	02/02/2008	15:30:00	0	-4.6232	7.851	0.2638
311	02/02/2008	15:40:00	0	-4.6957	7.904	0.1913
312	02/02/2008	15:50:00	0	-4.7791	7.949	0.1079
313	02/02/2008	16:00:00	0	-4.8613	7.997	0.0257
314	02/02/2008	16:10:00	0	-4.9347	8.044	-0.0477
315	02/02/2008	16:20:00	0	-4.9907	8.089	-0.1037
316	02/02/2008	16:30:00	0	-5.0329	8.126	-0.1459
317	02/02/2008	16:40:00	0	-5.0796	8.165	-0.1926
318	02/02/2008	16:50:00	0	-5.0907	8.189	-0.2037
319	02/02/2008	17:00:00	0	-5.0975	8.227	-0.2105
320	02/02/2008	17:10:00	0	-5.1118	8.258	-0.2248
321	02/02/2008	17:20:00	0	-5.1314	8.246	-0.2444
322	02/02/2008	17:30:00	0	-5.1688	8.196	-0.2818
323	02/02/2008	17:40:00	0	-5.225	8.139	-0.338
324	02/02/2008	17:50:00	0	-5.2892	8.112	-0.4022
325	02/02/2008	18:00:00	0	-5.3438	8.082	-0.4568
326	02/02/2008	18:10:00	0	-5.3746	8.064	-0.4876
327	02/02/2008	18:20:00	0	-5.3548	8.061	-0.4678

328	02/02/2008	18:30:00	0	-5.3376	8.064	-0.4506
329	02/02/2008	18:40:00	0	-5.342	8.062	-0.455
330	02/02/2008	18:50:00	0	-5.3205	8.064	-0.4335
331	02/02/2008	19:00:00	0	-5.3146	8.074	-0.4276
332	02/02/2008	19:10:00	0	-5.3608	8.056	-0.4738
333	02/02/2008	19:20:00	0	-5.4123	8.059	-0.5253
334	02/02/2008	19:30:00	0	-5.4328	8.052	-0.5458
335	02/02/2008	19:40:00	0	-5.4257	8.065	-0.5387
336	02/02/2008	19:50:00	0	-5.3829	8.091	-0.4959
337	02/02/2008	20:00:00	0	-5.3646	8.108	-0.4776
338	02/02/2008	20:10:00	0	-5.3403	8.12	-0.4533
339	02/02/2008	20:20:00	0	-5.2781	8.141	-0.3911
340	02/02/2008	20:30:00	0	-5.2157	8.165	-0.3287
341	02/02/2008	20:40:00	0	-5.2068	8.165	-0.3198
342	02/02/2008	20:50:00	0	-5.2215	8.167	-0.3345
343	02/02/2008	21:00:00	0	-5.191	8.171	-0.304
344	02/02/2008	21:10:00	0	-5.1354	8.224	-0.2484
345	02/02/2008	21:20:00	0	-5.0562	8.388	-0.1692
346	02/02/2008	21:30:00	0	-4.9695	8.426	-0.0825
347	02/02/2008	21:40:00	0	-4.9005	8.413	-0.0135
348	02/02/2008	21:50:00	0	-4.7933	8.347	0.0937
349	02/02/2008	22:00:00	0	-4.7033	8.224	0.1837
350	02/02/2008	22:10:00	0	-4.6479	7.874	0.2391
351	02/02/2008	22:20:00	0	-4.5932	7.618	0.2938
352	02/02/2008	22:30:00	0	-4.5662	7.503	0.3208
353	02/02/2008	22:40:00	0	-4.4974	7.435	0.3896
354	02/02/2008	22:50:00	0	-4.4249	7.335	0.4621
355	02/02/2008	23:00:00	0	-4.338	7.238	0.549
356	02/02/2008	23:10:00	0	-4.2536	7.166	0.6334
357	02/02/2008	23:20:00	0	-4.1947	7.115	0.6923
358	02/02/2008	23:30:00	0	-4.12	7.083	0.767
359	02/02/2008	23:40:00	0	-4.0593	7.049	0.8277
360	02/02/2008	23:50:00	0	-4.0375	7.028	0.8495
361	03/02/2008	00:00:00	0	-4.0058	7.022	0.8812
362	03/02/2008	00:10:00	0	-3.9392	7.01	0.9478
363	03/02/2008	00:20:00	0	-3.8925	7.005	0.9945
364	03/02/2008	00:30:00	0	-3.8857	6.986	1.0013
365	03/02/2008	00:40:00	0	-3.9007	6.985	0.9863
366	03/02/2008	00:50:00	0	-3.8827	6.993	1.0043
367	03/02/2008	01:00:00	0	-3.8656	7.004	1.0214
368	03/02/2008	01:10:00	0	-3.8655	7.006	1.0215
369	03/02/2008	01:20:00	0	-3.8275	7.001	1.0595
370	03/02/2008	01:30:00	0	-3.8201	6.988	1.0669
371	03/02/2008	01:40:00	0	-3.8385	6.979	1.0485
372	03/02/2008	01:50:00	0	-3.8858	6.99	1.0012
373	03/02/2008	02:00:00	0	-3.9612	7.015	0.9258
374	03/02/2008	02:10:00	0	-3.9855	7.054	0.9015
375	03/02/2008	02:20:00	0	-4.026	7.084	0.861
376	03/02/2008	02:30:00	0	-4.0987	7.135	0.7883
377	03/02/2008	02:40:00	0	-4.1221	7.205	0.7649
378	03/02/2008	02:50:00	0	-4.1671	7.253	0.7199
379	03/02/2008	03:00:00	0	-4.1863	7.316	0.7007
380	03/02/2008	03:10:00	0	-4.2533	7.379	0.6337
381	03/02/2008	03:20:00	0	-4.3405	7.456	0.5465
382	03/02/2008	03:30:00	0	-4.4053	7.53	0.4817
383	03/02/2008	03:40:00	0	-4.4861	7.6	0.4009
384	03/02/2008	03:50:00	0	-4.5697	7.669	0.3173
385	03/02/2008	04:00:00	0	-4.6284	7.733	0.2586
386	03/02/2008	04:10:00	0	-4.7045	7.793	0.1825
387	03/02/2008	04:20:00	0	-4.7829	7.858	0.1041
388	03/02/2008	04:30:00	0	-4.8596	7.911	0.0274
389	03/02/2008	04:40:00	0	-4.9518	7.968	-0.0648
390	03/02/2008	04:50:00	0	-5.0167	8.021	-0.1297
391	03/02/2008	05:00:00	0	-5.0681	8.067	-0.1811
392	03/02/2008	05:10:00	0	-5.0871	8.1	-0.2001
393	03/02/2008	05:20:00	0	-5.0972	8.141	-0.2102
394	03/02/2008	05:30:00	0	-5.1133	8.148	-0.2263
395	03/02/2008	05:40:00	0	-5.1409	8.151	-0.2539
396	03/02/2008	05:50:00	0	-5.1892	8.1	-0.3022
397	03/02/2008	06:00:00	0	-5.2365	8.063	-0.3495
398	03/02/2008	06:10:00	0	-5.2728	8.037	-0.3858
399	03/02/2008	06:20:00	0	-5.3011	8.024	-0.4141
400	03/02/2008	06:30:00	0	-5.3651	7.999	-0.4781
401	03/02/2008	06:40:00	0	-5.3959	7.973	-0.5089
402	03/02/2008	06:50:00	0	-5.4022	7.98	-0.5152
403	03/02/2008	07:00:00	0	-5.4333	7.932	-0.5463
404	03/02/2008	07:10:00	0	-5.4214	7.958	-0.5344
405	03/02/2008	07:20:00	0	-5.4272	7.983	-0.5402
406	03/02/2008	07:30:00	0	-5.4376	7.999	-0.5506
407	03/02/2008	07:40:00	0	-5.439	8.023	-0.552
408	03/02/2008	07:50:00	0	-5.4544	8.035	-0.5674
409	03/02/2008	08:00:00	0	-5.4236	8.037	-0.5366
410	03/02/2008	08:10:00	0	-5.3661	8.073	-0.4791
411	03/02/2008	08:20:00	0	-5.3415	8.087	-0.4545
412	03/02/2008	08:30:00	0	-5.2971	8.097	-0.4101
413	03/02/2008	08:40:00	0	-5.2438	8.111	-0.3568
414	03/02/2008	08:50:00	0	-5.1764	8.122	-0.2894
415	03/02/2008	09:00:00	0	-5.1262	8.163	-0.2392
416	03/02/2008	09:10:00	0	-5.1061	8.291	-0.2191
417	03/02/2008	09:20:00	0	-5.0402	8.353	-0.1532
418	03/02/2008	09:30:00	0	-4.9703	8.368	-0.0833
419	03/02/2008	09:40:00	0	-4.8901	8.357	-0.0031
420	03/02/2008	09:50:00	0	-4.8253	8.297	0.0617
421	03/02/2008	10:00:00	0	-4.7601	8.24	0.1269
422	03/02/2008	10:10:00	0	-4.6467	8.017	0.2403
423	03/02/2008	10:20:00	0	-4.5187	7.535	0.3683
424	03/02/2008	10:30:00	0	-4.4126	7.25	0.4744
425	03/02/2008	10:40:00	0	-4.3244	7.119	0.5626
426	03/02/2008	10:50:00	0	-4.2253	7.053	0.6617
427	03/02/2008	11:00:00	0	-4.138	6.999	0.749
428	03/02/2008	11:10:00	0	-4.0786	6.958	0.8084
429	03/02/2008	11:20:00	0	-4.0167	6.917	0.8703
430	03/02/2008	11:30:00	0	-3.9253	6.895	0.9617
431	03/02/2008	11:40:00	0	-3.8259	6.857	1.0611
432	03/02/2008	11:50:00	0	-3.7611	6.83	1.1259
433	03/02/2008	12:00:00	0	-3.6891	6.808	1.1979
434	03/02/2008	12:10:00	0	-3.6114	6.783	1.2756
435	03/02/2008	12:20:00	0	-3.5667	6.751	1.3203
436	03/02/2008	12:30:00	0	-3.5269	6.732	1.3601
437	03/02/2008	12:40:00	0	-3.507	6.714	1.38
438	03/02/2008	12:50:00	0	-3.4608	6.705	1.4262



439	03/02/2008	13:00:00	0	-3.4307	6.689	1.4563
440	03/02/2008	13:10:00	0	-3.4118	6.674	1.4752
441	03/02/2008	13:20:00	0	-3.4006	6.663	1.4864
442	03/02/2008	13:30:00	0	-3.4258	6.66	1.4612
443	03/02/2008	13:40:00	0	-3.4546	6.668	1.4324
444	03/02/2008	13:50:00	0	-3.4509	6.681	1.4361
445	03/02/2008	14:00:00	0	-3.4446	6.679	1.4424
446	03/02/2008	14:10:00	0	-3.4527	6.674	1.4343
447	03/02/2008	14:20:00	0	-3.4749	6.676	1.4121
448	03/02/2008	14:30:00	0	-3.5239	6.685	1.3631
449	03/02/2008	14:40:00	0	-3.5817	6.704	1.3053
450	03/02/2008	14:50:00	0	-3.6524	6.728	1.2346
451	03/02/2008	15:00:00	0	-3.7333	6.751	1.1537
452	03/02/2008	15:10:00	0	-3.8041	6.782	1.0829
453	03/02/2008	15:20:00	0	-3.8532	6.796	1.0338
454	03/02/2008	15:30:00	0	-3.8959	6.822	0.9911
455	03/02/2008	15:40:00	0	-3.9304	6.854	0.9566
456	03/02/2008	15:50:00	0	-3.9999	6.898	0.8871
457	03/02/2008	16:00:00	0	-4.064	6.952	0.823
458	03/02/2008	16:10:00	0	-4.1491	7.01	0.7379
459	03/02/2008	16:20:00	0	-4.2592	7.071	0.6278
460	03/02/2008	16:30:00	0	-4.3502	7.134	0.5368
461	03/02/2008	16:40:00	0	-4.433	7.207	0.454
462	03/02/2008	16:50:00	0	-4.5115	7.281	0.3755
463	03/02/2008	17:00:00	0	-4.6021	7.343	0.2849
464	03/02/2008	17:10:00	0	-4.6699	7.404	0.2171
465	03/02/2008	17:20:00	0	-4.7291	7.469	0.1579
466	03/02/2008	17:30:00	0	-4.8235	7.529	0.0635
467	03/02/2008	17:40:00	0	-4.9405	7.592	-0.0535
468	03/02/2008	17:50:00	0	-5.0148	7.654	-0.1278
469	03/02/2008	18:00:00	0	-5.0621	7.708	-0.1751
470	03/02/2008	18:10:00	0	-5.0806	7.763	-0.1936
471	03/02/2008	18:20:00	0	-5.0913	7.784	-0.2043
472	03/02/2008	18:30:00	0	-5.1095	7.789	-0.2225
473	03/02/2008	18:40:00	0	-5.132	7.79	-0.245
474	03/02/2008	18:50:00	0	-5.1591	7.773	-0.2721
475	03/02/2008	19:00:00	0	-5.1843	7.759	-0.2973
476	03/02/2008	19:10:00	0	-5.2304	7.763	-0.3434
477	03/02/2008	19:20:00	0	-5.2944	7.758	-0.4074
478	03/02/2008	19:30:00	0	-5.3209	7.728	-0.4339
479	03/02/2008	19:40:00	0	-5.3207	7.715	-0.4337
480	03/02/2008	19:50:00	0	-5.3079	7.719	-0.4209
481	03/02/2008	20:00:00	0	-5.308	7.729	-0.421
482	03/02/2008	20:10:00	0	-5.3265	7.745	-0.4395
483	03/02/2008	20:20:00	0	-5.3359	7.752	-0.4489
484	03/02/2008	20:30:00	0	-5.3053	7.756	-0.4183
485	03/02/2008	20:40:00	0	-5.2829	7.771	-0.3959
486	03/02/2008	20:50:00	0	-5.2761	7.778	-0.3891
487	03/02/2008	21:00:00	0	-5.2452	7.791	-0.3582
488	03/02/2008	21:10:00	0	-5.206	7.808	-0.319
489	03/02/2008	21:20:00	0	-5.1599	7.823	-0.2729
490	03/02/2008	21:30:00	0	-5.1203	7.86	-0.2333
491	03/02/2008	21:40:00	0	-5.0949	7.927	-0.2079
492	03/02/2008	21:50:00	0	-5.032	7.983	-0.145
493	03/02/2008	22:00:00	0	-4.954	8.044	-0.067
494	03/02/2008	22:10:00	0	-4.8923	8.056	-0.0053
495	03/02/2008	22:20:00	0	-4.8045	8.052	0.0025
496	03/02/2008	22:30:00	0	-4.7179	8.012	0.1691
497	03/02/2008	22:40:00	0	-4.6234	7.88	0.2636
498	03/02/2008	22:50:00	0	-4.5325	7.573	0.3545
499	03/02/2008	23:00:00	0	-4.4357	7.264	0.4513
500	03/02/2008	23:10:00	0	-4.3333	7.072	0.5537
501	03/02/2008	23:20:00	0	-4.2241	6.964	0.6629
502	03/02/2008	23:30:00	0	-4.1226	6.906	0.7644
503	03/02/2008	23:40:00	0	-4.038	6.836	0.849
504	03/02/2008	23:50:00	0	-3.9539	6.802	0.9331
505	04/02/2008	00:00:00	0	-3.8762	6.774	1.0108
506	04/02/2008	00:10:00	0	-3.8062	6.758	1.0808
507	04/02/2008	00:20:00	0	-3.7326	6.734	1.1544
508	04/02/2008	00:30:00	0	-3.6824	6.714	1.2046
509	04/02/2008	00:40:00	0	-3.6176	6.698	1.2694
510	04/02/2008	00:50:00	0	-3.5486	6.676	1.3384
511	04/02/2008	01:00:00	0	-3.4711	6.656	1.4159
512	04/02/2008	01:10:00	0	-3.4124	6.634	1.4746
513	04/02/2008	01:20:00	0	-3.3699	6.619	1.5171
514	04/02/2008	01:30:00	0	-3.3715	6.606	1.5155
515	04/02/2008	01:40:00	0	-3.3845	6.606	1.5025
516	04/02/2008	01:50:00	0	-3.4043	6.613	1.4827
517	04/02/2008	02:00:00	0	-3.4246	6.621	1.4624
518	04/02/2008	02:10:00	0	-3.4034	6.627	1.4836
519	04/02/2008	02:20:00	0	-3.3912	6.621	1.4958
520	04/02/2008	02:30:00	0	-3.3779	6.618	1.5091
521	04/02/2008	02:40:00	0	-3.378	6.614	1.509
522	04/02/2008	02:50:00	0	-3.411	6.615	1.476
523	04/02/2008	03:00:00	0	-3.4379	6.626	1.4491
524	04/02/2008	03:10:00	0	-3.5072	6.636	1.3798
525	04/02/2008	03:20:00	0	-3.5821	6.658	1.3049
526	04/02/2008	03:30:00	0	-3.6654	6.677	1.2216
527	04/02/2008	03:40:00	0	-3.7319	6.698	1.1551
528	04/02/2008	03:50:00	0	-3.775	6.718	1.112
529	04/02/2008	04:00:00	0	-3.7964	6.744	1.0906
530	04/02/2008	04:10:00	0	-3.8629	6.764	1.0241
531	04/02/2008	04:20:00	0	-3.9532	6.803	0.9338
532	04/02/2008	04:30:00	0	-4.0502	6.86	0.8368
533	04/02/2008	04:40:00	0	-4.1502	6.923	0.7368
534	04/02/2008	04:50:00	0	-4.2601	6.983	0.6269
535	04/02/2008	05:00:00	0	-4.3729	7.046	0.5141
536	04/02/2008	05:10:00	0	-4.4807	7.12	0.4063
537	04/02/2008	05:20:00	0	-4.5544	7.188	0.3326
538	04/02/2008	05:30:00	0	-4.6221	7.253	0.2649
539	04/02/2008	05:40:00	0	-4.6915	7.317	0.1955
540	04/02/2008	05:50:00	0	-4.7725	7.38	0.1145
541	04/02/2008	06:00:00	0	-4.8661	7.441	0.0209
542	04/02/2008	06:10:00	0	-4.9564	7.505	-0.0694
543	04/02/2008	06:20:00	0	-5.0056	7.563	-0.1186
544	04/02/2008	06:30:00	0	-5.0446	7.612	-0.1576
545	04/02/2008	06:40:00	0	-5.0714	7.65	-0.1844
546	04/02/2008	06:50:00	0	-5.0867	7.694	-0.1997
547	04/02/2008	07:00:00	0	-5.1086	7.708	-0.2216
548	04/02/2008	07:10:00	0	-5.1295	7.705	-0.2425
549	04/02/2008	07:20:00	0	-5.1709	7.689	-0.2839

550	04/02/2008	07:30:00	0	-5.2306	7.682	-0.3436
551	04/02/2008	07:40:00	0	-5.2647	7.682	-0.3777
552	04/02/2008	07:50:00	0	-5.3242	7.665	-0.4372
553	04/02/2008	08:00:00	0	-5.3443	7.648	-0.4573
554	04/02/2008	08:10:00	0	-5.3254	7.652	-0.4384
555	04/02/2008	08:20:00	0	-5.298	7.66	-0.411
556	04/02/2008	08:30:00	0	-5.2802	7.672	-0.3932
557	04/02/2008	08:40:00	0	-5.3092	7.681	-0.4222
558	04/02/2008	08:50:00	0	-5.2966	7.691	-0.4126
559	04/02/2008	09:00:00	0	-5.2542	7.697	-0.3672
560	04/02/2008	09:10:00	0	-5.2291	7.712	-0.3421
561	04/02/2008	09:20:00	0	-5.1851	7.726	-0.2981
562	04/02/2008	09:30:00	0	-5.1701	7.74	-0.2831
563	04/02/2008	09:40:00	0	-5.128	7.761	-0.241
564	04/02/2008	09:50:00	0	-5.0917	7.816	-0.2047
565	04/02/2008	10:00:00	0	-4.9997	7.864	-0.1127
566	04/02/2008	10:10:00	0	-4.892	7.883	-0.005
567	04/02/2008	10:20:00	0	-4.8103	7.889	0.0767
568	04/02/2008	10:30:00	0	-4.7236	7.878	0.1634
569	04/02/2008	10:40:00	0	-4.6126	7.741	0.2744
570	04/02/2008	10:50:00	0	-4.4961	7.399	0.3909
571	04/02/2008	11:00:00	0	-4.3975	7.114	0.4895
572	04/02/2008	11:10:00	0	-4.302	6.972	0.585
573	04/02/2008	11:20:00	0	-4.197	6.882	0.69
574	04/02/2008	11:30:00	0	-4.0986	6.842	0.7884
575	04/02/2008	11:40:00	0	-3.9842	6.82	0.9028
576	04/02/2008	11:50:00	0	-3.8642	6.801	1.0228
577	04/02/2008	12:00:00	0	-3.7578	6.79	1.1292
578	04/02/2008	12:10:00	0	-3.6561	6.781	1.2309
579	04/02/2008	12:20:00	0	-3.5656	6.763	1.3214
580	04/02/2008	12:30:00	0	-3.4819	6.706	1.4051
581	04/02/2008	12:40:00	0	-3.4018	6.65	1.4852
582	04/02/2008	12:50:00	0	-3.3406	6.614	1.5464
583	04/02/2008	13:00:00	0	-3.2639	6.592	1.6231
584	04/02/2008	13:10:00	0	-3.2146	6.569	1.6724
585	04/02/2008	13:20:00	0	-3.1602	6.556	1.7268
586	04/02/2008	13:30:00	0	-3.1102	6.54	1.7768
587	04/02/2008	13:40:00	0	-3.0856	6.523	1.8014
588	04/02/2008	13:50:00	0	-3.0849	6.515	1.8021
589	04/02/2008	14:00:00	0	-3.0677	6.518	1.8193
590	04/02/2008	14:10:00	0	-3.0536	6.513	1.8334
591	04/02/2008	14:20:00	0	-3.0492	6.506	1.8378
592	04/02/2008	14:30:00	0	-3.0829	6.509	1.8041
593	04/02/2008	14:40:00	0	-3.0976	6.521	1.7894
594	04/02/2008	14:50:00	0	-3.1431	6.528	1.7439
595	04/02/2008	15:00:00	0	-3.2034	6.541	1.6836
596	04/02/2008	15:10:00	0	-3.2755	6.552	1.6115
597	04/02/2008	15:20:00	0	-3.3393	6.565	1.5477
598	04/02/2008	15:30:00	0	-3.3974	6.578	1.4896
599	04/02/2008	15:40:00	0	-3.4556	6.594	1.4314
600	04/02/2008	15:50:00	0	-3.53	6.614	1.357
601	04/02/2008	16:00:00	0	-3.6207	6.615	1.2663
602	04/02/2008	16:10:00	0	-3.7108	6.624	1.1762
603	04/02/2008	16:20:00	0	-3.8213	6.658	1.0657
604	04/02/2008	16:30:00	0	-3.9281	6.699	0.9589
605	04/02/2008	16:40:00	0	-4.0336	6.745	0.8534
606	04/02/2008	16:50:00	0	-4.1384	6.804	0.7486
607	04/02/2008	17:00:00	0	-4.2383	6.858	0.6477
608	04/02/2008	17:10:00	0	-4.3464	6.919	0.5406
609	04/02/2008	17:20:00	0	-4.4591	6.985	0.4279
610	04/02/2008	17:30:00	0	-4.5726	7.048	0.3144
611	04/02/2008	17:40:00	0	-4.7015	7.115	0.1855
612	04/02/2008	17:50:00	0	-4.8256	7.181	0.0614
613	04/02/2008	18:00:00	0	-4.9473	7.251	-0.0603
614	04/02/2008	18:10:00	0	-5.0111	7.316	-0.1241
615	04/02/2008	18:20:00	0	-5.057	7.379	-0.17
616	04/02/2008	18:30:00	0	-5.0814	7.415	-0.1944
617	04/02/2008	18:40:00	0	-5.0976	7.449	-0.2106
618	04/02/2008	18:50:00	0	-5.1357	7.436	-0.2487
619	04/02/2008	19:00:00	0	-5.206	7.424	-0.319
620	04/02/2008	19:10:00	0	-5.2918	7.438	-0.4048
621	04/02/2008	19:20:00	0	-5.3599	7.442	-0.4729
622	04/02/2008	19:30:00	0	-5.4088	7.425	-0.5218
623	04/02/2008	19:40:00	0	-5.4702	7.431	-0.5832
624	04/02/2008	19:50:00	0	-5.5225	7.432	-0.6355
625	04/02/2008	20:00:00	0	-5.5597	7.433	-0.6727
626	04/02/2008	20:10:00	0	-5.5957	7.445	-0.7087
627	04/02/2008	20:20:00	0	-5.6239	7.456	-0.7369
628	04/02/2008	20:30:00	0	-5.6608	7.463	-0.7738
629	04/02/2008	20:40:00	0	-5.6769	7.472	-0.7899
630	04/02/2008	20:50:00	0	-5.6737	7.481	-0.7867
631	04/02/2008	21:00:00	0	-5.66	7.491	-0.7773
632	04/02/2008	21:10:00	0	-5.6531	7.502	-0.7661
633	04/02/2008	21:20:00	0	-5.6364	7.511	-0.7494
634	04/02/2008	21:30:00	0	-5.6133	7.523	-0.7263
635	04/02/2008	21:40:00	0	-5.5922	7.531	-0.7052
636	04/02/2008	21:50:00	0	-5.5595	7.541	-0.6725
637	04/02/2008	22:00:00	0	-5.5275	7.55	-0.6405
638	04/02/2008	22:10:00	0	-5.478	7.56	-0.591
639	04/02/2008	22:20:00	0	-5.3969	7.576	-0.5099
640	04/02/2008	22:30:00	0	-5.296	7.59	-0.409
641	04/02/2008	22:40:00	0	-5.204	7.603	-0.317
642	04/02/2008	22:50:00	0	-5.1372	7.619	-0.2502
643	04/02/2008	23:00:00	0	-5.0961	7.649	-0.2091
644	04/02/2008	23:10:00	0	-5.0168	7.702	-0.1298
645	04/02/2008	23:20:00	0	-4.8991	7.709	-0.0121
646	04/02/2008	23:30:00	0	-4.7791	7.708	0.1079
647	04/02/2008	23:40:00	0	-4.6579	7.493	0.2291
648	04/02/2008	23:50:00	0	-4.5206	7.207	0.3664
649	05/02/2008	00:00:00	0	-4.3722	6.962	0.5148
650	05/02/2008	00:10:00	0	-4.2294	6.818	0.6576
651	05/02/2008	00:20:00	0	-4.0955	6.757	0.7915
652	05/02/2008	00:30:00	0	-3.9848	6.705	0.9022
653	05/02/2008	00:40:00	0	-3.8857	6.658	1.0013
654	05/02/2008	00:50:00	0	-3.7803	6.619	1.1067
655	05/02/2008	01:00:00	0	-3.678	6.581	1.209
656	05/02/2008	01:10:00	0	-3.5678	6.551	1.3192
657	05/02/2008	01:20:00	0	-3.4563	6.521	1.4307
658	05/02/2008	01:30:00	0	-3.3481	6.492	1.5389
659	05/02/2008	01:40:00	0	-3.2614	6.464	1.6256
660	05/02/2008	01:50:00	0	-3.2026	6.442	1.6844

661	05/02/2008	02:00:00	0	-3.1493	6.422	1.7377
662	05/02/2008	02:10:00	0	-3.0947	6.402	1.7923
663	05/02/2008	02:20:00	0	-3.0426	6.381	1.8444
664	05/02/2008	02:30:00	0	-2.9891	6.368	1.8979
665	05/02/2008	02:40:00	0	-2.9439	6.349	1.9431
666	05/02/2008	02:50:00	0	-2.9313	6.339	1.9557
667	05/02/2008	03:00:00	0	-2.9529	6.333	1.9341
668	05/02/2008	03:10:00	0	-2.9791	6.341	1.9079
669	05/02/2008	03:20:00	0	-3.0122	6.346	1.8748
670	05/02/2008	03:30:00	0	-3.0506	6.354	1.8364
671	05/02/2008	03:40:00	0	-3.0955	6.362	1.7915
672	05/02/2008	03:50:00	0	-3.1193	6.369	1.7677
673	05/02/2008	04:00:00	0	-3.1551	6.377	1.7319
674	05/02/2008	04:10:00	0	-3.2065	6.384	1.6805
675	05/02/2008	04:20:00	0	-3.2668	6.397	1.6202
676	05/02/2008	04:30:00	0	-3.3509	6.41	1.5361
677	05/02/2008	04:40:00	0	-3.4556	6.425	1.4314
678	05/02/2008	04:50:00	0	-3.5683	6.423	1.3187
679	05/02/2008	05:00:00	0	-3.6823	6.438	1.2047
680	05/02/2008	05:10:00	0	-3.794	6.473	1.093
681	05/02/2008	05:20:00	0	-3.9064	6.514	0.9806
682	05/02/2008	05:30:00	0	-4.0016	6.56	0.8854
683	05/02/2008	05:40:00	0	-4.1058	6.611	0.7812
684	05/02/2008	05:50:00	0	-4.225	6.671	0.662
685	05/02/2008	06:00:00	0	-4.3452	6.737	0.5418
686	05/02/2008	06:10:00	0	-4.4823	6.799	0.4047
687	05/02/2008	06:20:00	0	-4.6231	6.864	0.2639
688	05/02/2008	06:30:00	0	-4.7521	6.931	0.1349
689	05/02/2008	06:40:00	0	-4.8483	7	0.0387
690	05/02/2008	06:50:00	0	-4.9513	7.071	-0.0643
691	05/02/2008	07:00:00	0	-5.0079	7.138	-0.1209
692	05/02/2008	07:10:00	0	-5.0412	7.187	-0.1542
693	05/02/2008	07:20:00	0	-5.0676	7.238	-0.1806
694	05/02/2008	07:30:00	0	-5.0834	7.282	-0.1964
695	05/02/2008	07:40:00	0	-5.1096	7.303	-0.2226
696	05/02/2008	07:50:00	0	-5.1563	7.288	-0.2693
697	05/02/2008	08:00:00	0	-5.2088	7.286	-0.3218
698	05/02/2008	08:10:00	0	-5.2517	7.302	-0.3647
699	05/02/2008	08:20:00	0	-5.2896	7.318	-0.4026
700	05/02/2008	08:30:00	0	-5.323	7.312	-0.436
701	05/02/2008	08:40:00	0	-5.3462	7.312	-0.4592
702	05/02/2008	08:50:00	0	-5.3657	7.313	-0.4787
703	05/02/2008	09:00:00	0	-5.3642	7.327	-0.4772
704	05/02/2008	09:10:00	0	-5.3745	7.336	-0.4875
705	05/02/2008	09:20:00	0	-5.3688	7.346	-0.4818
706	05/02/2008	09:30:00	0	-5.3541	7.352	-0.4671
707	05/02/2008	09:40:00	0	-5.329	7.363	-0.442
708	05/02/2008	09:50:00	0	-5.2842	7.375	-0.3972
709	05/02/2008	10:00:00	0	-5.2217	7.384	-0.3347
710	05/02/2008	10:10:00	0	-5.1615	7.396	-0.2745
711	05/02/2008	10:20:00	0	-5.1162	7.41	-0.2292
712	05/02/2008	10:30:00	0	-5.0875	7.448	-0.2005
713	05/02/2008	10:40:00	0	-5.0184	7.528	-0.1314
714	05/02/2008	10:50:00	0	-4.9096	7.563	-0.0226
715	05/02/2008	11:00:00	0	-4.7816	7.559	0.1054
716	05/02/2008	11:10:00	0	-4.6612	7.541	0.2258
717	05/02/2008	11:20:00	0	-4.5315	7.413	0.3555
718	05/02/2008	11:30:00	0	-4.3953	7.136	0.4917
719	05/02/2008	11:40:00	0	-4.2496	6.832	0.6374
720	05/02/2008	11:50:00	0	-4.1157	6.667	0.7713
721	05/02/2008	12:00:00	0	-3.9892	6.607	0.8978
722	05/02/2008	12:10:00	0	-3.8621	6.577	1.0249
723	05/02/2008	12:20:00	0	-3.7479	6.555	1.1391
724	05/02/2008	12:30:00	0	-3.6453	6.536	1.2417
725	05/02/2008	12:40:00	0	-3.5406	6.521	1.3464
726	05/02/2008	12:50:00	0	-3.4304	6.502	1.4566
727	05/02/2008	13:00:00	0	-3.3129	6.487	1.5741
728	05/02/2008	13:10:00	0	-3.2164	6.461	1.6706
729	05/02/2008	13:20:00	0	-3.1208	6.442	1.7662
730	05/02/2008	13:30:00	0	-3.0473	6.421	1.8397
731	05/02/2008	13:40:00	0	-2.9706	6.404	1.9164
732	05/02/2008	13:50:00	0	-2.8985	6.387	1.9885
733	05/02/2008	14:00:00	0	-2.8384	6.37	2.0486
734	05/02/2008	14:10:00	0	-2.8001	6.355	2.0869
735	05/02/2008	14:20:00	0	-2.7581	6.348	2.1288
736	05/02/2008	14:30:00	0	-2.72	6.338	2.167
737	05/02/2008	14:40:00	0	-2.6889	6.329	2.1981
738	05/02/2008	14:50:00	0	-2.6758	6.326	2.2112
739	05/02/2008	15:00:00	0	-2.6752	6.324	2.2118
740	05/02/2008	15:10:00	0	-2.6716	6.321	2.2154
741	05/02/2008	15:20:00	0	-2.6945	6.323	2.1925
742	05/02/2008	15:30:00	0	-2.7478	6.325	2.1392
743	05/02/2008	15:40:00	0	-2.8047	6.328	2.0823
744	05/02/2008	15:50:00	0	-2.8707	6.333	2.0163
745	05/02/2008	16:00:00	0	-2.943	6.341	1.944
746	05/02/2008	16:10:00	0	-3.0251	6.351	1.8619
747	05/02/2008	16:20:00	0	-3.1128	6.363	1.7742
748	05/02/2008	16:30:00	0	-3.2094	6.376	1.6776
749	05/02/2008	16:40:00	0	-3.3135	6.374	1.5735
750	05/02/2008	16:50:00	0	-3.4071	6.373	1.4799
751	05/02/2008	17:00:00	0	-3.5014	6.39	1.3856
752	05/02/2008	17:10:00	0	-3.5904	6.416	1.2966
753	05/02/2008	17:20:00	0	-3.7033	6.447	1.1837
754	05/02/2008	17:30:00	0	-3.8263	6.486	1.0607
755	05/02/2008	17:40:00	0	-3.9603	6.533	0.9267
756	05/02/2008	17:50:00	0	-4.1023	6.581	0.7847
757	05/02/2008	18:00:00	0	-4.2473	6.64	0.6397
758	05/02/2008	18:10:00	0	-4.3883	6.696	0.4987
759	05/02/2008	18:20:00	0	-4.5238	6.757	0.3632
760	05/02/2008	18:30:00	0	-4.6408	6.821	0.2462
761	05/02/2008	18:40:00	0	-4.7762	6.876	0.1108
762	05/02/2008	18:50:00	0	-4.9262	6.945	-0.0392
763	05/02/2008	19:00:00	0	-5.0048	7.005	-0.1178
764	05/02/2008	19:10:00	0	-5.0565	7.049	-0.1695
765	05/02/2008	19:20:00	0	-5.0782	7.076	-0.1912
766	05/02/2008	19:30:00	0	-5.1024	7.1	-0.2154
767	05/02/2008	19:40:00	0	-5.1486	7.088	-0.2616
768	05/02/2008	19:50:00	0	-5.2381	7.098	-0.3511
769	05/02/2008	20:00:00	0	-5.3376	7.124	-0.4506
770	05/02/2008	20:10:00	0	-5.4364	7.121	-0.5494
771	05/02/2008	20:20:00	0	-5.5106	7.116	-0.6236

772	05/02/2008	20:30:00	0	-5.5836	7.124	-0.6966
773	05/02/2008	20:40:00	0	-5.6506	7.144	-0.7636
774	05/02/2008	20:50:00	0	-5.6881	7.155	-0.8011
775	05/02/2008	21:00:00	0	-5.7063	7.165	-0.8193
776	05/02/2008	21:10:00	0	-5.7183	7.174	-0.8313
777	05/02/2008	21:20:00	0	-5.7333	7.181	-0.8463
778	05/02/2008	21:30:00	0	-5.74	7.188	-0.853
779	05/02/2008	21:40:00	0	-5.7373	7.198	-0.8503
780	05/02/2008	21:50:00	0	-5.729	7.211	-0.842
781	05/02/2008	22:00:00	0	-5.7205	7.224	-0.8335
782	05/02/2008	22:10:00	0	-5.7014	7.238	-0.8144
783	05/02/2008	22:20:00	0	-5.6205	7.249	-0.7335
784	05/02/2008	22:30:00	0	-5.5277	7.262	-0.6407
785	05/02/2008	22:40:00	0	-5.4598	7.275	-0.5728
786	05/02/2008	22:50:00	0	-5.4002	7.284	-0.5132
787	05/02/2008	23:00:00	0	-5.3354	7.293	-0.4484
788	05/02/2008	23:10:00	0	-5.2493	7.298	-0.3623
789	05/02/2008	23:20:00	0	-5.1604	7.303	-0.2734
790	05/02/2008	23:30:00	0	-5.099	7.315	-0.212
791	05/02/2008	23:40:00	0	-4.9938	7.354	-0.1068
792	05/02/2008	23:50:00	0	-4.8494	7.364	0.0376
793	06/02/2008	00:00:00	0	-4.6911	7.374	0.1959
794	06/02/2008	00:10:00	0	-4.5318	7.067	0.3552
795	06/02/2008	00:20:00	0	-4.3639	6.747	0.5031
796	06/02/2008	00:30:00	0	-4.2555	6.646	0.6315
797	06/02/2008	00:40:00	0	-4.121	6.582	0.766
798	06/02/2008	00:50:00	0	-3.9727	6.542	0.9143
799	06/02/2008	01:00:00	0	-3.8341	6.521	1.0529
800	06/02/2008	01:10:00	0	-3.7027	6.508	1.1843
801	06/02/2008	01:20:00	0	-3.5693	6.486	1.3177
802	06/02/2008	01:30:00	0	-3.4359	6.469	1.4511
803	06/02/2008	01:40:00	0	-3.3073	6.448	1.5797
804	06/02/2008	01:50:00	0	-3.1883	6.424	1.6987
805	06/02/2008	02:00:00	0	-3.066	6.403	1.821
806	06/02/2008	02:10:00	0	-2.9649	6.38	1.9221
807	06/02/2008	02:20:00	0	-2.8683	6.362	2.0187
808	06/02/2008	02:30:00	0	-2.7729	6.344	2.1141
809	06/02/2008	02:40:00	0	-2.6778	6.329	2.2092
810	06/02/2008	02:50:00	0	-2.6064	6.315	2.2806
811	06/02/2008	03:00:00	0	-2.5899	6.302	2.2971
812	06/02/2008	03:10:00	0	-2.5741	6.298	2.3129
813	06/02/2008	03:20:00	0	-2.6063	6.294	2.2807
814	06/02/2008	03:30:00	0	-2.5968	6.298	2.2902
815	06/02/2008	03:40:00	0	-2.6278	6.3	2.2592
816	06/02/2008	03:50:00	0	-2.6567	6.304	2.2303
817	06/02/2008	04:00:00	0	-2.6751	6.309	2.2119
818	06/02/2008	04:10:00	0	-2.7194	6.312	2.1676
819	06/02/2008	04:20:00	0	-2.7511	6.315	2.1359
820	06/02/2008	04:30:00	0	-2.8215	6.321	2.0655
821	06/02/2008	04:40:00	0	-2.92	6.326	1.967
822	06/02/2008	04:50:00	0	-3.0232	6.333	1.8638
823	06/02/2008	05:00:00	0	-3.1361	6.343	1.7509
824	06/02/2008	05:10:00	0	-3.2387	6.342	1.6483
825	06/02/2008	05:20:00	0	-3.3367	6.339	1.5503
826	06/02/2008	05:30:00	0	-3.4506	6.348	1.4364
827	06/02/2008	05:40:00	0	-3.5665	6.368	1.3205
828	06/02/2008	05:50:00	0	-3.8863	6.392	1.2007
829	06/02/2008	06:00:00	0	-3.8172	6.424	1.0698
830	06/02/2008	06:10:00	0	-3.9518	6.462	0.9352
831	06/02/2008	06:20:00	0	-4.0928	6.51	0.7942
832	06/02/2008	06:30:00	0	-4.242	6.557	0.645
833	06/02/2008	06:40:00	0	-4.3788	6.607	0.5082
834	06/02/2008	06:50:00	0	-4.5104	6.664	0.3766
835	06/02/2008	07:00:00	0	-4.6189	6.718	0.2681
836	06/02/2008	07:10:00	0	-4.735	6.766	0.152
837	06/02/2008	07:20:00	0	-4.8735	6.826	0.0135
838	06/02/2008	07:30:00	0	-4.9884	6.882	-0.1014
839	06/02/2008	07:40:00	0	-5.031	6.938	-0.144
840	06/02/2008	07:50:00	0	-5.066	6.969	-0.179
841	06/02/2008	08:00:00	0	-5.0811	6.992	-0.1941
842	06/02/2008	08:10:00	0	-5.1006	7.022	-0.2136
843	06/02/2008	08:20:00	0	-5.1518	6.996	-0.2648
844	06/02/2008	08:30:00	0	-5.2207	7.001	-0.3337
845	06/02/2008	08:40:00	0	-5.2637	7.024	-0.3767
846	06/02/2008	08:50:00	0	-5.3008	7.042	-0.4138
847	06/02/2008	09:00:00	0	-5.3708	7.047	-0.4838
848	06/02/2008	09:10:00	0	-5.4454	7.044	-0.5584
849	06/02/2008	09:20:00	0	-5.4739	7.031	-0.5869
850	06/02/2008	09:30:00	0	-5.4732	7.037	-0.5862
851	06/02/2008	09:40:00	0	-5.4542	7.055	-0.5672
852	06/02/2008	09:50:00	0	-5.4584	7.073	-0.5714
853	06/02/2008	10:00:00	0	-5.4577	7.099	-0.5707
854	06/02/2008	10:10:00	0	-5.4299	7.107	-0.5429
855	06/02/2008	10:20:00	0	-5.38	7.113	-0.493
856	06/02/2008	10:30:00	0	-5.3375	7.121	-0.4505
857	06/02/2008	10:40:00	0	-5.2961	7.136	-0.4091
858	06/02/2008	10:50:00	0	-5.2393	7.144	-0.3523
859	06/02/2008	11:00:00	0	-5.155	7.143	-0.268
860	06/02/2008	11:10:00	0	-5.0965	7.146	-0.2095
861	06/02/2008	11:20:00	0	-5.016	7.203	-0.129
862	06/02/2008	11:30:00	0	-4.8864	7.238	0.0006
863	06/02/2008	11:40:00	0	-4.7532	7.231	0.1338
864	06/02/2008	11:50:00	0	-4.6159	7.241	0.2711
865	06/02/2008	12:00:00	0	-4.4782	7.139	0.4088
866	06/02/2008	12:10:00	0	-4.3369	6.795	0.5501
867	06/02/2008	12:20:00	0	-4.1735	6.64	0.7135
868	06/02/2008	12:30:00	0	-4.0228	6.572	0.8642
869	06/02/2008	12:40:00	0	-3.8758	6.545	1.0112
870	06/02/2008	12:50:00	0	-3.7233	6.517	1.1637
871	06/02/2008	13:00:00	0	-3.5792	6.493	1.3078
872	06/02/2008	13:10:00	0	-3.4546	6.478	1.4324
873	06/02/2008	13:20:00	0	-3.3251	6.461	1.5619
874	06/02/2008	13:30:00	0	-3.1987	6.438	1.6883
875	06/02/2008	13:40:00	0	-3.0708	6.411	1.8162
876	06/02/2008	13:50:00	0	-2.9569	6.383	1.9301
877	06/02/2008	14:00:00	0	-2.8453	6.358	2.0417
878	06/02/2008	14:10:00	0	-2.7348	6.34	2.1522
879	06/02/2008	14:20:00	0	-2.6391	6.32	2.2479
880	06/02/2008	14:30:00	0	-2.5407	6.302	2.3463
881	06/02/2008	14:40:00	0	-2.4775	6.285	2.4095
882	06/02/2008	14:50:00	0	-2.4407	6.275	2.4463

883	06/02/2008	15:00:00	0	-2.4371	6.265	2.4499
884	06/02/2008	15:10:00	0	-2.4102	6.261	2.4768
885	06/02/2008	15:20:00	0	-2.3784	6.259	2.5086
886	06/02/2008	15:30:00	0	-2.3562	6.255	2.5308
887	06/02/2008	15:40:00	0	-2.3696	6.248	2.5174
888	06/02/2008	15:50:00	0	-2.4117	6.248	2.4753
889	06/02/2008	16:00:00	0	-2.4428	6.25	2.4442
890	06/02/2008	16:10:00	0	-2.5045	6.252	2.3825
891	06/02/2008	16:20:00	0	-2.5764	6.26	2.3106
892	06/02/2008	16:30:00	0	-2.6571	6.263	2.2299
893	06/02/2008	16:40:00	0	-2.7499	6.266	2.1371
894	06/02/2008	16:50:00	0	-2.8514	6.276	2.0356
895	06/02/2008	17:00:00	0	-2.95	6.288	1.937
896	06/02/2008	17:10:00	0	-3.0538	6.29	1.8332
897	06/02/2008	17:20:00	0	-3.1508	6.284	1.7362
898	06/02/2008	17:30:00	0	-3.2633	6.289	1.6237
899	06/02/2008	17:40:00	0	-3.4002	6.308	1.4868
900	06/02/2008	17:50:00	0	-3.542	6.335	1.345
901	06/02/2008	18:00:00	0	-3.688	6.363	1.199
902	06/02/2008	18:10:00	0	-3.8421	6.402	1.0449
903	06/02/2008	18:20:00	0	-4.0051	6.442	0.8819
904	06/02/2008	18:30:00	0	-4.1799	6.493	0.7071
905	06/02/2008	18:40:00	0	-4.3429	6.545	0.5441
906	06/02/2008	18:50:00	0	-4.4928	6.6	0.3942
907	06/02/2008	19:00:00	0	-4.6428	6.655	0.2442
908	06/02/2008	19:10:00	0	-4.8012	6.707	0.0858
909	06/02/2008	19:20:00	0	-4.9649	6.761	-0.0779
910	06/02/2008	19:30:00	0	-5.0187	6.814	-0.1317
911	06/02/2008	19:40:00	0	-5.0655	6.844	-0.1785
912	06/02/2008	19:50:00	0	-5.098	6.868	-0.211
913	06/02/2008	20:00:00	0	-5.1828	6.843	-0.2958
914	06/02/2008	20:10:00	0	-5.3045	6.87	-0.4175
915	06/02/2008	20:20:00	0	-5.4134	6.898	-0.5264
916	06/02/2008	20:30:00	0	-5.5094	6.892	-0.6224
917	06/02/2008	20:40:00	0	-5.5931	6.893	-0.7061
918	06/02/2008	20:50:00	0	-5.6741	6.908	-0.7871
919	06/02/2008	21:00:00	0	-5.7345	6.923	-0.8475
920	06/02/2008	21:10:00	0	-5.787	6.929	-0.9
921	06/02/2008	21:20:00	0	-5.8281	6.933	-0.9411
922	06/02/2008	21:30:00	0	-5.8676	6.946	-0.9806
923	06/02/2008	21:40:00	0	-5.9044	6.956	-1.0174
924	06/02/2008	21:50:00	0	-5.933	6.967	-1.046
925	06/02/2008	22:00:00	0	-5.9497	6.978	-1.0627
926	06/02/2008	22:10:00	0	-5.9579	6.993	-1.0709
927	06/02/2008	22:20:00	0	-5.9636	7.001	-1.0766
928	06/02/2008	22:30:00	0	-5.968	7.015	-1.081
929	06/02/2008	22:40:00	0	-5.9628	7.024	-1.0758
930	06/02/2008	22:50:00	0	-5.9441	7.034	-1.0571
931	06/02/2008	23:00:00	0	-5.914	7.045	-1.027
932	06/02/2008	23:10:00	0	-5.8903	7.056	-1.0033
933	06/02/2008	23:20:00	0	-5.8662	7.065	-0.9792
934	06/02/2008	23:30:00	0	-5.8269	7.072	-0.9399
935	06/02/2008	23:40:00	0	-5.7351	7.073	-0.8481
936	06/02/2008	23:50:00	0	-5.6161	7.071	-0.7291
937	07/02/2008	00:00:00	0	-5.5125	7.079	-0.6255
938	07/02/2008	00:10:00	0	-5.4058	7.086	-0.5188
939	07/02/2008	00:20:00	0	-5.2909	7.092	-0.4039
940	07/02/2008	00:30:00	0	-5.1674	7.102	-0.2804
941	07/02/2008	00:40:00	0	-5.0878	7.104	-0.2008
942	07/02/2008	00:50:00	0	-4.9691	7.131	-0.0821
943	07/02/2008	01:00:00	0	-4.8145	7.14	0.0725
944	07/02/2008	01:10:00	0	-4.6412	7.105	0.2458
945	07/02/2008	01:20:00	0	-4.4674	6.761	0.4196
946	07/02/2008	01:30:00	0	-4.2858	6.588	0.6012
947	07/02/2008	01:40:00	0	-4.1131	6.492	0.7739
948	07/02/2008	01:50:00	0	-3.9464	6.437	0.9406
949	07/02/2008	02:00:00	0	-3.7977	6.397	1.0893
950	07/02/2008	02:10:00	0	-3.659	6.369	1.228
951	07/02/2008	02:20:00	0	-3.5199	6.349	1.3671
952	07/02/2008	02:30:00	0	-3.3834	6.333	1.5036
953	07/02/2008	02:40:00	0	-3.2526	6.315	1.6344
954	07/02/2008	02:50:00	0	-3.1394	6.302	1.7476
955	07/02/2008	03:00:00	0	-3.0416	6.288	1.8454
956	07/02/2008	03:10:00	0	-2.9495	6.275	1.9375
957	07/02/2008	03:20:00	0	-2.882	6.265	2.005
958	07/02/2008	03:30:00	0	-2.8262	6.259	2.0608
959	07/02/2008	03:40:00	0	-2.8053	6.253	2.0817
960	07/02/2008	03:50:00	0	-2.7844	6.25	2.1026
961	07/02/2008	04:00:00	0	-2.7569	6.248	2.1301
962	07/02/2008	04:10:00	0	-2.7629	6.25	2.1241
963	07/02/2008	04:20:00	0	-2.8303	6.25	2.0567
964	07/02/2008	04:30:00	0	-2.9195	6.256	1.9675
965	07/02/2008	04:40:00	0	-3.0071	6.262	1.8799
966	07/02/2008	04:50:00	0	-3.061	6.27	1.826
967	07/02/2008	05:00:00	0	-3.1371	6.277	1.7499
968	07/02/2008	05:10:00	0	-3.2381	6.289	1.6489
969	07/02/2008	05:20:00	0	-3.3455	6.294	1.5415
970	07/02/2008	05:30:00	0	-3.4387	6.292	1.4483
971	07/02/2008	05:40:00	0	-3.545	6.295	1.342
972	07/02/2008	05:50:00	0	-3.6768	6.316	1.2102
973	07/02/2008	06:00:00	0	-3.8296	6.348	1.0574
974	07/02/2008	06:10:00	0	-3.994	6.387	0.893
975	07/02/2008	06:20:00	0	-4.1607	6.435	0.7263
976	07/02/2008	06:30:00	0	-4.3198	6.486	0.5672
977	07/02/2008	06:40:00	0	-4.4866	6.542	0.4004
978	07/02/2008	06:50:00	0	-4.6439	6.606	0.2431
979	07/02/2008	07:00:00	0	-4.8051	6.67	0.0819
980	07/02/2008	07:10:00	0	-4.9575	6.732	-0.0705
981	07/02/2008	07:20:00	0	-5.0158	6.782	-0.1288
982	07/02/2008	07:30:00	0	-5.074	6.823	-0.187
983	07/02/2008	07:40:00	0	-5.1256	6.833	-0.2386
984	07/02/2008	07:50:00	0	-5.2339	6.829	-0.3469
985	07/02/2008	08:00:00	0	-5.3496	6.858	-0.4626
986	07/02/2008	08:10:00	0	-5.4638	6.877	-0.5768
987	07/02/2008	08:20:00	0	-5.5624	6.875	-0.6754
988	07/02/2008	08:30:00	0	-5.6583	6.881	-0.7713
989	07/02/2008	08:40:00	0	-5.7305	6.896	-0.8435
990	07/02/2008	08:50:00	0	-5.7855	6.906	-0.8985
991	07/02/2008	09:00:00	0	-5.8387	6.906	-0.9517
992	07/02/2008	09:10:00	0	-5.8873	6.918	-1.0003
993	07/02/2008	09:20:00	0	-5.926	6.927	-1.039

994	07/02/2008	09:30:00	0	-5.9556	6.933	-1.0686
995	07/02/2008	09:40:00	0	-5.9772	6.946	-1.0902
996	07/02/2008	09:50:00	0	-5.9976	6.965	-1.1106
997	07/02/2008	10:00:00	0	-6.0107	6.984	-1.1237
998	07/02/2008	10:10:00	0	-6.0265	7.005	-1.1395
999	07/02/2008	10:20:00	0	-6.0422	7.008	-1.1552
1000	07/02/2008	10:30:00	0	-6.0545	7.014	-1.1675
1001	07/02/2008	10:40:00	0	-6.0634	7.022	-1.1764
1002	07/02/2008	10:50:00	0	-6.0645	7.033	-1.1775
1003	07/02/2008	11:00:00	0	-6.0636	7.046	-1.1766
1004	07/02/2008	11:10:00	0	-6.0523	7.053	-1.1653
1005	07/02/2008	11:20:00	0	-6.0332	7.062	-1.1462
1006	07/02/2008	11:30:00	0	-6.0009	7.066	-1.1139
1007	07/02/2008	11:40:00	0	-5.9388	7.065	-1.0518
1008	07/02/2008	11:50:00	0	-5.8693	7.075	-0.9823
1009	07/02/2008	12:00:00	0	-5.7913	7.086	-0.9043
1010	07/02/2008	12:10:00	0	-5.7048	7.093	-0.8178
1011	07/02/2008	12:20:00	0	-5.5617	7.097	-0.6747
1012	07/02/2008	12:30:00	0	-5.4263	7.102	-0.5393
1013	07/02/2008	12:40:00	0	-5.2829	7.107	-0.3959
1014	07/02/2008	12:50:00	0	-5.1622	7.119	-0.2752
1015	07/02/2008	13:00:00	0	-5.0199	7.129	-0.1329
1016	07/02/2008	13:10:00	0	-4.8383	7.159	0.0487
1017	07/02/2008	13:20:00	0	-4.6391	6.764	0.2479
1018	07/02/2008	13:30:00	0	-4.4472	6.538	0.4398
1019	07/02/2008	13:40:00	0	-4.2653	6.478	0.6217
1020	07/02/2008	13:50:00	0	-4.0774	6.435	0.8096
1021	07/02/2008	14:00:00	0	-3.8879	6.404	0.9991
1022	07/02/2008	14:10:00	0	-3.7054	6.386	1.1816
1023	07/02/2008	14:20:00	0	-3.5451	6.368	1.3419
1024	07/02/2008	14:30:00	0	-3.3869	6.353	1.5001
1025	07/02/2008	14:40:00	0	-3.247	6.339	1.64
1026	07/02/2008	14:50:00	0	-3.1289	6.329	1.7581
1027	07/02/2008	15:00:00	0	-3.0215	6.32	1.8655
1028	07/02/2008	15:10:00	0	-2.9208	6.312	1.9662
1029	07/02/2008	15:20:00	0	-2.8325	6.307	2.0545
1030	07/02/2008	15:30:00	0	-2.7465	6.3	2.1405
1031	07/02/2008	15:40:00	0	-2.6677	6.296	2.2193
1032	07/02/2008	15:50:00	0	-2.6201	6.29	2.2669
1033	07/02/2008	16:00:00	0	-2.5987	6.287	2.2883
1034	07/02/2008	16:10:00	0	-2.587	6.287	2.3
1035	07/02/2008	16:20:00	0	-2.5683	6.286	2.3187
1036	07/02/2008	16:30:00	0	-2.5567	6.29	2.3303
1037	07/02/2008	16:40:00	0	-2.58	6.291	2.307
1038	07/02/2008	16:50:00	0	-2.6029	6.291	2.2841
1039	07/02/2008	17:00:00	0	-2.621	6.296	2.266
1040	07/02/2008	17:10:00	0	-2.6536	6.299	2.2334
1041	07/02/2008	17:20:00	0	-2.731	6.301	2.156
1042	07/02/2008	17:30:00	0	-2.8261	6.303	2.0609
1043	07/02/2008	17:40:00	0	-2.9413	6.306	1.9457
1044	07/02/2008	17:50:00	0	-3.0508	6.312	1.8362
1045	07/02/2008	18:00:00	0	-3.1689	6.317	1.7181
1046	07/02/2008	18:10:00	0	-3.2772	6.314	1.6098
1047	07/02/2008	18:20:00	0	-3.4087	6.312	1.4783
1048	07/02/2008	18:30:00	0	-3.5433	6.325	1.3437
1049	07/02/2008	18:40:00	0	-3.6831	6.345	1.2039
1050	07/02/2008	18:50:00	0	-3.8355	6.368	1.0515
1051	07/02/2008	19:00:00	0	-4.0066	6.4	0.8804
1052	07/02/2008	19:10:00	0	-4.1747	6.437	0.7123
1053	07/02/2008	19:20:00	0	-4.3489	6.476	0.5381
1054	07/02/2008	19:30:00	0	-4.518	6.52	0.369
1055	07/02/2008	19:40:00	0	-4.684	6.568	0.203
1056	07/02/2008	19:50:00	0	-4.8422	6.617	0.0448
1057	07/02/2008	20:00:00	0	-4.9839	6.67	-0.0969
1058	07/02/2008	20:10:00	0	-5.0384	6.712	-0.1514
1059	07/02/2008	20:20:00	0	-5.0799	6.735	-0.1929
1060	07/02/2008	20:30:00	0	-5.1212	6.735	-0.2342
1061	07/02/2008	20:40:00	0	-5.1901	6.72	-0.3031
1062	07/02/2008	20:50:00	0	-5.3024	6.748	-0.4154
1063	07/02/2008	21:00:00	0	-5.4184	6.779	-0.5314
1064	07/02/2008	21:10:00	0	-5.5141	6.784	-0.6271
1065	07/02/2008	21:20:00	0	-5.5966	6.792	-0.7096
1066	07/02/2008	21:30:00	0	-5.6696	6.801	-0.7826
1067	07/02/2008	21:40:00	0	-5.7281	6.814	-0.8411
1068	07/02/2008	21:50:00	0	-5.7883	6.825	-0.9013
1069	07/02/2008	22:00:00	0	-5.8313	6.831	-0.9443
1070	07/02/2008	22:10:00	0	-5.8651	6.836	-0.9781
1071	07/02/2008	22:20:00	0	-5.8885	6.849	-1.0015
1072	07/02/2008	22:30:00	0	-5.9097	6.861	-1.0227
1073	07/02/2008	22:40:00	0	-5.9221	6.87	-1.0351
1074	07/02/2008	22:50:00	0	-5.9275	6.884	-1.0405
1075	07/02/2008	23:00:00	0	-5.9231	6.896	-1.0361
1076	07/02/2008	23:10:00	0	-5.9118	6.906	-1.0248
1077	07/02/2008	23:20:00	0	-5.8905	6.916	-1.0035
1078	07/02/2008	23:30:00	0	-5.8612	6.926	-0.9742
1079	07/02/2008	23:40:00	0	-5.8062	6.928	-0.9192
1080	07/02/2008	23:50:00	0	-5.7275	6.921	-0.8405
1081	08/02/2008	00:00:00	0	-5.619	6.92	-0.732
1082	08/02/2008	00:10:00	0	-5.5118	6.928	-0.6248
1083	08/02/2008	00:20:00	0	-5.4056	6.936	-0.5186
1084	08/02/2008	00:30:00	0	-5.2925	6.941	-0.4055
1085	08/02/2008	00:40:00	0	-5.1968	6.947	-0.3098
1086	08/02/2008	00:50:00	0	-5.1151	6.955	-0.2281
1087	08/02/2008	01:00:00	0	-4.9777	6.987	-0.0907
1088	08/02/2008	01:10:00	0	-4.7966	6.996	0.0904
1089	08/02/2008	01:20:00	0	-4.6207	6.938	0.2663
1090	08/02/2008	01:30:00	0	-4.4491	6.61	0.4379
1091	08/02/2008	01:40:00	0	-4.2553	6.527	0.6317
1092	08/02/2008	01:50:00	0	-4.0646	6.468	0.8224
1093	08/02/2008	02:00:00	0	-3.8937	6.44	0.9933
1094	08/02/2008	02:10:00	0	-3.7484	6.428	1.1386
1095	08/02/2008	02:20:00	0	-3.6072	6.419	1.2798
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1097	08/02/2008	02:40:00	0	-3.3557	6.407	1.5313
1098	08/02/2008	02:50:00	0	-3.2434	6.404	1.6436
1099	08/02/2008	03:00:00	0	-3.1212	6.399	1.7658
1100	08/02/2008	03:10:00	0	-3.0237	6.395	1.8653
1101	08/02/2008	03:20:00	0	-2.9384	6.392	1.9496
1102	08/02/2008	03:30:00	0	-2.8475	6.389	2.0395
1103	08/02/2008	03:40:00	0	-2.7625	6.387	2.1245
1104	08/02/2008	03:50:00	0	-2.7064	6.384	2.1806

1105	08/02/2008	04:00:00	0	-2.6604	6.381	2.2266
1106	08/02/2008	04:10:00	0	-2.6211	6.38	2.2659
1107	08/02/2008	04:20:00	0	-2.6094	6.378	2.2776
1108	08/02/2008	04:30:00	0	-2.5988	6.379	2.2882
1109	08/02/2008	04:40:00	0	-2.6059	6.38	2.2811
1110	08/02/2008	04:50:00	0	-2.619	6.381	2.268
1111	08/02/2008	05:00:00	0	-2.6665	6.383	2.2205
1112	08/02/2008	05:10:00	0	-2.7119	6.383	2.1751
1113	08/02/2008	05:20:00	0	-2.7806	6.386	2.1064
1114	08/02/2008	05:30:00	0	-2.8824	6.39	2.0046
1115	08/02/2008	05:40:00	0	-2.9899	6.395	1.8971
1116	08/02/2008	05:50:00	0	-3.0959	6.401	1.7911
1117	08/02/2008	06:00:00	0	-3.2199	6.403	1.6671
1118	08/02/2008	06:10:00	0	-3.3565	6.399	1.5305
1119	08/02/2008	06:20:00	0	-3.4872	6.406	1.3998
1120	08/02/2008	06:30:00	0	-3.6204	6.421	1.2666
1121	08/02/2008	06:40:00	0	-3.77	6.44	1.117
1122	08/02/2008	06:50:00	0	-3.9298	6.464	0.9572
1123	08/02/2008	07:00:00	0	-4.0919	6.497	0.7951
1124	08/02/2008	07:10:00	0	-4.2684	6.536	0.6186
1125	08/02/2008	07:20:00	0	-4.4488	6.578	0.4382
1126	08/02/2008	07:30:00	0	-4.6298	6.622	0.2572
1127	08/02/2008	07:40:00	0	-4.8087	6.667	0.0783
1128	08/02/2008	07:50:00	0	-4.9774	6.716	-0.0904
1129	08/02/2008	08:00:00	0	-5.0341	6.753	-0.1471
1130	08/02/2008	08:10:00	0	-5.0803	6.773	-0.1933
1131	08/02/2008	08:20:00	0	-5.139	6.768	-0.252
1132	08/02/2008	08:30:00	0	-5.2565	6.773	-0.3695
1133	08/02/2008	08:40:00	0	-5.3728	6.8	-0.4858
1134	08/02/2008	08:50:00	0	-5.5009	6.813	-0.6139
1135	08/02/2008	09:00:00	0	-5.6005	6.812	-0.7135
1136	08/02/2008	09:10:00	0	-5.6765	6.822	-0.7895
1137	08/02/2008	09:20:00	0	-5.7387	6.834	-0.8517
1138	08/02/2008	09:30:00	0	-5.7991	6.843	-0.9121
1139	08/02/2008	09:40:00	0	-5.8524	6.847	-0.9654
1140	08/02/2008	09:50:00	0	-5.903	6.854	-1.016
1141	08/02/2008	10:00:00	0	-5.9345	6.866	-1.0475
1142	08/02/2008	10:10:00	0	-5.9583	6.876	-1.0713
1143	08/02/2008	10:20:00	0	-5.9825	6.889	-1.0955
1144	08/02/2008	10:30:00	0	-6.0023	6.899	-1.1153

Serial Number  
1028469  
Project ID  
RCM4738  
Location  
BH02  
Channel 1  
Identification  
LEVEL  
Unit  
m  
Offset 4.383  
0.00 m  
Altitude  
0 m  
Channel 2  
Identification  
TEMPERATURE  
Unit  
Deg C

	Date	Time	100 ms	LEVEL	TEMPERATURE	
16	31/01/2008	14:30:00	0	-3.8063	11.832	0.5767
17	31/01/2008	14:40:00	0	-3.8137	11.825	0.5693
18	31/01/2008	14:50:00	0	-3.8217	11.818	0.5613
19	31/01/2008	15:00:00	0	-3.8309	11.812	0.5521
20	31/01/2008	15:10:00	0	-3.8386	11.809	0.5444
21	31/01/2008	15:20:00	0	-3.8483	11.81	0.5347
22	31/01/2008	15:30:00	0	-3.855	11.81	0.528
23	31/01/2008	15:40:00	0	-3.8629	11.804	0.5201
24	31/01/2008	15:50:00	0	-3.8663	11.808	0.5167
25	31/01/2008	16:00:00	0	-3.8703	11.81	0.5127
26	31/01/2008	16:10:00	0	-3.8745	11.809	0.5085
27	31/01/2008	16:20:00	0	-3.8747	11.819	0.5083
28	31/01/2008	16:30:00	0	-3.8731	11.821	0.5099
29	31/01/2008	16:40:00	0	-3.8735	11.822	0.5095
30	31/01/2008	16:50:00	0	-3.8712	11.827	0.5118
31	31/01/2008	17:00:00	0	-3.8633	11.83	0.5197
32	31/01/2008	17:10:00	0	-3.86	11.832	0.523
33	31/01/2008	17:20:00	0	-3.8539	11.835	0.5291
34	31/01/2008	17:30:00	0	-3.8469	11.837	0.5361
35	31/01/2008	17:40:00	0	-3.8374	11.837	0.5456
36	31/01/2008	17:50:00	0	-3.826	11.839	0.557
37	31/01/2008	18:00:00	0	-3.8153	11.839	0.5677
38	31/01/2008	18:10:00	0	-3.8024	11.84	0.5806
39	31/01/2008	18:20:00	0	-3.7878	11.841	0.5952
40	31/01/2008	18:30:00	0	-3.7788	11.841	0.6042
41	31/01/2008	18:40:00	0	-3.7634	11.842	0.6196
42	31/01/2008	18:50:00	0	-3.7495	11.842	0.6335
43	31/01/2008	19:00:00	0	-3.7353	11.842	0.6477
44	31/01/2008	19:10:00	0	-3.7178	11.844	0.6652
45	31/01/2008	19:20:00	0	-3.7006	11.844	0.6824
46	31/01/2008	19:30:00	0	-3.685	11.846	0.698
47	31/01/2008	19:40:00	0	-3.6629	11.847	0.7201
48	31/01/2008	19:50:00	0	-3.6394	11.848	0.7436
49	31/01/2008	20:00:00	0	-3.6217	11.847	0.7613
50	31/01/2008	20:10:00	0	-3.6023	11.846	0.7807
51	31/01/2008	20:20:00	0	-3.5874	11.846	0.7956
52	31/01/2008	20:30:00	0	-3.5714	11.845	0.8116
53	31/01/2008	20:40:00	0	-3.5539	11.845	0.8291
54	31/01/2008	20:50:00	0	-3.5358	11.846	0.8472
55	31/01/2008	21:00:00	0	-3.5177	11.845	0.8653
56	31/01/2008	21:10:00	0	-3.4998	11.845	0.8832
57	31/01/2008	21:20:00	0	-3.4786	11.845	0.9044
58	31/01/2008	21:30:00	0	-3.4599	11.845	0.9231
59	31/01/2008	21:40:00	0	-3.44	11.844	0.943
60	31/01/2008	21:50:00	0	-3.4276	11.844	0.9554
61	31/01/2008	22:00:00	0	-3.4127	11.844	0.9703
62	31/01/2008	22:10:00	0	-3.3995	11.843	0.9835
63	31/01/2008	22:20:00	0	-3.3873	11.842	0.9957
64	31/01/2008	22:30:00	0	-3.3711	11.842	1.0119
65	31/01/2008	22:40:00	0	-3.3594	11.842	1.0236
66	31/01/2008	22:50:00	0	-3.347	11.843	1.036
67	31/01/2008	23:00:00	0	-3.3329	11.844	1.0501
68	31/01/2008	23:10:00	0	-3.3288	11.843	1.0542
69	31/01/2008	23:20:00	0	-3.3214	11.844	1.0616
70	31/01/2008	23:30:00	0	-3.3151	11.844	1.0679
71	31/01/2008	23:40:00	0	-3.3136	11.844	1.0694
72	31/01/2008	23:50:00	0	-3.3146	11.844	1.0684
73	01/02/2008	00:00:00	0	-3.3146	11.845	1.0684
74	01/02/2008	00:10:00	0	-3.319	11.843	1.064
75	01/02/2008	00:20:00	0	-3.3273	11.845	1.0557
76	01/02/2008	00:30:00	0	-3.342	11.845	1.041
77	01/02/2008	00:40:00	0	-3.3555	11.845	1.0275
78	01/02/2008	00:50:00	0	-3.3706	11.847	1.0124
79	01/02/2008	01:00:00	0	-3.3871	11.848	0.9959
80	01/02/2008	01:10:00	0	-3.4037	11.85	0.9793
81	01/02/2008	01:20:00	0	-3.4206	11.851	0.9624
82	01/02/2008	01:30:00	0	-3.4326	11.851	0.9504
83	01/02/2008	01:40:00	0	-3.4479	11.851	0.9351
84	01/02/2008	01:50:00	0	-3.4677	11.851	0.9153
85	01/02/2008	02:00:00	0	-3.4881	11.852	0.8949
86	01/02/2008	02:10:00	0	-3.5073	11.852	0.8757
87	01/02/2008	02:20:00	0	-3.5252	11.851	0.8578
88	01/02/2008	02:30:00	0	-3.5441	11.852	0.8389
89	01/02/2008	02:40:00	0	-3.5651	11.853	0.8179
90	01/02/2008	02:50:00	0	-3.5839	11.853	0.7991
91	01/02/2008	03:00:00	0	-3.6004	11.854	0.7826
92	01/02/2008	03:10:00	0	-3.6174	11.854	0.7656
93	01/02/2008	03:20:00	0	-3.6382	11.853	0.7448
94	01/02/2008	03:30:00	0	-3.6553	11.853	0.7277
95	01/02/2008	03:40:00	0	-3.6699	11.853	0.7131
96	01/02/2008	03:50:00	0	-3.6834	11.852	0.6996
97	01/02/2008	04:00:00	0	-3.7016	11.852	0.6814
98	01/02/2008	04:10:00	0	-3.7143	11.852	0.6687
99	01/02/2008	04:20:00	0	-3.7273	11.851	0.6557
100	01/02/2008	04:30:00	0	-3.7413	11.852	0.6417
101	01/02/2008	04:40:00	0	-3.75	11.851	0.633
102	01/02/2008	04:50:00	0	-3.7607	11.851	0.6223
103	01/02/2008	05:00:00	0	-3.7697	11.85	0.6133
104	01/02/2008	05:10:00	0	-3.7797	11.851	0.6033
105	01/02/2008	05:20:00	0	-3.7872	11.85	0.5958
106	01/02/2008	05:30:00	0	-3.7916	11.848	0.5914



107	01/02/2008	05:40:00	0	-3.7956	11.846	0.5874
108	01/02/2008	05:50:00	0	-3.8012	11.843	0.5818
109	01/02/2008	06:00:00	0	-3.8059	11.842	0.5771
110	01/02/2008	06:10:00	0	-3.8097	11.844	0.5733
111	01/02/2008	06:20:00	0	-3.8087	11.845	0.5743
112	01/02/2008	06:30:00	0	-3.8055	11.846	0.5775
113	01/02/2008	06:40:00	0	-3.7977	11.849	0.5853
114	01/02/2008	06:50:00	0	-3.794	11.851	0.589
115	01/02/2008	07:00:00	0	-3.7936	11.851	0.5894
116	01/02/2008	07:10:00	0	-3.7924	11.851	0.5906
117	01/02/2008	07:20:00	0	-3.7822	11.852	0.6008
118	01/02/2008	07:30:00	0	-3.7745	11.852	0.6085
119	01/02/2008	07:40:00	0	-3.7708	11.852	0.6122
120	01/02/2008	07:50:00	0	-3.7574	11.852	0.6256
121	01/02/2008	08:00:00	0	-3.7434	11.852	0.6396
122	01/02/2008	08:10:00	0	-3.7217	11.853	0.6613
123	01/02/2008	08:20:00	0	-3.7087	11.853	0.6743
124	01/02/2008	08:30:00	0	-3.6898	11.855	0.6932
125	01/02/2008	08:40:00	0	-3.6687	11.857	0.7143
126	01/02/2008	08:50:00	0	-3.6471	11.858	0.7359
127	01/02/2008	09:00:00	0	-3.6197	11.858	0.7633
128	01/02/2008	09:10:00	0	-3.5935	11.857	0.7895
129	01/02/2008	09:20:00	0	-3.573	11.856	0.81
130	01/02/2008	09:30:00	0	-3.554	11.855	0.829
131	01/02/2008	09:40:00	0	-3.53	11.854	0.853
132	01/02/2008	09:50:00	0	-3.5069	11.854	0.8761
133	01/02/2008	10:00:00	0	-3.4789	11.853	0.9041
134	01/02/2008	10:10:00	0	-3.4584	11.854	0.9246
135	01/02/2008	10:20:00	0	-3.4404	11.853	0.9426
136	01/02/2008	10:30:00	0	-3.4223	11.85	0.9607
137	01/02/2008	10:40:00	0	-3.4013	11.849	0.9817
138	01/02/2008	10:50:00	0	-3.3815	11.849	1.0015
139	01/02/2008	11:00:00	0	-3.3603	11.849	1.0227
140	01/02/2008	11:10:00	0	-3.3355	11.848	1.0475
141	01/02/2008	11:20:00	0	-3.3175	11.847	1.0655
142	01/02/2008	11:30:00	0	-3.3048	11.848	1.0782
143	01/02/2008	11:40:00	0	-3.3013	11.847	1.0817
144	01/02/2008	11:50:00	0	-3.2987	11.849	1.0843
145	01/02/2008	12:00:00	0	-3.2997	11.849	1.0833
146	01/02/2008	12:10:00	0	-3.3056	11.848	1.0774
147	01/02/2008	12:20:00	0	-3.3077	11.849	1.0753
148	01/02/2008	12:30:00	0	-3.3139	11.85	1.0691
149	01/02/2008	12:40:00	0	-3.3089	11.85	1.0741
150	01/02/2008	12:50:00	0	-3.3051	11.85	1.0779
151	01/02/2008	13:00:00	0	-3.3081	11.851	1.0749
152	01/02/2008	13:10:00	0	-3.3098	11.85	1.0732
153	01/02/2008	13:20:00	0	-3.3209	11.851	1.0621
154	01/02/2008	13:30:00	0	-3.3339	11.851	1.0491
155	01/02/2008	13:40:00	0	-3.3489	11.852	1.0341
156	01/02/2008	13:50:00	0	-3.3546	11.852	1.0284
157	01/02/2008	14:00:00	0	-3.3631	11.853	1.0199
158	01/02/2008	14:10:00	0	-3.3724	11.853	1.0106
159	01/02/2008	14:20:00	0	-3.3883	11.854	0.9947
160	01/02/2008	14:30:00	0	-3.4047	11.856	0.9783
161	01/02/2008	14:40:00	0	-3.4225	11.857	0.9605
162	01/02/2008	14:50:00	0	-3.4412	11.857	0.9418
163	01/02/2008	15:00:00	0	-3.4558	11.857	0.9272
164	01/02/2008	15:10:00	0	-3.47	11.857	0.913
165	01/02/2008	15:20:00	0	-3.4826	11.857	0.9004
166	01/02/2008	15:30:00	0	-3.4979	11.856	0.8851
167	01/02/2008	15:40:00	0	-3.5136	11.857	0.8694
168	01/02/2008	15:50:00	0	-3.5311	11.857	0.8519
169	01/02/2008	16:00:00	0	-3.5503	11.857	0.8327
170	01/02/2008	16:10:00	0	-3.5655	11.857	0.8175
171	01/02/2008	16:20:00	0	-3.5822	11.857	0.8008
172	01/02/2008	16:30:00	0	-3.5959	11.858	0.7871
173	01/02/2008	16:40:00	0	-3.6094	11.859	0.7736
174	01/02/2008	16:50:00	0	-3.6247	11.859	0.7583
175	01/02/2008	17:00:00	0	-3.6358	11.859	0.7472
176	01/02/2008	17:10:00	0	-3.6498	11.858	0.7332
177	01/02/2008	17:20:00	0	-3.6643	11.86	0.7187
178	01/02/2008	17:30:00	0	-3.676	11.86	0.707
179	01/02/2008	17:40:00	0	-3.6858	11.859	0.6972
180	01/02/2008	17:50:00	0	-3.694	11.86	0.689
181	01/02/2008	18:00:00	0	-3.7015	11.859	0.6815
182	01/02/2008	18:10:00	0	-3.707	11.859	0.676
183	01/02/2008	18:20:00	0	-3.7084	11.86	0.6746
184	01/02/2008	18:30:00	0	-3.7148	11.86	0.6682
185	01/02/2008	18:40:00	0	-3.7214	11.86	0.6616
186	01/02/2008	18:50:00	0	-3.7254	11.86	0.6576
187	01/02/2008	19:00:00	0	-3.7338	11.86	0.6492
188	01/02/2008	19:10:00	0	-3.7353	11.861	0.6477
189	01/02/2008	19:20:00	0	-3.7307	11.861	0.6523
190	01/02/2008	19:30:00	0	-3.7241	11.862	0.6589
191	01/02/2008	19:40:00	0	-3.716	11.863	0.667
192	01/02/2008	19:50:00	0	-3.7094	11.862	0.6736
193	01/02/2008	20:00:00	0	-3.6991	11.865	0.6839
194	01/02/2008	20:10:00	0	-3.6892	11.865	0.6938
195	01/02/2008	20:20:00	0	-3.6789	11.865	0.7041
196	01/02/2008	20:30:00	0	-3.6671	11.866	0.7159
197	01/02/2008	20:40:00	0	-3.6537	11.866	0.7293
198	01/02/2008	20:50:00	0	-3.641	11.867	0.742
199	01/02/2008	21:00:00	0	-3.6235	11.866	0.7595
200	01/02/2008	21:10:00	0	-3.6068	11.865	0.7762
201	01/02/2008	21:20:00	0	-3.5919	11.865	0.7911
202	01/02/2008	21:30:00	0	-3.5748	11.865	0.8082
203	01/02/2008	21:40:00	0	-3.5583	11.864	0.8247
204	01/02/2008	21:50:00	0	-3.5433	11.863	0.8397
205	01/02/2008	22:00:00	0	-3.5238	11.862	0.8592
206	01/02/2008	22:10:00	0	-3.5064	11.86	0.8766
207	01/02/2008	22:20:00	0	-3.4867	11.86	0.8963
208	01/02/2008	22:30:00	0	-3.4697	11.859	0.9133
209	01/02/2008	22:40:00	0	-3.4576	11.858	0.9254
210	01/02/2008	22:50:00	0	-3.4437	11.858	0.9393
211	01/02/2008	23:00:00	0	-3.4317	11.857	0.9513
212	01/02/2008	23:10:00	0	-3.4203	11.856	0.9627
213	01/02/2008	23:20:00	0	-3.4074	11.856	0.9756
214	01/02/2008	23:30:00	0	-3.3929	11.855	0.9901
215	01/02/2008	23:40:00	0	-3.3846	11.855	0.9984
216	01/02/2008	23:50:00	0	-3.3787	11.855	1.0043
217	02/02/2008	00:00:00	0	-3.3787	11.855	1.0043
218	02/02/2008	00:10:00	0	-3.3787	11.855	1.0043

219	02/02/2008	00:20:00	0	-3.3805	11.855	1.0025
220	02/02/2008	00:30:00	0	-3.3857	11.855	0.9973
221	02/02/2008	00:40:00	0	-3.3901	11.855	0.9929
222	02/02/2008	00:50:00	0	-3.3965	11.855	0.9865
223	02/02/2008	01:00:00	0	-3.4009	11.855	0.9821
224	02/02/2008	01:10:00	0	-3.409	11.855	0.974
225	02/02/2008	01:20:00	0	-3.419	11.856	0.964
226	02/02/2008	01:30:00	0	-3.4315	11.856	0.9515
227	02/02/2008	01:40:00	0	-3.4496	11.857	0.9334
228	02/02/2008	01:50:00	0	-3.4646	11.859	0.9184
229	02/02/2008	02:00:00	0	-3.4832	11.861	0.8998
230	02/02/2008	02:10:00	0	-3.4991	11.862	0.8839
231	02/02/2008	02:20:00	0	-3.5183	11.862	0.8647
232	02/02/2008	02:30:00	0	-3.5375	11.861	0.8455
233	02/02/2008	02:40:00	0	-3.5542	11.861	0.8288
234	02/02/2008	02:50:00	0	-3.5706	11.86	0.8124
235	02/02/2008	03:00:00	0	-3.5899	11.86	0.7931
236	02/02/2008	03:10:00	0	-3.6078	11.861	0.7752
237	02/02/2008	03:20:00	0	-3.6276	11.861	0.7554
238	02/02/2008	03:30:00	0	-3.6436	11.861	0.7394
239	02/02/2008	03:40:00	0	-3.6611	11.861	0.7219
240	02/02/2008	03:50:00	0	-3.6769	11.861	0.7061
241	02/02/2008	04:00:00	0	-3.6906	11.862	0.6924
242	02/02/2008	04:10:00	0	-3.7059	11.861	0.6771
243	02/02/2008	04:20:00	0	-3.7218	11.862	0.6612
244	02/02/2008	04:30:00	0	-3.7395	11.861	0.6435
245	02/02/2008	04:40:00	0	-3.755	11.861	0.628
246	02/02/2008	04:50:00	0	-3.7687	11.86	0.6143
247	02/02/2008	05:00:00	0	-3.7834	11.859	0.5996
248	02/02/2008	05:10:00	0	-3.7998	11.859	0.5832
249	02/02/2008	05:20:00	0	-3.814	11.857	0.569
250	02/02/2008	05:30:00	0	-3.8256	11.856	0.5574
251	02/02/2008	05:40:00	0	-3.8349	11.857	0.5481
252	02/02/2008	05:50:00	0	-3.8467	11.855	0.5363
253	02/02/2008	06:00:00	0	-3.858	11.855	0.525
254	02/02/2008	06:10:00	0	-3.8686	11.855	0.5144
255	02/02/2008	06:20:00	0	-3.8759	11.853	0.5071
256	02/02/2008	06:30:00	0	-3.8864	11.852	0.4986
257	02/02/2008	06:40:00	0	-3.896	11.852	0.487
258	02/02/2008	06:50:00	0	-3.9045	11.852	0.4785
259	02/02/2008	07:00:00	0	-3.9138	11.852	0.4692
260	02/02/2008	07:10:00	0	-3.9215	11.851	0.4615
261	02/02/2008	07:20:00	0	-3.9268	11.851	0.4562
262	02/02/2008	07:30:00	0	-3.9348	11.852	0.4482
263	02/02/2008	07:40:00	0	-3.9468	11.85	0.4362
264	02/02/2008	07:50:00	0	-3.9454	11.849	0.4376
265	02/02/2008	08:00:00	0	-3.9528	11.847	0.4302
266	02/02/2008	08:10:00	0	-3.9499	11.846	0.4331
267	02/02/2008	08:20:00	0	-3.9551	11.844	0.4279
268	02/02/2008	08:30:00	0	-3.9495	11.845	0.4335
269	02/02/2008	08:40:00	0	-3.9514	11.845	0.4316
270	02/02/2008	08:50:00	0	-3.9439	11.846	0.4391
271	02/02/2008	09:00:00	0	-3.9372	11.849	0.4458
272	02/02/2008	09:10:00	0	-3.9289	11.852	0.4541
273	02/02/2008	09:20:00	0	-3.9179	11.855	0.4651
274	02/02/2008	09:30:00	0	-3.9065	11.857	0.4765
275	02/02/2008	09:40:00	0	-3.8942	11.857	0.4888
276	02/02/2008	09:50:00	0	-3.8836	11.857	0.4994
277	02/02/2008	10:00:00	0	-3.8701	11.858	0.5129
278	02/02/2008	10:10:00	0	-3.8559	11.859	0.5271
279	02/02/2008	10:20:00	0	-3.837	11.86	0.546
280	02/02/2008	10:30:00	0	-3.8162	11.861	0.5668
281	02/02/2008	10:40:00	0	-3.7927	11.862	0.5903
282	02/02/2008	10:50:00	0	-3.7713	11.863	0.6117
283	02/02/2008	11:00:00	0	-3.7445	11.863	0.6385
284	02/02/2008	11:10:00	0	-3.7218	11.863	0.6612
285	02/02/2008	11:20:00	0	-3.7005	11.862	0.6825
286	02/02/2008	11:30:00	0	-3.6822	11.861	0.7008
287	02/02/2008	11:40:00	0	-3.6633	11.861	0.7197
288	02/02/2008	11:50:00	0	-3.6458	11.861	0.7372
289	02/02/2008	12:00:00	0	-3.6245	11.861	0.7585
290	02/02/2008	12:10:00	0	-3.6024	11.861	0.7806
291	02/02/2008	12:20:00	0	-3.5841	11.86	0.7989
292	02/02/2008	12:30:00	0	-3.5716	11.86	0.8114
293	02/02/2008	12:40:00	0	-3.5642	11.859	0.8188
294	02/02/2008	12:50:00	0	-3.5551	11.86	0.8279
295	02/02/2008	13:00:00	0	-3.552	11.86	0.831
296	02/02/2008	13:10:00	0	-3.5477	11.86	0.8353
297	02/02/2008	13:20:00	0	-3.5434	11.86	0.8396
298	02/02/2008	13:30:00	0	-3.5411	11.86	0.8419
299	02/02/2008	13:40:00	0	-3.5391	11.86	0.8439
300	02/02/2008	13:50:00	0	-3.5385	11.86	0.8445
301	02/02/2008	14:00:00	0	-3.544	11.86	0.839
302	02/02/2008	14:10:00	0	-3.5516	11.86	0.8314
303	02/02/2008	14:20:00	0	-3.5634	11.861	0.8196
304	02/02/2008	14:30:00	0	-3.5769	11.862	0.8061
305	02/02/2008	14:40:00	0	-3.5906	11.863	0.7924
306	02/02/2008	14:50:00	0	-3.6063	11.863	0.7767
307	02/02/2008	15:00:00	0	-3.6228	11.864	0.7602
308	02/02/2008	15:10:00	0	-3.6383	11.864	0.7447
309	02/02/2008	15:20:00	0	-3.6537	11.863	0.7293
310	02/02/2008	15:30:00	0	-3.6689	11.862	0.7141
311	02/02/2008	15:40:00	0	-3.684	11.863	0.699
312	02/02/2008	15:50:00	0	-3.7006	11.863	0.6824
313	02/02/2008	16:00:00	0	-3.7173	11.863	0.6657
314	02/02/2008	16:10:00	0	-3.7346	11.863	0.6484
315	02/02/2008	16:20:00	0	-3.7519	11.863	0.6311
316	02/02/2008	16:30:00	0	-3.7679	11.863	0.6151
317	02/02/2008	16:40:00	0	-3.7847	11.862	0.5983
318	02/02/2008	16:50:00	0	-3.7989	11.861	0.5841
319	02/02/2008	17:00:00	0	-3.8161	11.861	0.5669
320	02/02/2008	17:10:00	0	-3.8312	11.86	0.5518
321	02/02/2008	17:20:00	0	-3.8438	11.86	0.5392
322	02/02/2008	17:30:00	0	-3.8565	11.859	0.5265
323	02/02/2008	17:40:00	0	-3.8714	11.858	0.5116
324	02/02/2008	17:50:00	0	-3.8886	11.854	0.4944
325	02/02/2008	18:00:00	0	-3.9052	11.851	0.4778
326	02/02/2008	18:10:00	0	-3.9213	11.848	0.4617
327	02/02/2008	18:20:00	0	-3.9356	11.846	0.4474
328	02/02/2008	18:30:00	0	-3.9428	11.843	0.4402
329	02/02/2008	18:40:00	0	-3.9506	11.844	0.4324
330	02/02/2008	18:50:00	0	-3.9589	11.843	0.4241

331	02/02/2008	19:00:00	0	-3.9638	11.839	0.4192
332	02/02/2008	19:10:00	0	-3.971	11.839	0.412
333	02/02/2008	19:20:00	0	-3.9799	11.838	0.4031
334	02/02/2008	19:30:00	0	-3.9904	11.836	0.3926
335	02/02/2008	19:40:00	0	-4.0129	11.832	0.3701
336	02/02/2008	19:50:00	0	-4.0311	11.832	0.3519
337	02/02/2008	20:00:00	0	-4.0356	11.832	0.3474
338	02/02/2008	20:10:00	0	-4.0375	11.825	0.3455
339	02/02/2008	20:20:00	0	-4.0376	11.826	0.3454
340	02/02/2008	20:30:00	0	-4.042	11.825	0.341
341	02/02/2008	20:40:00	0	-4.0417	11.828	0.3413
342	02/02/2008	20:50:00	0	-4.042	11.829	0.341
343	02/02/2008	21:00:00	0	-4.0606	11.824	0.3224
344	02/02/2008	21:10:00	0	-4.0577	11.827	0.3253
345	02/02/2008	21:20:00	0	-4.0576	11.821	0.3254
346	02/02/2008	21:30:00	0	-4.0468	11.831	0.3362
347	02/02/2008	21:40:00	0	-4.0426	11.836	0.3404
348	02/02/2008	21:50:00	0	-4.029	11.837	0.354
349	02/02/2008	22:00:00	0	-4.0179	11.841	0.3651
350	02/02/2008	22:10:00	0	-4.005	11.844	0.378
351	02/02/2008	22:20:00	0	-3.9948	11.845	0.3882
352	02/02/2008	22:30:00	0	-3.985	11.847	0.398
353	02/02/2008	22:40:00	0	-3.9744	11.847	0.4086
354	02/02/2008	22:50:00	0	-3.9612	11.848	0.4218
355	02/02/2008	23:00:00	0	-3.9453	11.848	0.4377
356	02/02/2008	23:10:00	0	-3.9267	11.849	0.4563
357	02/02/2008	23:20:00	0	-3.9095	11.85	0.4735
358	02/02/2008	23:30:00	0	-3.8886	11.853	0.4944
359	02/02/2008	23:40:00	0	-3.8672	11.855	0.5158
360	02/02/2008	23:50:00	0	-3.8486	11.856	0.5344
361	03/02/2008	00:00:00	0	-3.8273	11.857	0.5557
362	03/02/2008	00:10:00	0	-3.8023	11.858	0.5807
363	03/02/2008	00:20:00	0	-3.7804	11.858	0.6026
364	03/02/2008	00:30:00	0	-3.7626	11.858	0.6204
365	03/02/2008	00:40:00	0	-3.7448	11.858	0.6382
366	03/02/2008	00:50:00	0	-3.7286	11.858	0.6544
367	03/02/2008	01:00:00	0	-3.7114	11.858	0.6716
368	03/02/2008	01:10:00	0	-3.696	11.858	0.687
369	03/02/2008	01:20:00	0	-3.6801	11.858	0.7029
370	03/02/2008	01:30:00	0	-3.6664	11.858	0.7166
371	03/02/2008	01:40:00	0	-3.6511	11.858	0.7319
372	03/02/2008	01:50:00	0	-3.6448	11.859	0.7382
373	03/02/2008	02:00:00	0	-3.6421	11.859	0.7409
374	03/02/2008	02:10:00	0	-3.6405	11.858	0.7425
375	03/02/2008	02:20:00	0	-3.6386	11.859	0.7444
376	03/02/2008	02:30:00	0	-3.644	11.859	0.739
377	03/02/2008	02:40:00	0	-3.6466	11.86	0.7364
378	03/02/2008	02:50:00	0	-3.652	11.86	0.731
379	03/02/2008	03:00:00	0	-3.658	11.861	0.725
380	03/02/2008	03:10:00	0	-3.6666	11.861	0.7164
381	03/02/2008	03:20:00	0	-3.6767	11.861	0.7063
382	03/02/2008	03:30:00	0	-3.6881	11.862	0.6949
383	03/02/2008	03:40:00	0	-3.6982	11.863	0.6848
384	03/02/2008	03:50:00	0	-3.7129	11.863	0.6701
385	03/02/2008	04:00:00	0	-3.7233	11.863	0.6597
386	03/02/2008	04:10:00	0	-3.7377	11.862	0.6453
387	03/02/2008	04:20:00	0	-3.753	11.862	0.63
388	03/02/2008	04:30:00	0	-3.7666	11.861	0.6164
389	03/02/2008	04:40:00	0	-3.7831	11.86	0.5999
390	03/02/2008	04:50:00	0	-3.7977	11.862	0.5853
391	03/02/2008	05:00:00	0	-3.8151	11.861	0.5679
392	03/02/2008	05:10:00	0	-3.8305	11.861	0.5525
393	03/02/2008	05:20:00	0	-3.8463	11.859	0.5367
394	03/02/2008	05:30:00	0	-3.8617	11.858	0.5213
395	03/02/2008	05:40:00	0	-3.8748	11.857	0.5082
396	03/02/2008	05:50:00	0	-3.8872	11.857	0.4958
397	03/02/2008	06:00:00	0	-3.9034	11.854	0.4796
398	03/02/2008	06:10:00	0	-3.9189	11.851	0.4641
399	03/02/2008	06:20:00	0	-3.9316	11.845	0.4514
400	03/02/2008	06:30:00	0	-3.9454	11.841	0.4376
401	03/02/2008	06:40:00	0	-3.9591	11.839	0.4239
402	03/02/2008	06:50:00	0	-3.9713	11.837	0.4117
403	03/02/2008	07:00:00	0	-3.9833	11.835	0.3997
404	03/02/2008	07:10:00	0	-3.9921	11.835	0.3909
405	03/02/2008	07:20:00	0	-4.0016	11.832	0.3814
406	03/02/2008	07:30:00	0	-4.0087	11.83	0.3743
407	03/02/2008	07:40:00	0	-4.0156	11.827	0.3674
408	03/02/2008	07:50:00	0	-4.0207	11.824	0.3623
409	03/02/2008	08:00:00	0	-4.026	11.826	0.357
410	03/02/2008	08:10:00	0	-4.0284	11.826	0.3546
411	03/02/2008	08:20:00	0	-4.03	11.825	0.353
412	03/02/2008	08:30:00	0	-4.047	11.818	0.336
413	03/02/2008	08:40:00	0	-4.0443	11.821	0.3387
414	03/02/2008	08:50:00	0	-4.0613	11.808	0.3217
415	03/02/2008	09:00:00	0	-4.0718	11.815	0.3112
416	03/02/2008	09:10:00	0	-4.0666	11.813	0.3164
417	03/02/2008	09:20:00	0	-4.0691	11.813	0.3139
418	03/02/2008	09:30:00	0	-4.0606	11.821	0.3224
419	03/02/2008	09:40:00	0	-4.0508	11.827	0.3322
420	03/02/2008	09:50:00	0	-4.0426	11.832	0.3404
421	03/02/2008	10:00:00	0	-4.0336	11.836	0.3494
422	03/02/2008	10:10:00	0	-4.0258	11.838	0.3572
423	03/02/2008	10:20:00	0	-4.0131	11.838	0.3699
424	03/02/2008	10:30:00	0	-3.9966	11.839	0.3864
425	03/02/2008	10:40:00	0	-3.979	11.84	0.404
426	03/02/2008	10:50:00	0	-3.9556	11.84	0.4274
427	03/02/2008	11:00:00	0	-3.9321	11.842	0.4509
428	03/02/2008	11:10:00	0	-3.9104	11.846	0.4726
429	03/02/2008	11:20:00	0	-3.8857	11.849	0.4973
430	03/02/2008	11:30:00	0	-3.8587	11.851	0.5243
431	03/02/2008	11:40:00	0	-3.8263	11.853	0.5567
432	03/02/2008	11:50:00	0	-3.7971	11.853	0.5859
433	03/02/2008	12:00:00	0	-3.7612	11.854	0.6218
434	03/02/2008	12:10:00	0	-3.7315	11.855	0.6515
435	03/02/2008	12:20:00	0	-3.7005	11.855	0.6825
436	03/02/2008	12:30:00	0	-3.6693	11.855	0.7137
437	03/02/2008	12:40:00	0	-3.6405	11.855	0.7425
438	03/02/2008	12:50:00	0	-3.6119	11.855	0.7711
439	03/02/2008	13:00:00	0	-3.5851	11.855	0.7979
440	03/02/2008	13:10:00	0	-3.5579	11.856	0.8251
441	03/02/2008	13:20:00	0	-3.5337	11.855	0.8493
442	03/02/2008	13:30:00	0	-3.5119	11.854	0.8711

443	03/02/2008	13:40:00	0	-3.4954	11.854	0.8876
444	03/02/2008	13:50:00	0	-3.4781	11.853	0.9049
445	03/02/2008	14:00:00	0	-3.4626	11.854	0.9204
446	03/02/2008	14:10:00	0	-3.4457	11.853	0.9373
447	03/02/2008	14:20:00	0	-3.4331	11.853	0.9499
448	03/02/2008	14:30:00	0	-3.4263	11.853	0.9567
449	03/02/2008	14:40:00	0	-3.4222	11.853	0.9608
450	03/02/2008	14:50:00	0	-3.4231	11.853	0.9599
451	03/02/2008	15:00:00	0	-3.4273	11.853	0.9557
452	03/02/2008	15:10:00	0	-3.4335	11.854	0.9495
453	03/02/2008	15:20:00	0	-3.4417	11.855	0.9413
454	03/02/2008	15:30:00	0	-3.451	11.855	0.932
455	03/02/2008	15:40:00	0	-3.4609	11.856	0.9221
456	03/02/2008	15:50:00	0	-3.4746	11.856	0.9084
457	03/02/2008	16:00:00	0	-3.4877	11.857	0.8953
458	03/02/2008	16:10:00	0	-3.5049	11.859	0.8781
459	03/02/2008	16:20:00	0	-3.5226	11.859	0.8604
460	03/02/2008	16:30:00	0	-3.5428	11.86	0.8402
461	03/02/2008	16:40:00	0	-3.5605	11.86	0.8225
462	03/02/2008	16:50:00	0	-3.5781	11.86	0.8049
463	03/02/2008	17:00:00	0	-3.5969	11.86	0.7861
464	03/02/2008	17:10:00	0	-3.6157	11.86	0.7673
465	03/02/2008	17:20:00	0	-3.6346	11.86	0.7484
466	03/02/2008	17:30:00	0	-3.6524	11.86	0.7306
467	03/02/2008	17:40:00	0	-3.6742	11.86	0.7088
468	03/02/2008	17:50:00	0	-3.6938	11.861	0.6892
469	03/02/2008	18:00:00	0	-3.716	11.861	0.667
470	03/02/2008	18:10:00	0	-3.7332	11.86	0.6498
471	03/02/2008	18:20:00	0	-3.7516	11.859	0.6314
472	03/02/2008	18:30:00	0	-3.7695	11.858	0.6135
473	03/02/2008	18:40:00	0	-3.7853	11.858	0.5977
474	03/02/2008	18:50:00	0	-3.7989	11.857	0.5841
475	03/02/2008	19:00:00	0	-3.8174	11.857	0.5656
476	03/02/2008	19:10:00	0	-3.8325	11.855	0.5505
477	03/02/2008	19:20:00	0	-3.8507	11.855	0.5323
478	03/02/2008	19:30:00	0	-3.8647	11.855	0.5183
479	03/02/2008	19:40:00	0	-3.8798	11.853	0.5032
480	03/02/2008	19:50:00	0	-3.8892	11.853	0.4938
481	03/02/2008	20:00:00	0	-3.8977	11.852	0.4853
482	03/02/2008	20:10:00	0	-3.9025	11.853	0.4805
483	03/02/2008	20:20:00	0	-3.9143	11.854	0.4687
484	03/02/2008	20:30:00	0	-3.9195	11.853	0.4635
485	03/02/2008	20:40:00	0	-3.9212	11.853	0.4618
486	03/02/2008	20:50:00	0	-3.9294	11.852	0.4536
487	03/02/2008	21:00:00	0	-3.9327	11.85	0.4503
488	03/02/2008	21:10:00	0	-3.9315	11.852	0.4515
489	03/02/2008	21:20:00	0	-3.9349	11.852	0.4481
490	03/02/2008	21:30:00	0	-3.9383	11.851	0.4447
491	03/02/2008	21:40:00	0	-3.9418	11.848	0.4412
492	03/02/2008	21:50:00	0	-3.9416	11.849	0.4414
493	03/02/2008	22:00:00	0	-3.9437	11.847	0.4393
494	03/02/2008	22:10:00	0	-3.9453	11.848	0.4377
495	03/02/2008	22:20:00	0	-3.9413	11.85	0.4417
496	03/02/2008	22:30:00	0	-3.937	11.849	0.446
497	03/02/2008	22:40:00	0	-3.9445	11.843	0.4385
498	03/02/2008	22:50:00	0	-3.9324	11.843	0.4506
499	03/02/2008	23:00:00	0	-3.9191	11.847	0.4639
500	03/02/2008	23:10:00	0	-3.9035	11.851	0.4795
501	03/02/2008	23:20:00	0	-3.8868	11.852	0.4962
502	03/02/2008	23:30:00	0	-3.8695	11.853	0.5135
503	03/02/2008	23:40:00	0	-3.8483	11.855	0.5347
504	03/02/2008	23:50:00	0	-3.8265	11.858	0.5565
505	04/02/2008	00:00:00	0	-3.8011	11.86	0.5819
506	04/02/2008	00:10:00	0	-3.772	11.862	0.611
507	04/02/2008	00:20:00	0	-3.7419	11.863	0.6411
508	04/02/2008	00:30:00	0	-3.7145	11.862	0.6685
509	04/02/2008	00:40:00	0	-3.6827	11.862	0.7003
510	04/02/2008	00:50:00	0	-3.6507	11.861	0.7323
511	04/02/2008	01:00:00	0	-3.6175	11.861	0.7655
512	04/02/2008	01:10:00	0	-3.5871	11.861	0.7959
513	04/02/2008	01:20:00	0	-3.5556	11.86	0.8274
514	04/02/2008	01:30:00	0	-3.5296	11.86	0.8534
515	04/02/2008	01:40:00	0	-3.5065	11.86	0.8765
516	04/02/2008	01:50:00	0	-3.4863	11.86	0.8967
517	04/02/2008	02:00:00	0	-3.4691	11.859	0.9139
518	04/02/2008	02:10:00	0	-3.4496	11.859	0.9334
519	04/02/2008	02:20:00	0	-3.4307	11.86	0.9523
520	04/02/2008	02:30:00	0	-3.4125	11.859	0.9705
521	04/02/2008	02:40:00	0	-3.3959	11.859	0.9871
522	04/02/2008	02:50:00	0	-3.3833	11.858	0.9997
523	04/02/2008	03:00:00	0	-3.3743	11.858	1.0087
524	04/02/2008	03:10:00	0	-3.3698	11.858	1.0132
525	04/02/2008	03:20:00	0	-3.3697	11.858	1.0133
526	04/02/2008	03:30:00	0	-3.3745	11.857	1.0085
527	04/02/2008	03:40:00	0	-3.3821	11.858	1.0009
528	04/02/2008	03:50:00	0	-3.3904	11.858	0.9926
529	04/02/2008	04:00:00	0	-3.398	11.858	0.985
530	04/02/2008	04:10:00	0	-3.4099	11.859	0.9731
531	04/02/2008	04:20:00	0	-3.4255	11.86	0.9575
532	04/02/2008	04:30:00	0	-3.4454	11.86	0.9376
533	04/02/2008	04:40:00	0	-3.4672	11.861	0.9158
534	04/02/2008	04:50:00	0	-3.4897	11.861	0.8933
535	04/02/2008	05:00:00	0	-3.5135	11.862	0.8695
536	04/02/2008	05:10:00	0	-3.5361	11.863	0.8469
537	04/02/2008	05:20:00	0	-3.5568	11.862	0.8262
538	04/02/2008	05:30:00	0	-3.577	11.862	0.806
539	04/02/2008	05:40:00	0	-3.5982	11.86	0.7848
540	04/02/2008	05:50:00	0	-3.6169	11.859	0.7661
541	04/02/2008	06:00:00	0	-3.6382	11.858	0.7448
542	04/02/2008	06:10:00	0	-3.6595	11.859	0.7235
543	04/02/2008	06:20:00	0	-3.6791	11.86	0.7039
544	04/02/2008	06:30:00	0	-3.6992	11.861	0.6838
545	04/02/2008	06:40:00	0	-3.7178	11.86	0.6652
546	04/02/2008	06:50:00	0	-3.7394	11.859	0.6436
547	04/02/2008	07:00:00	0	-3.759	11.859	0.624
548	04/02/2008	07:10:00	0	-3.7785	11.859	0.6045
549	04/02/2008	07:20:00	0	-3.7976	11.858	0.5854
550	04/02/2008	07:30:00	0	-3.8158	11.858	0.5672
551	04/02/2008	07:40:00	0	-3.8347	11.857	0.5483
552	04/02/2008	07:50:00	0	-3.8536	11.856	0.5294
553	04/02/2008	08:00:00	0	-3.8703	11.855	0.5127
554	04/02/2008	08:10:00	0	-3.8844	11.855	0.4986

555	04/02/2008	08:20:00	0	-3.8926	11.854	0.4904
556	04/02/2008	08:30:00	0	-3.8991	11.855	0.4839
557	04/02/2008	08:40:00	0	-3.9065	11.855	0.4765
558	04/02/2008	08:50:00	0	-3.9154	11.854	0.4676
559	04/02/2008	09:00:00	0	-3.9202	11.854	0.4628
560	04/02/2008	09:10:00	0	-3.9239	11.854	0.4591
561	04/02/2008	09:20:00	0	-3.9255	11.854	0.4575
562	04/02/2008	09:30:00	0	-3.9281	11.855	0.4549
563	04/02/2008	09:40:00	0	-3.9323	11.855	0.4507
564	04/02/2008	09:50:00	0	-3.9338	11.854	0.4492
565	04/02/2008	10:00:00	0	-3.9381	11.854	0.4449
566	04/02/2008	10:10:00	0	-3.938	11.855	0.445
567	04/02/2008	10:20:00	0	-3.9397	11.855	0.4433
568	04/02/2008	10:30:00	0	-3.9403	11.855	0.4427
569	04/02/2008	10:40:00	0	-3.9346	11.857	0.4484
570	04/02/2008	10:50:00	0	-3.9264	11.858	0.4566
571	04/02/2008	11:00:00	0	-3.9152	11.86	0.4678
572	04/02/2008	11:10:00	0	-3.8991	11.861	0.4839
573	04/02/2008	11:20:00	0	-3.8813	11.862	0.5017
574	04/02/2008	11:30:00	0	-3.86	11.863	0.523
575	04/02/2008	11:40:00	0	-3.8326	11.864	0.5504
576	04/02/2008	11:50:00	0	-3.803	11.866	0.58
577	04/02/2008	12:00:00	0	-3.7676	11.866	0.6154
578	04/02/2008	12:10:00	0	-3.732	11.866	0.651
579	04/02/2008	12:20:00	0	-3.6942	11.865	0.6888
580	04/02/2008	12:30:00	0	-3.6573	11.864	0.7257
581	04/02/2008	12:40:00	0	-3.6204	11.864	0.7626
582	04/02/2008	12:50:00	0	-3.5847	11.863	0.7983
583	04/02/2008	13:00:00	0	-3.5458	11.863	0.8372
584	04/02/2008	13:10:00	0	-3.5108	11.862	0.8722
585	04/02/2008	13:20:00	0	-3.4728	11.862	0.9102
586	04/02/2008	13:30:00	0	-3.437	11.861	0.946
587	04/02/2008	13:40:00	0	-3.4063	11.86	0.9767
588	04/02/2008	13:50:00	0	-3.3753	11.86	1.0077
589	04/02/2008	14:00:00	0	-3.3454	11.86	1.0376
590	04/02/2008	14:10:00	0	-3.3177	11.859	1.0653
591	04/02/2008	14:20:00	0	-3.2922	11.859	1.0908
592	04/02/2008	14:30:00	0	-3.2722	11.857	1.1108
593	04/02/2008	14:40:00	0	-3.252	11.857	1.131
594	04/02/2008	14:50:00	0	-3.2403	11.856	1.1427
595	04/02/2008	15:00:00	0	-3.2331	11.856	1.1499
596	04/02/2008	15:10:00	0	-3.2288	11.855	1.1542
597	04/02/2008	15:20:00	0	-3.227	11.854	1.156
598	04/02/2008	15:30:00	0	-3.2297	11.854	1.1533
599	04/02/2008	15:40:00	0	-3.2342	11.855	1.1488
600	04/02/2008	15:50:00	0	-3.2442	11.854	1.1388
601	04/02/2008	16:00:00	0	-3.2594	11.853	1.1236
602	04/02/2008	16:10:00	0	-3.2772	11.852	1.1058
603	04/02/2008	16:20:00	0	-3.3006	11.852	1.0824
604	04/02/2008	16:30:00	0	-3.3259	11.852	1.0571
605	04/02/2008	16:40:00	0	-3.354	11.852	1.029
606	04/02/2008	16:50:00	0	-3.3822	11.85	1.0008
607	04/02/2008	17:00:00	0	-3.4135	11.851	0.9695
608	04/02/2008	17:10:00	0	-3.4435	11.847	0.9395
609	04/02/2008	17:20:00	0	-3.473	11.847	0.91
610	04/02/2008	17:30:00	0	-3.5014	11.847	0.8816
611	04/02/2008	17:40:00	0	-3.5314	11.848	0.8516
612	04/02/2008	17:50:00	0	-3.561	11.847	0.822
613	04/02/2008	18:00:00	0	-3.5923	11.848	0.7907
614	04/02/2008	18:10:00	0	-3.6211	11.848	0.7619
615	04/02/2008	18:20:00	0	-3.649	11.846	0.734
616	04/02/2008	18:30:00	0	-3.6775	11.847	0.7055
617	04/02/2008	18:40:00	0	-3.702	11.847	0.681
618	04/02/2008	18:50:00	0	-3.7276	11.847	0.6554
619	04/02/2008	19:00:00	0	-3.7546	11.846	0.6284
620	04/02/2008	19:10:00	0	-3.7826	11.847	0.6004
621	04/02/2008	19:20:00	0	-3.8078	11.847	0.5752
622	04/02/2008	19:30:00	0	-3.8332	11.848	0.5498
623	04/02/2008	19:40:00	0	-3.8545	11.848	0.5285
624	04/02/2008	19:50:00	0	-3.8765	11.847	0.5045
625	04/02/2008	20:00:00	0	-3.8982	11.846	0.4848
626	04/02/2008	20:10:00	0	-3.9176	11.845	0.4654
627	04/02/2008	20:20:00	0	-3.9343	11.845	0.4487
628	04/02/2008	20:30:00	0	-3.9499	11.846	0.4331
629	04/02/2008	20:40:00	0	-3.9675	11.844	0.4155
630	04/02/2008	20:50:00	0	-3.9839	11.847	0.3991
631	04/02/2008	21:00:00	0	-3.991	11.846	0.392
632	04/02/2008	21:10:00	0	-3.9999	11.846	0.3831
633	04/02/2008	21:20:00	0	-4.0059	11.848	0.3771
634	04/02/2008	21:30:00	0	-4.0121	11.845	0.3709
635	04/02/2008	21:40:00	0	-4.0155	11.845	0.3675
636	04/02/2008	21:50:00	0	-4.016	11.845	0.367
637	04/02/2008	22:00:00	0	-4.0155	11.844	0.3675
638	04/02/2008	22:10:00	0	-4.0149	11.844	0.3681
639	04/02/2008	22:20:00	0	-4.0115	11.845	0.3715
640	04/02/2008	22:30:00	0	-4.0043	11.842	0.3787
641	04/02/2008	22:40:00	0	-3.9985	11.843	0.3845
642	04/02/2008	22:50:00	0	-3.9994	11.843	0.3836
643	04/02/2008	23:00:00	0	-3.9958	11.844	0.3872
644	04/02/2008	23:10:00	0	-3.9934	11.844	0.3896
645	04/02/2008	23:20:00	0	-3.9876	11.845	0.3954
646	04/02/2008	23:30:00	0	-3.9813	11.844	0.4017
647	04/02/2008	23:40:00	0	-3.9743	11.846	0.4087
648	04/02/2008	23:50:00	0	-3.9642	11.85	0.4188
649	05/02/2008	00:00:00	0	-3.9463	11.852	0.4367
650	05/02/2008	00:10:00	0	-3.9236	11.855	0.4594
651	05/02/2008	00:20:00	0	-3.8978	11.856	0.4852
652	05/02/2008	00:30:00	0	-3.8687	11.859	0.5143
653	05/02/2008	00:40:00	0	-3.8343	11.862	0.5487
654	05/02/2008	00:50:00	0	-3.7973	11.862	0.5857
655	05/02/2008	01:00:00	0	-3.759	11.862	0.624
656	05/02/2008	01:10:00	0	-3.7182	11.862	0.6648
657	05/02/2008	01:20:00	0	-3.676	11.861	0.707
658	05/02/2008	01:30:00	0	-3.6325	11.861	0.7505
659	05/02/2008	01:40:00	0	-3.5894	11.861	0.7936
660	05/02/2008	01:50:00	0	-3.5478	11.86	0.8352
661	05/02/2008	02:00:00	0	-3.5064	11.86	0.8766
662	05/02/2008	02:10:00	0	-3.4661	11.86	0.9169
663	05/02/2008	02:20:00	0	-3.4253	11.859	0.9577
664	05/02/2008	02:30:00	0	-3.3847	11.859	0.9983
665	05/02/2008	02:40:00	0	-3.3475	11.858	1.0355
666	05/02/2008	02:50:00	0	-3.3128	11.857	1.0702

667	05/02/2008	03:00:00	0	-3.2804	11.857	1.1026
668	05/02/2008	03:10:00	0	-3.2546	11.857	1.1284
669	05/02/2008	03:20:00	0	-3.2308	11.855	1.1522
670	05/02/2008	03:30:00	0	-3.2088	11.854	1.1742
671	05/02/2008	03:40:00	0	-3.1927	11.855	1.1903
672	05/02/2008	03:50:00	0	-3.1772	11.856	1.2058
673	05/02/2008	04:00:00	0	-3.1667	11.855	1.2163
674	05/02/2008	04:10:00	0	-3.1596	11.856	1.2234
675	05/02/2008	04:20:00	0	-3.1605	11.855	1.2225
676	05/02/2008	04:30:00	0	-3.165	11.856	1.218
677	05/02/2008	04:40:00	0	-3.1751	11.855	1.2079
678	05/02/2008	04:50:00	0	-3.1908	11.856	1.1922
679	05/02/2008	05:00:00	0	-3.2133	11.855	1.1697
680	05/02/2008	05:10:00	0	-3.2366	11.853	1.1464
681	05/02/2008	05:20:00	0	-3.2645	11.85	1.1185
682	05/02/2008	05:30:00	0	-3.2925	11.844	1.0905
683	05/02/2008	05:40:00	0	-3.3238	11.839	1.0592
684	05/02/2008	05:50:00	0	-3.3538	11.833	1.0292
685	05/02/2008	06:00:00	0	-3.3839	11.834	0.9991
686	05/02/2008	06:10:00	0	-3.4155	11.834	0.9675
687	05/02/2008	06:20:00	0	-3.4462	11.834	0.9368
688	05/02/2008	06:30:00	0	-3.479	11.835	0.904
689	05/02/2008	06:40:00	0	-3.5112	11.834	0.8718
690	05/02/2008	06:50:00	0	-3.5411	11.835	0.8419
691	05/02/2008	07:00:00	0	-3.5694	11.836	0.8136
692	05/02/2008	07:10:00	0	-3.5963	11.837	0.7867
693	05/02/2008	07:20:00	0	-3.619	11.839	0.764
694	05/02/2008	07:30:00	0	-3.6436	11.84	0.7394
695	05/02/2008	07:40:00	0	-3.6698	11.84	0.7132
696	05/02/2008	07:50:00	0	-3.6988	11.842	0.6842
697	05/02/2008	08:00:00	0	-3.721	11.842	0.662
698	05/02/2008	08:10:00	0	-3.7445	11.841	0.6385
699	05/02/2008	08:20:00	0	-3.7651	11.843	0.6179
700	05/02/2008	08:30:00	0	-3.7854	11.841	0.5976
701	05/02/2008	08:40:00	0	-3.8018	11.84	0.5812
702	05/02/2008	08:50:00	0	-3.8178	11.841	0.5652
703	05/02/2008	09:00:00	0	-3.8305	11.84	0.5525
704	05/02/2008	09:10:00	0	-3.8431	11.841	0.5399
705	05/02/2008	09:20:00	0	-3.855	11.841	0.528
706	05/02/2008	09:30:00	0	-3.8617	11.841	0.5213
707	05/02/2008	09:40:00	0	-3.8696	11.84	0.5134
708	05/02/2008	09:50:00	0	-3.8728	11.84	0.5102
709	05/02/2008	10:00:00	0	-3.8734	11.841	0.5096
710	05/02/2008	10:10:00	0	-3.8699	11.843	0.5131
711	05/02/2008	10:20:00	0	-3.8653	11.841	0.5177
712	05/02/2008	10:30:00	0	-3.8611	11.842	0.5219
713	05/02/2008	10:40:00	0	-3.8583	11.842	0.5247
714	05/02/2008	10:50:00	0	-3.8607	11.844	0.5223
715	05/02/2008	11:00:00	0	-3.8603	11.844	0.5227
716	05/02/2008	11:10:00	0	-3.8588	11.844	0.5242
717	05/02/2008	11:20:00	0	-3.8526	11.844	0.5304
718	05/02/2008	11:30:00	0	-3.8453	11.844	0.5377
719	05/02/2008	11:40:00	0	-3.8295	11.845	0.5535
720	05/02/2008	11:50:00	0	-3.8094	11.848	0.5736
721	05/02/2008	12:00:00	0	-3.7857	11.851	0.5973
722	05/02/2008	12:10:00	0	-3.7572	11.855	0.6258
723	05/02/2008	12:20:00	0	-3.7235	11.859	0.6595
724	05/02/2008	12:30:00	0	-3.6851	11.86	0.6979
725	05/02/2008	12:40:00	0	-3.6456	11.86	0.7374
726	05/02/2008	12:50:00	0	-3.6025	11.858	0.7805
727	05/02/2008	13:00:00	0	-3.5578	11.859	0.8252
728	05/02/2008	13:10:00	0	-3.5151	11.859	0.8679
729	05/02/2008	13:20:00	0	-3.4729	11.858	0.9101
730	05/02/2008	13:30:00	0	-3.4307	11.858	0.9523
731	05/02/2008	13:40:00	0	-3.3839	11.857	0.9991
732	05/02/2008	13:50:00	0	-3.3428	11.856	1.0402
733	05/02/2008	14:00:00	0	-3.2987	11.857	1.0843
734	05/02/2008	14:10:00	0	-3.2595	11.856	1.1235
735	05/02/2008	14:20:00	0	-3.2175	11.855	1.1655
736	05/02/2008	14:30:00	0	-3.18	11.856	1.203
737	05/02/2008	14:40:00	0	-3.144	11.855	1.239
738	05/02/2008	14:50:00	0	-3.1096	11.854	1.2734
739	05/02/2008	15:00:00	0	-3.0776	11.854	1.3054
740	05/02/2008	15:10:00	0	-3.0485	11.855	1.3345
741	05/02/2008	15:20:00	0	-3.0244	11.853	1.3586
742	05/02/2008	15:30:00	0	-3.0076	11.853	1.3754
743	05/02/2008	15:40:00	0	-2.9971	11.852	1.3859
744	05/02/2008	15:50:00	0	-2.9866	11.852	1.3964
745	05/02/2008	16:00:00	0	-2.9849	11.852	1.3981
746	05/02/2008	16:10:00	0	-2.9855	11.852	1.3975
747	05/02/2008	16:20:00	0	-2.9949	11.852	1.3881
748	05/02/2008	16:30:00	0	-3.0061	11.852	1.3769
749	05/02/2008	16:40:00	0	-3.0235	11.852	1.3595
750	05/02/2008	16:50:00	0	-3.043	11.852	1.34
751	05/02/2008	17:00:00	0	-3.0651	11.852	1.3179
752	05/02/2008	17:10:00	0	-3.091	11.848	1.292
753	05/02/2008	17:20:00	0	-3.1229	11.847	1.2601
754	05/02/2008	17:30:00	0	-3.1568	11.848	1.2262
755	05/02/2008	17:40:00	0	-3.1963	11.845	1.1867
756	05/02/2008	17:50:00	0	-3.2377	11.836	1.1453
757	05/02/2008	18:00:00	0	-3.2784	11.83	1.1046
758	05/02/2008	18:10:00	0	-3.3198	11.807	1.0632
759	05/02/2008	18:20:00	0	-3.3589	11.78	1.0241
760	05/02/2008	18:30:00	0	-3.3938	11.787	0.9892
761	05/02/2008	18:40:00	0	-3.4284	11.8	0.9546
762	05/02/2008	18:50:00	0	-3.4669	11.808	0.9161
763	05/02/2008	19:00:00	0	-3.5054	11.809	0.8776
764	05/02/2008	19:10:00	0	-3.5429	11.811	0.8401
765	05/02/2008	19:20:00	0	-3.5779	11.811	0.8051
766	05/02/2008	19:30:00	0	-3.6112	11.814	0.7718
767	05/02/2008	19:40:00	0	-3.6428	11.813	0.7402
768	05/02/2008	19:50:00	0	-3.6763	11.819	0.7067
769	05/02/2008	20:00:00	0	-3.7064	11.817	0.6766
770	05/02/2008	20:10:00	0	-3.7405	11.823	0.6425
771	05/02/2008	20:20:00	0	-3.7729	11.822	0.6101
772	05/02/2008	20:30:00	0	-3.8003	11.824	0.5827
773	05/02/2008	20:40:00	0	-3.8297	11.827	0.5533
774	05/02/2008	20:50:00	0	-3.8561	11.825	0.5269
775	05/02/2008	21:00:00	0	-3.8748	11.831	0.5082
776	05/02/2008	21:10:00	0	-3.8915	11.827	0.4915
777	05/02/2008	21:20:00	0	-3.91	11.83	0.473
778	05/02/2008	21:30:00	0	-3.9264	11.827	0.4566

779	05/02/2008	21:40:00	0	-3.9436	11.827	0.4394
780	05/02/2008	21:50:00	0	-3.9539	11.828	0.4291
781	05/02/2008	22:00:00	0	-3.9609	11.825	0.4221
782	05/02/2008	22:10:00	0	-3.9677	11.826	0.4153
783	05/02/2008	22:20:00	0	-3.9738	11.827	0.4082
784	05/02/2008	22:30:00	0	-3.9682	11.825	0.4146
785	05/02/2008	22:40:00	0	-3.9621	11.827	0.4209
786	05/02/2008	22:50:00	0	-3.9559	11.825	0.4271
787	05/02/2008	23:00:00	0	-3.9524	11.826	0.4306
788	05/02/2008	23:10:00	0	-3.9435	11.826	0.4395
789	05/02/2008	23:20:00	0	-3.9342	11.828	0.4488
790	05/02/2008	23:30:00	0	-3.9269	11.827	0.4561
791	05/02/2008	23:40:00	0	-3.9234	11.827	0.4596
792	05/02/2008	23:50:00	0	-3.9213	11.829	0.4617
793	06/02/2008	00:00:00	0	-3.9198	11.829	0.4632
794	06/02/2008	00:10:00	0	-3.9087	11.828	0.4743
795	06/02/2008	00:20:00	0	-3.8931	11.828	0.4899
796	06/02/2008	00:30:00	0	-3.8759	11.833	0.5071
797	06/02/2008	00:40:00	0	-3.854	11.838	0.529
798	06/02/2008	00:50:00	0	-3.8219	11.846	0.5611
799	06/02/2008	01:00:00	0	-3.7837	11.851	0.5993
800	06/02/2008	01:10:00	0	-3.7427	11.851	0.6403
801	06/02/2008	01:20:00	0	-3.7005	11.851	0.6825
802	06/02/2008	01:30:00	0	-3.6518	11.85	0.7312
803	06/02/2008	01:40:00	0	-3.6057	11.851	0.7773
804	06/02/2008	01:50:00	0	-3.5565	11.85	0.8265
805	06/02/2008	02:00:00	0	-3.5069	11.85	0.8761
806	06/02/2008	02:10:00	0	-3.4591	11.849	0.9239
807	06/02/2008	02:20:00	0	-3.4075	11.849	0.9755
808	06/02/2008	02:30:00	0	-3.3559	11.848	1.0271
809	06/02/2008	02:40:00	0	-3.3037	11.848	1.0793
810	06/02/2008	02:50:00	0	-3.2546	11.848	1.1284
811	06/02/2008	03:00:00	0	-3.2091	11.845	1.1739
812	06/02/2008	03:10:00	0	-3.1672	11.845	1.2158
813	06/02/2008	03:20:00	0	-3.1311	11.845	1.2519
814	06/02/2008	03:30:00	0	-3.0945	11.845	1.2885
815	06/02/2008	03:40:00	0	-3.0651	11.845	1.3179
816	06/02/2008	03:50:00	0	-3.0395	11.846	1.3435
817	06/02/2008	04:00:00	0	-3.0181	11.846	1.3649
818	06/02/2008	04:10:00	0	-3.001	11.846	1.382
819	06/02/2008	04:20:00	0	-2.9859	11.845	1.3971
820	06/02/2008	04:30:00	0	-2.9779	11.845	1.4051
821	06/02/2008	04:40:00	0	-2.9806	11.845	1.4024
822	06/02/2008	04:50:00	0	-2.9841	11.845	1.3989
823	06/02/2008	05:00:00	0	-2.9955	11.845	1.3875
824	06/02/2008	05:10:00	0	-3.0103	11.846	1.3727
825	06/02/2008	05:20:00	0	-3.0292	11.847	1.3538
826	06/02/2008	05:30:00	0	-3.0533	11.847	1.3297
827	06/02/2008	05:40:00	0	-3.0839	11.848	1.2991
828	06/02/2008	05:50:00	0	-3.1161	11.848	1.2669
829	06/02/2008	06:00:00	0	-3.1527	11.848	1.2303
830	06/02/2008	06:10:00	0	-3.1932	11.845	1.1898
831	06/02/2008	06:20:00	0	-3.2353	11.842	1.1477
832	06/02/2008	06:30:00	0	-3.2772	11.843	1.1058
833	06/02/2008	06:40:00	0	-3.3217	11.841	1.0613
834	06/02/2008	06:50:00	0	-3.366	11.821	1.017
835	06/02/2008	07:00:00	0	-3.4072	11.78	0.9758
836	06/02/2008	07:10:00	0	-3.4494	11.769	0.9336
837	06/02/2008	07:20:00	0	-3.491	11.766	0.892
838	06/02/2008	07:30:00	0	-3.5314	11.764	0.8516
839	06/02/2008	07:40:00	0	-3.5684	11.763	0.8146
840	06/02/2008	07:50:00	0	-3.6031	11.762	0.7799
841	06/02/2008	08:00:00	0	-3.635	11.753	0.748
842	06/02/2008	08:10:00	0	-3.6666	11.783	0.7164
843	06/02/2008	08:20:00	0	-3.6985	11.802	0.6845
844	06/02/2008	08:30:00	0	-3.731	11.807	0.652
845	06/02/2008	08:40:00	0	-3.7557	11.811	0.6273
846	06/02/2008	08:50:00	0	-3.7828	11.81	0.6002
847	06/02/2008	09:00:00	0	-3.8055	11.809	0.5775
848	06/02/2008	09:10:00	0	-3.8323	11.814	0.5507
849	06/02/2008	09:20:00	0	-3.8563	11.813	0.5267
850	06/02/2008	09:30:00	0	-3.876	11.814	0.507
851	06/02/2008	09:40:00	0	-3.8906	11.815	0.4924
852	06/02/2008	09:50:00	0	-3.9042	11.813	0.4788
853	06/02/2008	10:00:00	0	-3.9139	11.814	0.4691
854	06/02/2008	10:10:00	0	-3.9223	11.815	0.4607
855	06/02/2008	10:20:00	0	-3.9266	11.815	0.4564
856	06/02/2008	10:30:00	0	-3.928	11.813	0.455
857	06/02/2008	10:40:00	0	-3.9293	11.814	0.4537
858	06/02/2008	10:50:00	0	-3.9271	11.812	0.4559
859	06/02/2008	11:00:00	0	-3.922	11.815	0.461
860	06/02/2008	11:10:00	0	-3.9132	11.813	0.4698
861	06/02/2008	11:20:00	0	-3.9029	11.814	0.4801
862	06/02/2008	11:30:00	0	-3.8943	11.812	0.4887
863	06/02/2008	11:40:00	0	-3.8897	11.812	0.4933
864	06/02/2008	11:50:00	0	-3.8837	11.815	0.4993
865	06/02/2008	12:00:00	0	-3.8725	11.82	0.5105
866	06/02/2008	12:10:00	0	-3.8529	11.822	0.5301
867	06/02/2008	12:20:00	0	-3.8277	11.824	0.5553
868	06/02/2008	12:30:00	0	-3.7955	11.827	0.5875
869	06/02/2008	12:40:00	0	-3.7561	11.84	0.6269
870	06/02/2008	12:50:00	0	-3.7126	11.842	0.6704
871	06/02/2008	13:00:00	0	-3.6668	11.842	0.7162
872	06/02/2008	13:10:00	0	-3.6217	11.842	0.7613
873	06/02/2008	13:20:00	0	-3.5743	11.839	0.8087
874	06/02/2008	13:30:00	0	-3.5247	11.839	0.8583
875	06/02/2008	13:40:00	0	-3.4755	11.839	0.9075
876	06/02/2008	13:50:00	0	-3.4254	11.839	0.9576
877	06/02/2008	14:00:00	0	-3.373	11.84	1.01
878	06/02/2008	14:10:00	0	-3.3192	11.839	1.0638
879	06/02/2008	14:20:00	0	-3.2659	11.84	1.1171
880	06/02/2008	14:30:00	0	-3.2105	11.839	1.1725
881	06/02/2008	14:40:00	0	-3.1609	11.839	1.2221
882	06/02/2008	14:50:00	0	-3.1131	11.839	1.2699
883	06/02/2008	15:00:00	0	-3.069	11.84	1.314
884	06/02/2008	15:10:00	0	-3.0247	11.84	1.3583
885	06/02/2008	15:20:00	0	-2.9844	11.839	1.3986
886	06/02/2008	15:30:00	0	-2.9466	11.84	1.4364
887	06/02/2008	15:40:00	0	-2.9144	11.839	1.4686
888	06/02/2008	15:50:00	0	-2.8861	11.84	1.4969
889	06/02/2008	16:00:00	0	-2.8607	11.839	1.5223
890	06/02/2008	16:10:00	0	-2.8439	11.839	1.5391

891	06/02/2008	16:20:00	0	-2.8338	11.84	1.5492
892	06/02/2008	16:30:00	0	-2.829	11.839	1.554
893	06/02/2008	16:40:00	0	-2.8297	11.84	1.5533
894	06/02/2008	16:50:00	0	-2.8384	11.84	1.5446
895	06/02/2008	17:00:00	0	-2.8506	11.839	1.5324
896	06/02/2008	17:10:00	0	-2.867	11.839	1.516
897	06/02/2008	17:20:00	0	-2.8867	11.839	1.4963
898	06/02/2008	17:30:00	0	-2.9146	11.841	1.4684
899	06/02/2008	17:40:00	0	-2.9463	11.839	1.4367
900	06/02/2008	17:50:00	0	-2.9846	11.841	1.3984
901	06/02/2008	18:00:00	0	-3.0256	11.84	1.3574
902	06/02/2008	18:10:00	0	-3.0689	11.838	1.3141
903	06/02/2008	18:20:00	0	-3.1162	11.84	1.2668
904	06/02/2008	18:30:00	0	-3.1657	11.838	1.2173
905	06/02/2008	18:40:00	0	-3.2146	11.838	1.1684
906	06/02/2008	18:50:00	0	-3.2653	11.832	1.1177
907	06/02/2008	19:00:00	0	-3.3155	11.804	1.0675
908	06/02/2008	19:10:00	0	-3.3663	11.783	1.0167
909	06/02/2008	19:20:00	0	-3.4164	11.768	0.9666
910	06/02/2008	19:30:00	0	-3.4684	11.76	0.9146
911	06/02/2008	19:40:00	0	-3.5147	11.753	0.8683
912	06/02/2008	19:50:00	0	-3.5586	11.74	0.8242
913	06/02/2008	20:00:00	0	-3.6058	11.739	0.7772
914	06/02/2008	20:10:00	0	-3.6458	11.737	0.7372
915	06/02/2008	20:20:00	0	-3.6865	11.744	0.6965
916	06/02/2008	20:30:00	0	-3.7268	11.759	0.6562
917	06/02/2008	20:40:00	0	-3.7619	11.779	0.6211
918	06/02/2008	20:50:00	0	-3.8011	11.781	0.5819
919	06/02/2008	21:00:00	0	-3.8382	11.784	0.5448
920	06/02/2008	21:10:00	0	-3.8708	11.781	0.5122
921	06/02/2008	21:20:00	0	-3.8991	11.782	0.4839
922	06/02/2008	21:30:00	0	-3.9259	11.78	0.4571
923	06/02/2008	21:40:00	0	-3.9527	11.781	0.4303
924	06/02/2008	21:50:00	0	-3.9767	11.784	0.4063
925	06/02/2008	22:00:00	0	-3.9982	11.781	0.3848
926	06/02/2008	22:10:00	0	-4.0168	11.776	0.3662
927	06/02/2008	22:20:00	0	-4.0338	11.776	0.3492
928	06/02/2008	22:30:00	0	-4.0503	11.777	0.3327
929	06/02/2008	22:40:00	0	-4.0618	11.776	0.3212
930	06/02/2008	22:50:00	0	-4.071	11.767	0.312
931	06/02/2008	23:00:00	0	-4.0779	11.761	0.3051
932	06/02/2008	23:10:00	0	-4.081	11.763	0.302
933	06/02/2008	23:20:00	0	-4.0826	11.76	0.3004
934	06/02/2008	23:30:00	0	-4.0852	11.753	0.2978
935	06/02/2008	23:40:00	0	-4.0818	11.754	0.3012
936	06/02/2008	23:50:00	0	-4.0728	11.746	0.3102
937	07/02/2008	00:00:00	0	-4.0583	11.744	0.3247
938	07/02/2008	00:10:00	0	-4.0449	11.741	0.3381
939	07/02/2008	00:20:00	0	-4.0274	11.744	0.3556
940	07/02/2008	00:30:00	0	-4.0078	11.745	0.3752
941	07/02/2008	00:40:00	0	-3.989	11.745	0.394
942	07/02/2008	00:50:00	0	-3.9684	11.742	0.4146
943	07/02/2008	01:00:00	0	-3.9491	11.751	0.4339
944	07/02/2008	01:10:00	0	-3.9347	11.759	0.4483
945	07/02/2008	01:20:00	0	-3.9134	11.77	0.4686
946	07/02/2008	01:30:00	0	-3.8823	11.777	0.5007
947	07/02/2008	01:40:00	0	-3.8478	11.771	0.5352
948	07/02/2008	01:50:00	0	-3.8043	11.771	0.5787
949	07/02/2008	02:00:00	0	-3.7582	11.81	0.6248
950	07/02/2008	02:10:00	0	-3.7096	11.812	0.6734
951	07/02/2008	02:20:00	0	-3.6609	11.805	0.7221
952	07/02/2008	02:30:00	0	-3.6106	11.8	0.7724
953	07/02/2008	02:40:00	0	-3.5578	11.803	0.8252
954	07/02/2008	02:50:00	0	-3.5062	11.809	0.8768
955	07/02/2008	03:00:00	0	-3.4547	11.811	0.9283
956	07/02/2008	03:10:00	0	-3.4063	11.813	0.9767
957	07/02/2008	03:20:00	0	-3.3572	11.813	1.0258
958	07/02/2008	03:30:00	0	-3.3085	11.814	1.0745
959	07/02/2008	03:40:00	0	-3.2663	11.814	1.1167
960	07/02/2008	03:50:00	0	-3.2245	11.813	1.1585
961	07/02/2008	04:00:00	0	-3.1856	11.813	1.1974
962	07/02/2008	04:10:00	0	-3.1519	11.815	1.2311
963	07/02/2008	04:20:00	0	-3.1271	11.815	1.2559
964	07/02/2008	04:30:00	0	-3.1085	11.816	1.2745
965	07/02/2008	04:40:00	0	-3.0952	11.818	1.2878
966	07/02/2008	04:50:00	0	-3.0868	11.818	1.2962
967	07/02/2008	05:00:00	0	-3.0856	11.82	1.2974
968	07/02/2008	05:10:00	0	-3.0893	11.82	1.2937
969	07/02/2008	05:20:00	0	-3.1001	11.821	1.2829
970	07/02/2008	05:30:00	0	-3.1143	11.822	1.2687
971	07/02/2008	05:40:00	0	-3.1348	11.823	1.2482
972	07/02/2008	05:50:00	0	-3.1653	11.823	1.2177
973	07/02/2008	06:00:00	0	-3.2019	11.822	1.1811
974	07/02/2008	06:10:00	0	-3.2406	11.82	1.1424
975	07/02/2008	06:20:00	0	-3.2794	11.814	1.1036
976	07/02/2008	06:30:00	0	-3.322	11.81	1.061
977	07/02/2008	06:40:00	0	-3.3676	11.799	1.0154
978	07/02/2008	06:50:00	0	-3.4127	11.779	0.9703
979	07/02/2008	07:00:00	0	-3.4593	11.769	0.9237
980	07/02/2008	07:10:00	0	-3.5011	11.768	0.8819
981	07/02/2008	07:20:00	0	-3.5417	11.765	0.8413
982	07/02/2008	07:30:00	0	-3.5814	11.763	0.8016
983	07/02/2008	07:40:00	0	-3.6243	11.761	0.7587
984	07/02/2008	07:50:00	0	-3.6663	11.763	0.7167
985	07/02/2008	08:00:00	0	-3.7077	11.764	0.6753
986	07/02/2008	08:10:00	0	-3.7465	11.766	0.6365
987	07/02/2008	08:20:00	0	-3.783	11.771	0.6
988	07/02/2008	08:30:00	0	-3.82	11.769	0.563
989	07/02/2008	08:40:00	0	-3.8573	11.772	0.5257
990	07/02/2008	08:50:00	0	-3.8967	11.77	0.4863
991	07/02/2008	09:00:00	0	-3.9285	11.771	0.4545
992	07/02/2008	09:10:00	0	-3.9556	11.771	0.4274
993	07/02/2008	09:20:00	0	-3.9875	11.773	0.3955
994	07/02/2008	09:30:00	0	-4.0148	11.767	0.3682
995	07/02/2008	09:40:00	0	-4.0377	11.768	0.3453
996	07/02/2008	09:50:00	0	-4.0603	11.763	0.3227
997	07/02/2008	10:00:00	0	-4.0809	11.765	0.3021
998	07/02/2008	10:10:00	0	-4.0938	11.76	0.2892
999	07/02/2008	10:20:00	0	-4.1106	11.752	0.2724
1000	07/02/2008	10:30:00	0	-4.1254	11.745	0.2576
1001	07/02/2008	10:40:00	0	-4.144	11.734	0.239
1002	07/02/2008	10:50:00	0	-4.1536	11.727	0.2294



1003	07/02/2008	11:00:00	0	-4.1598	11.716	0.2232
1004	07/02/2008	11:10:00	0	-4.1661	11.708	0.2169
1005	07/02/2008	11:20:00	0	-4.1705	11.705	0.2125
1006	07/02/2008	11:30:00	0	-4.1732	11.697	0.2098
1007	07/02/2008	11:40:00	0	-4.1738	11.688	0.2082
1008	07/02/2008	11:50:00	0	-4.185	11.683	0.218
1009	07/02/2008	12:00:00	0	-4.1497	11.678	0.2333
1010	07/02/2008	12:10:00	0	-4.1409	11.668	0.2421
1011	07/02/2008	12:20:00	0	-4.1251	11.663	0.2579
1012	07/02/2008	12:30:00	0	-4.1082	11.659	0.2748
1013	07/02/2008	12:40:00	0	-4.0867	11.662	0.2963
1014	07/02/2008	12:50:00	0	-4.0759	11.658	0.3071
1015	07/02/2008	13:00:00	0	-4.0543	11.665	0.3287
1016	07/02/2008	13:10:00	0	-4.0319	11.643	0.3511
1017	07/02/2008	13:20:00	0	-4.0163	11.657	0.3667
1018	07/02/2008	13:30:00	0	-3.9958	11.668	0.3872
1019	07/02/2008	13:40:00	0	-3.9599	11.675	0.4231
1020	07/02/2008	13:50:00	0	-3.9181	11.693	0.4649
1021	07/02/2008	14:00:00	0	-3.8663	11.756	0.5167
1022	07/02/2008	14:10:00	0	-3.8129	11.775	0.5701
1023	07/02/2008	14:20:00	0	-3.7595	11.783	0.6235
1024	07/02/2008	14:30:00	0	-3.7047	11.793	0.6783
1025	07/02/2008	14:40:00	0	-3.6504	11.774	0.7326
1026	07/02/2008	14:50:00	0	-3.5964	11.781	0.7866
1027	07/02/2008	15:00:00	0	-3.5412	11.786	0.8418
1028	07/02/2008	15:10:00	0	-3.488	11.789	0.895
1029	07/02/2008	15:20:00	0	-3.4351	11.791	0.9479
1030	07/02/2008	15:30:00	0	-3.3803	11.792	1.0027
1031	07/02/2008	15:40:00	0	-3.3276	11.791	1.0554
1032	07/02/2008	15:50:00	0	-3.2783	11.793	1.1047
1033	07/02/2008	16:00:00	0	-3.231	11.795	1.152
1034	07/02/2008	16:10:00	0	-3.1859	11.795	1.1971
1035	07/02/2008	16:20:00	0	-3.1445	11.797	1.2385
1036	07/02/2008	16:30:00	0	-3.1056	11.8	1.2774
1037	07/02/2008	16:40:00	0	-3.0712	11.802	1.3118
1038	07/02/2008	16:50:00	0	-3.0408	11.802	1.3422
1039	07/02/2008	17:00:00	0	-3.0133	11.804	1.3697
1040	07/02/2008	17:10:00	0	-2.9914	11.806	1.3916
1041	07/02/2008	17:20:00	0	-2.98	11.807	1.403
1042	07/02/2008	17:30:00	0	-2.9729	11.807	1.4101
1043	07/02/2008	17:40:00	0	-2.9755	11.809	1.4075
1044	07/02/2008	17:50:00	0	-2.9804	11.81	1.4026
1045	07/02/2008	18:00:00	0	-2.9936	11.809	1.3894
1046	07/02/2008	18:10:00	0	-3.0108	11.81	1.3722
1047	07/02/2008	18:20:00	0	-3.037	11.812	1.346
1048	07/02/2008	18:30:00	0	-3.0677	11.812	1.3153
1049	07/02/2008	18:40:00	0	-3.1031	11.816	1.2799
1050	07/02/2008	18:50:00	0	-3.1409	11.815	1.2421
1051	07/02/2008	19:00:00	0	-3.1858	11.816	1.1972
1052	07/02/2008	19:10:00	0	-3.2328	11.815	1.1502
1053	07/02/2008	19:20:00	0	-3.28	11.813	1.103
1054	07/02/2008	19:30:00	0	-3.3302	11.798	1.0528
1055	07/02/2008	19:40:00	0	-3.3785	11.774	1.0045
1056	07/02/2008	19:50:00	0	-3.4271	11.753	0.9559
1057	07/02/2008	20:00:00	0	-3.4748	11.747	0.9081
1058	07/02/2008	20:10:00	0	-3.5213	11.737	0.8617
1059	07/02/2008	20:20:00	0	-3.5647	11.737	0.8183
1060	07/02/2008	20:30:00	0	-3.6063	11.731	0.7767
1061	07/02/2008	20:40:00	0	-3.6438	11.728	0.7392
1062	07/02/2008	20:50:00	0	-3.6836	11.73	0.6994
1063	07/02/2008	21:00:00	0	-3.7254	11.73	0.6576
1064	07/02/2008	21:10:00	0	-3.764	11.731	0.619
1065	07/02/2008	21:20:00	0	-3.8004	11.729	0.5826
1066	07/02/2008	21:30:00	0	-3.8338	11.733	0.5492
1067	07/02/2008	21:40:00	0	-3.8666	11.732	0.5164
1068	07/02/2008	21:50:00	0	-3.9003	11.736	0.4827
1069	07/02/2008	22:00:00	0	-3.9313	11.734	0.4517
1070	07/02/2008	22:10:00	0	-3.9561	11.73	0.4269
1071	07/02/2008	22:20:00	0	-3.9795	11.732	0.4035
1072	07/02/2008	22:30:00	0	-3.9989	11.733	0.3841
1073	07/02/2008	22:40:00	0	-4.0209	11.736	0.3621
1074	07/02/2008	22:50:00	0	-4.0402	11.747	0.3428
1075	07/02/2008	23:00:00	0	-4.0546	11.748	0.3284
1076	07/02/2008	23:10:00	0	-4.066	11.741	0.317
1077	07/02/2008	23:20:00	0	-4.0743	11.741	0.3087
1078	07/02/2008	23:30:00	0	-4.0794	11.733	0.3036
1079	07/02/2008	23:40:00	0	-4.0793	11.731	0.3037
1080	07/02/2008	23:50:00	0	-4.0791	11.724	0.3039
1081	08/02/2008	00:00:00	0	-4.071	11.715	0.312
1082	08/02/2008	00:10:00	0	-4.0611	11.71	0.3219
1083	08/02/2008	00:20:00	0	-4.0489	11.702	0.3341
1084	08/02/2008	00:30:00	0	-4.0305	11.692	0.3525
1085	08/02/2008	00:40:00	0	-4.0119	11.689	0.3711
1086	08/02/2008	00:50:00	0	-3.9907	11.688	0.3923
1087	08/02/2008	01:00:00	0	-3.9724	11.694	0.4106
1088	08/02/2008	01:10:00	0	-3.954	11.695	0.429
1089	08/02/2008	01:20:00	0	-3.9593	11.698	0.4237
1090	08/02/2008	01:30:00	0	-3.9327	11.71	0.4503
1091	08/02/2008	01:40:00	0	-3.8893	11.719	0.4937
1092	08/02/2008	01:50:00	0	-3.8502	11.734	0.5328
1093	08/02/2008	02:00:00	0	-3.8049	11.761	0.5781
1094	08/02/2008	02:10:00	0	-3.7577	11.78	0.6253
1095	08/02/2008	02:20:00	0	-3.7099	11.784	0.6731
1096	08/02/2008	02:30:00	0	-3.6616	11.785	0.7214
1097	08/02/2008	02:40:00	0	-3.612	11.776	0.771
1098	08/02/2008	02:50:00	0	-3.5609	11.776	0.8221
1099	08/02/2008	03:00:00	0	-3.5107	11.78	0.8723
1100	08/02/2008	03:10:00	0	-3.4613	11.784	0.9217
1101	08/02/2008	03:20:00	0	-3.4122	11.787	0.9708
1102	08/02/2008	03:30:00	0	-3.3608	11.789	1.0222
1103	08/02/2008	03:40:00	0	-3.3115	11.789	1.0715
1104	08/02/2008	03:50:00	0	-3.2646	11.789	1.1184
1105	08/02/2008	04:00:00	0	-3.217	11.79	1.166
1106	08/02/2008	04:10:00	0	-3.1725	11.79	1.2105
1107	08/02/2008	04:20:00	0	-3.132	11.79	1.251
1108	08/02/2008	04:30:00	0	-3.0942	11.792	1.2888
1109	08/02/2008	04:40:00	0	-3.0592	11.794	1.3238
1110	08/02/2008	04:50:00	0	-3.0273	11.794	1.3557
1111	08/02/2008	05:00:00	0	-3.0047	11.796	1.3783
1112	08/02/2008	05:10:00	0	-2.9863	11.797	1.3967
1113	08/02/2008	05:20:00	0	-2.9736	11.798	1.4094
1114	08/02/2008	05:30:00	0	-2.9683	11.799	1.4147

1115	08/02/2008	05:40:00	0	-2.9702	11.801	1.4128
1116	08/02/2008	05:50:00	0	-2.9773	11.802	1.4057
1117	08/02/2008	06:00:00	0	-2.9928	11.803	1.3902
1118	08/02/2008	06:10:00	0	-3.0144	11.805	1.3686
1119	08/02/2008	06:20:00	0	-3.0416	11.806	1.3414
1120	08/02/2008	06:30:00	0	-3.0733	11.806	1.3097
1121	08/02/2008	06:40:00	0	-3.1129	11.807	1.2701
1122	08/02/2008	06:50:00	0	-3.1531	11.805	1.2299
1123	08/02/2008	07:00:00	0	-3.1992	11.803	1.1838
1124	08/02/2008	07:10:00	0	-3.2451	11.802	1.1379
1125	08/02/2008	07:20:00	0	-3.2928	11.783	1.0902
1126	08/02/2008	07:30:00	0	-3.3445	11.766	1.0385
1127	08/02/2008	07:40:00	0	-3.3959	11.752	0.9871
1128	08/02/2008	07:50:00	0	-3.4455	11.747	0.9375
1129	08/02/2008	08:00:00	0	-3.495	11.742	0.888
1130	08/02/2008	08:10:00	0	-3.544	11.737	0.839
1131	08/02/2008	08:20:00	0	-3.5877	11.732	0.7953
1132	08/02/2008	08:30:00	0	-3.6298	11.729	0.7532
1133	08/02/2008	08:40:00	0	-3.6725	11.728	0.7105
1134	08/02/2008	08:50:00	0	-3.7174	11.731	0.6656
1135	08/02/2008	09:00:00	0	-3.7587	11.729	0.6243
1136	08/02/2008	09:10:00	0	-3.7999	11.728	0.5831
1137	08/02/2008	09:20:00	0	-3.8381	11.734	0.5449
1138	08/02/2008	09:30:00	0	-3.8714	11.732	0.5116
1139	08/02/2008	09:40:00	0	-3.9026	11.73	0.4804
1140	08/02/2008	09:50:00	0	-3.9385	11.727	0.4445
1141	08/02/2008	10:00:00	0	-3.9648	11.729	0.4182
1142	08/02/2008	10:10:00	0	-3.9898	11.74	0.3932
1143	08/02/2008	10:20:00	0	-4.0182	11.745	0.3648
1144	08/02/2008	10:30:00	0	-8.6601	11.419	-4.2771

Serial Number						
1027980						
Project ID						
RCM4738						
Location						
BH04						
Channel 1						
Identification						
LEVEL						
Unit						
m						
Offset						
0.00 m 5.168						
Altitude						
0 m						
Channel 2						
Identification						
TEMPERATURE						
Unit						
Deg C						
	Date	Time	100 ms	LEVEL	TEMPERATURE	
16	31/01/2008	14:30:00	0	-3.6678	12.499	1.5002
17	01/02/2008	14:40:00	0	-3.6684	12.568	1.4996
18	02/02/2008	14:50:00	0	-3.6685	12.592	1.4995
19	03/02/2008	15:00:00	0	-3.6682	12.598	1.4998
20	04/02/2008	15:10:00	0	-3.6687	12.603	1.4993
21	05/02/2008	15:20:00	0	-3.6686	12.606	1.4994
22	06/02/2008	15:30:00	0	-3.6694	12.605	1.4986
23	07/02/2008	15:40:00	0	-3.6698	12.608	1.4982
24	08/02/2008	15:50:00	0	-3.6693	12.608	1.4987
25	09/02/2008	16:00:00	0	-3.67	12.615	1.498
26	10/02/2008	16:10:00	0	-3.6698	12.611	1.4982
27	11/02/2008	16:20:00	0	-3.6701	12.607	1.4979
28	12/02/2008	16:30:00	0	-3.6699	12.609	1.4981
29	13/02/2008	16:40:00	0	-3.6704	12.608	1.4976
30	14/02/2008	16:50:00	0	-3.6702	12.609	1.4978
31	15/02/2008	17:00:00	0	-3.6697	12.609	1.4983
32	16/02/2008	17:10:00	0	-3.6712	12.609	1.4968
33	17/02/2008	17:20:00	0	-3.6711	12.61	1.4969
34	18/02/2008	17:30:00	0	-3.671	12.609	1.497
35	19/02/2008	17:40:00	0	-3.6709	12.611	1.4971
36	20/02/2008	17:50:00	0	-3.671	12.612	1.497
37	21/02/2008	18:00:00	0	-3.6707	12.611	1.4973
38	22/02/2008	18:10:00	0	-3.6706	12.612	1.4974
39	23/02/2008	18:20:00	0	-3.6716	12.61	1.4964
40	24/02/2008	18:30:00	0	-3.671	12.612	1.497
41	25/02/2008	18:40:00	0	-3.6723	12.613	1.4957
42	26/02/2008	18:50:00	0	-3.6722	12.615	1.4958
43	27/02/2008	19:00:00	0	-3.6715	12.613	1.4965
44	28/02/2008	19:10:00	0	-3.6718	12.613	1.4962
45	29/02/2008	19:20:00	0	-3.6724	12.613	1.4956
46	01/03/2008	19:30:00	0	-3.673	12.616	1.495
47	02/03/2008	19:40:00	0	-3.6723	12.616	1.4957
48	03/03/2008	19:50:00	0	-3.6726	12.618	1.4954
49	04/03/2008	20:00:00	0	-3.6731	12.618	1.4949
50	05/03/2008	20:10:00	0	-3.6733	12.617	1.4947
51	06/03/2008	20:20:00	0	-3.6729	12.618	1.4951
52	07/03/2008	20:30:00	0	-3.6724	12.62	1.4956
53	08/03/2008	20:40:00	0	-3.6723	12.619	1.4957
54	09/03/2008	20:50:00	0	-3.6739	12.619	1.4941
55	10/03/2008	21:00:00	0	-3.674	12.62	1.494
56	11/03/2008	21:10:00	0	-3.674	12.62	1.494
57	12/03/2008	21:20:00	0	-3.6749	12.62	1.4931
58	13/03/2008	21:30:00	0	-3.6742	12.62	1.4938
59	14/03/2008	21:40:00	0	-3.6739	12.621	1.4941
60	15/03/2008	21:50:00	0	-3.6742	12.621	1.4938
61	16/03/2008	22:00:00	0	-3.6753	12.621	1.4927
62	17/03/2008	22:10:00	0	-3.6743	12.621	1.4937
63	18/03/2008	22:20:00	0	-3.675	12.62	1.493
64	19/03/2008	22:30:00	0	-3.6747	12.621	1.4933
65	20/03/2008	22:40:00	0	-3.675	12.622	1.493
66	21/03/2008	22:50:00	0	-3.6747	12.62	1.4933
67	22/03/2008	23:00:00	0	-3.6754	12.621	1.4926
68	23/03/2008	23:10:00	0	-3.6757	12.621	1.4923
69	24/03/2008	23:20:00	0	-3.6753	12.621	1.4927
70	25/03/2008	23:30:00	0	-3.6756	12.621	1.4924
71	26/03/2008	23:40:00	0	-3.6755	12.621	1.4925
72	27/03/2008	23:50:00	0	-3.6765	12.623	1.4915
73	01/02/2008	00:00:00	0	-3.6755	12.622	1.4925
74	01/02/2008	00:10:00	0	-3.6768	12.622	1.4912
75	01/02/2008	00:20:00	0	-3.6766	12.623	1.4914
76	01/02/2008	00:30:00	0	-3.6767	12.623	1.4913
77	01/02/2008	00:40:00	0	-3.6771	12.622	1.4909
78	01/02/2008	00:50:00	0	-3.6786	12.624	1.4894
79	01/02/2008	01:00:00	0	-3.6779	12.623	1.4901
80	01/02/2008	01:10:00	0	-3.6773	12.624	1.4907
81	01/02/2008	01:20:00	0	-3.6773	12.624	1.4907
82	01/02/2008	01:30:00	0	-3.6776	12.622	1.4904
83	01/02/2008	01:40:00	0	-3.6773	12.624	1.4907
84	01/02/2008	01:50:00	0	-3.6782	12.624	1.4898
85	01/02/2008	02:00:00	0	-3.6787	12.623	1.4893
86	01/02/2008	02:10:00	0	-3.6791	12.624	1.4889
87	01/02/2008	02:20:00	0	-3.6774	12.625	1.4906
88	01/02/2008	02:30:00	0	-3.6795	12.625	1.4885
89	01/02/2008	02:40:00	0	-3.6786	12.626	1.4894
90	01/02/2008	02:50:00	0	-3.6787	12.627	1.4893
91	01/02/2008	03:00:00	0	-3.678	12.627	1.49
92	01/02/2008	03:10:00	0	-3.6789	12.625	1.4891
93	01/02/2008	03:20:00	0	-3.6803	12.626	1.4877
94	01/02/2008	03:30:00	0	-3.679	12.626	1.489
95	01/02/2008	03:40:00	0	-3.6799	12.625	1.4881
96	01/02/2008	03:50:00	0	-3.6794	12.626	1.4886
97	01/02/2008	04:00:00	0	-3.6816	12.627	1.4864
98	01/02/2008	04:10:00	0	-3.6803	12.626	1.4877
99	01/02/2008	04:20:00	0	-3.6807	12.627	1.4873
100	01/02/2008	04:30:00	0	-3.6812	12.627	1.4868
101	01/02/2008	04:40:00	0	-3.6811	12.627	1.4869
102	01/02/2008	04:50:00	0	-3.681	12.63	1.487
103	01/02/2008	05:00:00	0	-3.6806	12.629	1.4874
104	01/02/2008	05:10:00	0	-3.6817	12.629	1.4863
105	01/02/2008	05:20:00	0	-3.6827	12.629	1.4853

106	01/02/2008	05:30:00	0	-3.6817	12.629	1.4863
107	01/02/2008	05:40:00	0	-3.6821	12.629	1.4859
108	01/02/2008	05:50:00	0	-3.6821	12.629	1.4859
109	01/02/2008	06:00:00	0	-3.6817	12.629	1.4863
110	01/02/2008	06:10:00	0	-3.6819	12.628	1.4861
111	01/02/2008	06:20:00	0	-3.6826	12.627	1.4854
112	01/02/2008	06:30:00	0	-3.6833	12.628	1.4847
113	01/02/2008	06:40:00	0	-3.6824	12.628	1.4856
114	01/02/2008	06:50:00	0	-3.6829	12.629	1.4851
115	01/02/2008	07:00:00	0	-3.6838	12.629	1.4842
116	01/02/2008	07:10:00	0	-3.6842	12.629	1.4838
117	01/02/2008	07:20:00	0	-3.6831	12.631	1.4849
118	01/02/2008	07:30:00	0	-3.6838	12.631	1.4842
119	01/02/2008	07:40:00	0	-3.6836	12.631	1.4844
120	01/02/2008	07:50:00	0	-3.6842	12.632	1.4838
121	01/02/2008	08:00:00	0	-3.6842	12.633	1.4838
122	01/02/2008	08:10:00	0	-3.6849	12.633	1.4831
123	01/02/2008	08:20:00	0	-3.6853	12.634	1.4827
124	01/02/2008	08:30:00	0	-3.684	12.634	1.484
125	01/02/2008	08:40:00	0	-3.6853	12.633	1.4827
126	01/02/2008	08:50:00	0	-3.6857	12.633	1.4823
127	01/02/2008	09:00:00	0	-3.6851	12.634	1.4829
128	01/02/2008	09:10:00	0	-3.6854	12.634	1.4826
129	01/02/2008	09:20:00	0	-3.6851	12.635	1.4829
130	01/02/2008	09:30:00	0	-3.6862	12.635	1.4818
131	01/02/2008	09:40:00	0	-3.6857	12.635	1.4823
132	01/02/2008	09:50:00	0	-3.6859	12.634	1.4821
133	01/02/2008	10:00:00	0	-3.6871	12.635	1.4809
134	01/02/2008	10:10:00	0	-3.6869	12.635	1.4811
135	01/02/2008	10:20:00	0	-3.6867	12.634	1.4813
136	01/02/2008	10:30:00	0	-3.6875	12.635	1.4805
137	01/02/2008	10:40:00	0	-3.6862	12.635	1.4818
138	01/02/2008	10:50:00	0	-3.6858	12.634	1.4822
139	01/02/2008	11:00:00	0	-3.6872	12.633	1.4808
140	01/02/2008	11:10:00	0	-3.6872	12.635	1.4808
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142	01/02/2008	11:30:00	0	-3.6874	12.634	1.4806
143	01/02/2008	11:40:00	0	-3.6873	12.634	1.4807
144	01/02/2008	11:50:00	0	-3.6885	12.635	1.4795
145	01/02/2008	12:00:00	0	-3.6871	12.635	1.4809
146	01/02/2008	12:10:00	0	-3.6877	12.635	1.4803
147	01/02/2008	12:20:00	0	-3.6881	12.635	1.4799
148	01/02/2008	12:30:00	0	-3.6877	12.634	1.4803
149	01/02/2008	12:40:00	0	-3.689	12.636	1.479
150	01/02/2008	12:50:00	0	-3.6882	12.636	1.4798
151	01/02/2008	13:00:00	0	-3.6883	12.636	1.4797
152	01/02/2008	13:10:00	0	-3.6882	12.635	1.4798
153	01/02/2008	13:20:00	0	-3.6885	12.636	1.4795
154	01/02/2008	13:30:00	0	-3.689	12.636	1.479
155	01/02/2008	13:40:00	0	-3.6893	12.636	1.4787
156	01/02/2008	13:50:00	0	-3.6897	12.636	1.4783
157	01/02/2008	14:00:00	0	-3.6891	12.637	1.4789
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159	01/02/2008	14:20:00	0	-3.6891	12.635	1.4789
160	01/02/2008	14:30:00	0	-3.6892	12.637	1.4788
161	01/02/2008	14:40:00	0	-3.6887	12.637	1.4793
162	01/02/2008	14:50:00	0	-3.6892	12.637	1.4788
163	01/02/2008	15:00:00	0	-3.6898	12.637	1.4782
164	01/02/2008	15:10:00	0	-3.6897	12.636	1.4783
165	01/02/2008	15:20:00	0	-3.6886	12.636	1.4794
166	01/02/2008	15:30:00	0	-3.6895	12.635	1.4785
167	01/02/2008	15:40:00	0	-3.689	12.634	1.479
168	01/02/2008	15:50:00	0	-3.6894	12.636	1.4786
169	01/02/2008	16:00:00	0	-3.6905	12.639	1.4775
170	01/02/2008	16:10:00	0	-3.6884	12.639	1.4796
171	01/02/2008	16:20:00	0	-3.6902	12.636	1.4778
172	01/02/2008	16:30:00	0	-3.6889	12.635	1.4791
173	01/02/2008	16:40:00	0	-3.6894	12.635	1.4786
174	01/02/2008	16:50:00	0	-3.6897	12.637	1.4783
175	01/02/2008	17:00:00	0	-3.6892	12.639	1.4788
176	01/02/2008	17:10:00	0	-3.6894	12.638	1.4786
177	01/02/2008	17:20:00	0	-3.6892	12.639	1.4788
178	01/02/2008	17:30:00	0	-3.6893	12.638	1.4787
179	01/02/2008	17:40:00	0	-3.6887	12.637	1.4793
180	01/02/2008	17:50:00	0	-3.6887	12.637	1.4793
181	01/02/2008	18:00:00	0	-3.689	12.636	1.479
182	01/02/2008	18:10:00	0	-3.6895	12.636	1.4785
183	01/02/2008	18:20:00	0	-3.6889	12.635	1.4791
184	01/02/2008	18:30:00	0	-3.6887	12.635	1.4793
185	01/02/2008	18:40:00	0	-3.6889	12.635	1.4791
186	01/02/2008	18:50:00	0	-3.6885	12.634	1.4795
187	01/02/2008	19:00:00	0	-3.689	12.634	1.479
188	01/02/2008	19:10:00	0	-3.6896	12.632	1.4784
189	01/02/2008	19:20:00	0	-3.6893	12.633	1.4787
190	01/02/2008	19:30:00	0	-3.6888	12.631	1.4792
191	01/02/2008	19:40:00	0	-3.6882	12.632	1.4798
192	01/02/2008	19:50:00	0	-3.6885	12.633	1.4795
193	01/02/2008	20:00:00	0	-3.6885	12.631	1.4795
194	01/02/2008	20:10:00	0	-3.6892	12.631	1.4788
195	01/02/2008	20:20:00	0	-3.6891	12.63	1.4789
196	01/02/2008	20:30:00	0	-3.6884	12.63	1.4796
197	01/02/2008	20:40:00	0	-3.6891	12.63	1.4789
198	01/02/2008	20:50:00	0	-3.6896	12.629	1.4784
199	01/02/2008	21:00:00	0	-3.6897	12.63	1.4783
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201	01/02/2008	21:20:00	0	-3.6889	12.63	1.4791
202	01/02/2008	21:30:00	0	-3.6894	12.63	1.4786
203	01/02/2008	21:40:00	0	-3.6884	12.63	1.4796
204	01/02/2008	21:50:00	0	-3.69	12.63	1.478
205	01/02/2008	22:00:00	0	-3.6895	12.629	1.4785
206	01/02/2008	22:10:00	0	-3.6894	12.63	1.4786
207	01/02/2008	22:20:00	0	-3.689	12.63	1.479
208	01/02/2008	22:30:00	0	-3.6892	12.63	1.4788
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210	01/02/2008	22:50:00	0	-3.6901	12.629	1.4779
211	01/02/2008	23:00:00	0	-3.6893	12.629	1.4787
212	01/02/2008	23:10:00	0	-3.69	12.63	1.478
213	01/02/2008	23:20:00	0	-3.6898	12.631	1.4782
214	01/02/2008	23:30:00	0	-3.6899	12.629	1.4781
215	01/02/2008	23:40:00	0	-3.6898	12.63	1.4782
216	01/02/2008	23:50:00	0	-3.6891	12.63	1.4789

217	02/02/2008	00:00:00	0	-3.6895	12.631	1.4785
218	02/02/2008	00:10:00	0	-3.6896	12.631	1.4784
219	02/02/2008	00:20:00	0	-3.6888	12.631	1.4792
220	02/02/2008	00:30:00	0	-3.6899	12.631	1.4781
221	02/02/2008	00:40:00	0	-3.6893	12.632	1.4787
222	02/02/2008	00:50:00	0	-3.6887	12.63	1.4793
223	02/02/2008	01:00:00	0	-3.689	12.631	1.479
224	02/02/2008	01:10:00	0	-3.6893	12.631	1.4787
225	02/02/2008	01:20:00	0	-3.69	12.631	1.478
226	02/02/2008	01:30:00	0	-3.6896	12.63	1.4784
227	02/02/2008	01:40:00	0	-3.6903	12.631	1.4777
228	02/02/2008	01:50:00	0	-3.6894	12.632	1.4786
229	02/02/2008	02:00:00	0	-3.6901	12.631	1.4779
230	02/02/2008	02:10:00	0	-3.6902	12.631	1.4778
231	02/02/2008	02:20:00	0	-3.6898	12.631	1.4782
232	02/02/2008	02:30:00	0	-3.6893	12.63	1.4787
233	02/02/2008	02:40:00	0	-3.69	12.631	1.478
234	02/02/2008	02:50:00	0	-3.689	12.63	1.479
235	02/02/2008	03:00:00	0	-3.6894	12.631	1.4786
236	02/02/2008	03:10:00	0	-3.6898	12.63	1.4782
237	02/02/2008	03:20:00	0	-3.6902	12.631	1.4778
238	02/02/2008	03:30:00	0	-3.6895	12.631	1.4785
239	02/02/2008	03:40:00	0	-3.6898	12.63	1.4782
240	02/02/2008	03:50:00	0	-3.69	12.63	1.478
241	02/02/2008	04:00:00	0	-3.6893	12.629	1.4787
242	02/02/2008	04:10:00	0	-3.689	12.63	1.479
243	02/02/2008	04:20:00	0	-3.6892	12.629	1.4788
244	02/02/2008	04:30:00	0	-3.6894	12.629	1.4786
245	02/02/2008	04:40:00	0	-3.6903	12.628	1.4777
246	02/02/2008	04:50:00	0	-3.6901	12.629	1.4779
247	02/02/2008	05:00:00	0	-3.69	12.627	1.478
248	02/02/2008	05:10:00	0	-3.691	12.627	1.477
249	02/02/2008	05:20:00	0	-3.6912	12.628	1.4768
250	02/02/2008	05:30:00	0	-3.691	12.627	1.477
251	02/02/2008	05:40:00	0	-3.6906	12.627	1.4774
252	02/02/2008	05:50:00	0	-3.6917	12.627	1.4763
253	02/02/2008	06:00:00	0	-3.6912	12.627	1.4768
254	02/02/2008	06:10:00	0	-3.6916	12.627	1.4764
255	02/02/2008	06:20:00	0	-3.6903	12.627	1.4777
256	02/02/2008	06:30:00	0	-3.6907	12.627	1.4773
257	02/02/2008	06:40:00	0	-3.6914	12.627	1.4766
258	02/02/2008	06:50:00	0	-3.6922	12.627	1.4758
259	02/02/2008	07:00:00	0	-3.6918	12.627	1.4762
260	02/02/2008	07:10:00	0	-3.6923	12.626	1.4757
261	02/02/2008	07:20:00	0	-3.6913	12.627	1.4767
262	02/02/2008	07:30:00	0	-3.6918	12.627	1.4762
263	02/02/2008	07:40:00	0	-3.6914	12.627	1.4766
264	02/02/2008	07:50:00	0	-3.6928	12.626	1.4752
265	02/02/2008	08:00:00	0	-3.6925	12.627	1.4755
266	02/02/2008	08:10:00	0	-3.6931	12.627	1.4749
267	02/02/2008	08:20:00	0	-3.6921	12.625	1.4759
268	02/02/2008	08:30:00	0	-3.6928	12.625	1.4752
269	02/02/2008	08:40:00	0	-3.6926	12.627	1.4754
270	02/02/2008	08:50:00	0	-3.6936	12.626	1.4744
271	02/02/2008	09:00:00	0	-3.6929	12.626	1.4751
272	02/02/2008	09:10:00	0	-3.6929	12.626	1.4751
273	02/02/2008	09:20:00	0	-3.6932	12.625	1.4748
274	02/02/2008	09:30:00	0	-3.694	12.627	1.474
275	02/02/2008	09:40:00	0	-3.6935	12.627	1.4745
276	02/02/2008	09:50:00	0	-3.6935	12.627	1.4745
277	02/02/2008	10:00:00	0	-3.6917	12.626	1.4763
278	02/02/2008	10:10:00	0	-3.6938	12.627	1.4742
279	02/02/2008	10:20:00	0	-3.6934	12.627	1.4746
280	02/02/2008	10:30:00	0	-3.6937	12.629	1.4743
281	02/02/2008	10:40:00	0	-3.6944	12.627	1.4736
282	02/02/2008	10:50:00	0	-3.6937	12.627	1.4743
283	02/02/2008	11:00:00	0	-3.6943	12.627	1.4737
284	02/02/2008	11:10:00	0	-3.6943	12.628	1.4737
285	02/02/2008	11:20:00	0	-3.6942	12.627	1.4738
286	02/02/2008	11:30:00	0	-3.6946	12.627	1.4734
287	02/02/2008	11:40:00	0	-3.6939	12.629	1.4741
288	02/02/2008	11:50:00	0	-3.6944	12.627	1.4736
289	02/02/2008	12:00:00	0	-3.695	12.628	1.473
290	02/02/2008	12:10:00	0	-3.6945	12.629	1.4735
291	02/02/2008	12:20:00	0	-3.6948	12.629	1.4732
292	02/02/2008	12:30:00	0	-3.6945	12.628	1.4735
293	02/02/2008	12:40:00	0	-3.6954	12.629	1.4726
294	02/02/2008	12:50:00	0	-3.6943	12.63	1.4737
295	02/02/2008	13:00:00	0	-3.695	12.63	1.473
296	02/02/2008	13:10:00	0	-3.6953	12.629	1.4727
297	02/02/2008	13:20:00	0	-3.695	12.63	1.473
298	02/02/2008	13:30:00	0	-3.6957	12.63	1.4723
299	02/02/2008	13:40:00	0	-3.6961	12.63	1.4719
300	02/02/2008	13:50:00	0	-3.6952	12.631	1.4728
301	02/02/2008	14:00:00	0	-3.6958	12.631	1.4722
302	02/02/2008	14:10:00	0	-3.6957	12.631	1.4723
303	02/02/2008	14:20:00	0	-3.6949	12.631	1.4731
304	02/02/2008	14:30:00	0	-3.6956	12.631	1.4724
305	02/02/2008	14:40:00	0	-3.6957	12.631	1.4723
306	02/02/2008	14:50:00	0	-3.6959	12.632	1.4721
307	02/02/2008	15:00:00	0	-3.6964	12.631	1.4716
308	02/02/2008	15:10:00	0	-3.6959	12.63	1.4721
309	02/02/2008	15:20:00	0	-3.6965	12.631	1.4715
310	02/02/2008	15:30:00	0	-3.6964	12.632	1.4716
311	02/02/2008	15:40:00	0	-3.6966	12.632	1.4714
312	02/02/2008	15:50:00	0	-3.6965	12.632	1.4715
313	02/02/2008	16:00:00	0	-3.6971	12.632	1.4709
314	02/02/2008	16:10:00	0	-3.696	12.631	1.472
315	02/02/2008	16:20:00	0	-3.697	12.63	1.471
316	02/02/2008	16:30:00	0	-3.6963	12.631	1.4717
317	02/02/2008	16:40:00	0	-3.6963	12.632	1.4717
318	02/02/2008	16:50:00	0	-3.6973	12.63	1.4707
319	02/02/2008	17:00:00	0	-3.6972	12.631	1.4708
320	02/02/2008	17:10:00	0	-3.697	12.631	1.471
321	02/02/2008	17:20:00	0	-3.6971	12.632	1.4709
322	02/02/2008	17:30:00	0	-3.6974	12.63	1.4706
323	02/02/2008	17:40:00	0	-3.6967	12.632	1.4713
324	02/02/2008	17:50:00	0	-3.6975	12.631	1.4705
325	02/02/2008	18:00:00	0	-3.6976	12.631	1.4704
326	02/02/2008	18:10:00	0	-3.6973	12.631	1.4707
327	02/02/2008	18:20:00	0	-3.6982	12.631	1.4698

328	02/02/2008	18:30:00	0	-3.6976	12.631	1.4704
329	02/02/2008	18:40:00	0	-3.698	12.631	1.47
330	02/02/2008	18:50:00	0	-3.698	12.631	1.47
331	02/02/2008	19:00:00	0	-3.6985	12.631	1.4695
332	02/02/2008	19:10:00	0	-3.6984	12.631	1.4696
333	02/02/2008	19:20:00	0	-3.6985	12.631	1.4695
334	02/02/2008	19:30:00	0	-3.6983	12.632	1.4697
335	02/02/2008	19:40:00	0	-3.6982	12.633	1.4698
336	02/02/2008	19:50:00	0	-3.6983	12.633	1.4697
337	02/02/2008	20:00:00	0	-3.6989	12.631	1.4691
338	02/02/2008	20:10:00	0	-3.6989	12.633	1.4691
339	02/02/2008	20:20:00	0	-3.6989	12.631	1.4691
340	02/02/2008	20:30:00	0	-3.6995	12.632	1.4685
341	02/02/2008	20:40:00	0	-3.7	12.632	1.468
342	02/02/2008	20:50:00	0	-3.6996	12.632	1.4684
343	02/02/2008	21:00:00	0	-3.6992	12.633	1.4688
344	02/02/2008	21:10:00	0	-3.7002	12.631	1.4678
345	02/02/2008	21:20:00	0	-3.6996	12.632	1.4684
346	02/02/2008	21:30:00	0	-3.6996	12.632	1.4684
347	02/02/2008	21:40:00	0	-3.7002	12.632	1.4678
348	02/02/2008	21:50:00	0	-3.7002	12.632	1.4678
349	02/02/2008	22:00:00	0	-3.7001	12.632	1.4679
350	02/02/2008	22:10:00	0	-3.6999	12.633	1.4681
351	02/02/2008	22:20:00	0	-3.6998	12.633	1.4682
352	02/02/2008	22:30:00	0	-3.7007	12.633	1.4673
353	02/02/2008	22:40:00	0	-3.7001	12.634	1.4679
354	02/02/2008	22:50:00	0	-3.7009	12.634	1.4671
355	02/02/2008	23:00:00	0	-3.7015	12.634	1.4665
356	02/02/2008	23:10:00	0	-3.7014	12.633	1.4666
357	02/02/2008	23:20:00	0	-3.7018	12.633	1.4662
358	02/02/2008	23:30:00	0	-3.7017	12.633	1.4663
359	02/02/2008	23:40:00	0	-3.7014	12.635	1.4666
360	02/02/2008	23:50:00	0	-3.7016	12.635	1.4664
361	03/02/2008	00:00:00	0	-3.7019	12.634	1.4661
362	03/02/2008	00:10:00	0	-3.7019	12.635	1.4661
363	03/02/2008	00:20:00	0	-3.7014	12.635	1.4666
364	03/02/2008	00:30:00	0	-3.7019	12.635	1.4661
365	03/02/2008	00:40:00	0	-3.7021	12.635	1.4659
366	03/02/2008	00:50:00	0	-3.7018	12.636	1.4662
367	03/02/2008	01:00:00	0	-3.7023	12.636	1.4657
368	03/02/2008	01:10:00	0	-3.7024	12.635	1.4656
369	03/02/2008	01:20:00	0	-3.7021	12.636	1.4659
370	03/02/2008	01:30:00	0	-3.7028	12.636	1.4652
371	03/02/2008	01:40:00	0	-3.7029	12.636	1.4651
372	03/02/2008	01:50:00	0	-3.703	12.636	1.465
373	03/02/2008	02:00:00	0	-3.7032	12.637	1.4648
374	03/02/2008	02:10:00	0	-3.7035	12.636	1.4645
375	03/02/2008	02:20:00	0	-3.7031	12.636	1.4649
376	03/02/2008	02:30:00	0	-3.7027	12.638	1.4653
377	03/02/2008	02:40:00	0	-3.7035	12.637	1.4645
378	03/02/2008	02:50:00	0	-3.7031	12.638	1.4649
379	03/02/2008	03:00:00	0	-3.7034	12.638	1.4646
380	03/02/2008	03:10:00	0	-3.7034	12.638	1.4646
381	03/02/2008	03:20:00	0	-3.7039	12.638	1.4641
382	03/02/2008	03:30:00	0	-3.7037	12.638	1.4643
383	03/02/2008	03:40:00	0	-3.7034	12.638	1.4646
384	03/02/2008	03:50:00	0	-3.7037	12.637	1.4643
385	03/02/2008	04:00:00	0	-3.7037	12.637	1.4643
386	03/02/2008	04:10:00	0	-3.704	12.638	1.464
387	03/02/2008	04:20:00	0	-3.7044	12.638	1.4636
388	03/02/2008	04:30:00	0	-3.7042	12.639	1.4638
389	03/02/2008	04:40:00	0	-3.7043	12.639	1.4637
390	03/02/2008	04:50:00	0	-3.7049	12.639	1.4631
391	03/02/2008	05:00:00	0	-3.705	12.639	1.463
392	03/02/2008	05:10:00	0	-3.705	12.639	1.463
393	03/02/2008	05:20:00	0	-3.7048	12.638	1.4632
394	03/02/2008	05:30:00	0	-3.705	12.639	1.463
395	03/02/2008	05:40:00	0	-3.7049	12.639	1.4631
396	03/02/2008	05:50:00	0	-3.706	12.64	1.462
397	03/02/2008	06:00:00	0	-3.7062	12.638	1.4618
398	03/02/2008	06:10:00	0	-3.7059	12.638	1.4621
399	03/02/2008	06:20:00	0	-3.7064	12.639	1.4616
400	03/02/2008	06:30:00	0	-3.7056	12.639	1.4624
401	03/02/2008	06:40:00	0	-3.7064	12.64	1.4616
402	03/02/2008	06:50:00	0	-3.7062	12.639	1.4618
403	03/02/2008	07:00:00	0	-3.7069	12.64	1.4611
404	03/02/2008	07:10:00	0	-3.706	12.64	1.462
405	03/02/2008	07:20:00	0	-3.7073	12.64	1.4607
406	03/02/2008	07:30:00	0	-3.7077	12.641	1.4603
407	03/02/2008	07:40:00	0	-3.7071	12.64	1.4609
408	03/02/2008	07:50:00	0	-3.7075	12.641	1.4605
409	03/02/2008	08:00:00	0	-3.7069	12.64	1.4611
410	03/02/2008	08:10:00	0	-3.7075	12.642	1.4605
411	03/02/2008	08:20:00	0	-3.7078	12.641	1.4602
412	03/02/2008	08:30:00	0	-3.7076	12.641	1.4604
413	03/02/2008	08:40:00	0	-3.7078	12.64	1.4602
414	03/02/2008	08:50:00	0	-3.7083	12.642	1.4597
415	03/02/2008	09:00:00	0	-3.7086	12.64	1.4594
416	03/02/2008	09:10:00	0	-3.7079	12.642	1.4601
417	03/02/2008	09:20:00	0	-3.7083	12.642	1.4597
418	03/02/2008	09:30:00	0	-3.709	12.642	1.459
419	03/02/2008	09:40:00	0	-3.7091	12.641	1.4589
420	03/02/2008	09:50:00	0	-3.7088	12.643	1.4592
421	03/02/2008	10:00:00	0	-3.7089	12.643	1.4591
422	03/02/2008	10:10:00	0	-3.7095	12.643	1.4585
423	03/02/2008	10:20:00	0	-3.7096	12.642	1.4584
424	03/02/2008	10:30:00	0	-3.7096	12.642	1.4584
425	03/02/2008	10:40:00	0	-3.7102	12.644	1.4578
426	03/02/2008	10:50:00	0	-3.7101	12.644	1.4579
427	03/02/2008	11:00:00	0	-3.7101	12.645	1.4579
428	03/02/2008	11:10:00	0	-3.7108	12.644	1.4572
429	03/02/2008	11:20:00	0	-3.7106	12.645	1.4574
430	03/02/2008	11:30:00	0	-3.71	12.646	1.458
431	03/02/2008	11:40:00	0	-3.7109	12.644	1.4571
432	03/02/2008	11:50:00	0	-3.7117	12.644	1.4563
433	03/02/2008	12:00:00	0	-3.7112	12.646	1.4568
434	03/02/2008	12:10:00	0	-3.7114	12.645	1.4566
435	03/02/2008	12:20:00	0	-3.7114	12.646	1.4566
436	03/02/2008	12:30:00	0	-3.7121	12.646	1.4559
437	03/02/2008	12:40:00	0	-3.7121	12.646	1.4559
438	03/02/2008	12:50:00	0	-3.7121	12.646	1.4559

439	03/02/2008	13:00:00	0	-3.7118	12.647	1.4562
440	03/02/2008	13:10:00	0	-3.7121	12.647	1.4559
441	03/02/2008	13:20:00	0	-3.7123	12.647	1.4557
442	03/02/2008	13:30:00	0	-3.7116	12.648	1.4564
443	03/02/2008	13:40:00	0	-3.7127	12.648	1.4553
444	03/02/2008	13:50:00	0	-3.7124	12.647	1.4556
445	03/02/2008	14:00:00	0	-3.7132	12.648	1.4548
446	03/02/2008	14:10:00	0	-3.7129	12.648	1.4551
447	03/02/2008	14:20:00	0	-3.7131	12.648	1.4549
448	03/02/2008	14:30:00	0	-3.7131	12.649	1.4549
449	03/02/2008	14:40:00	0	-3.7132	12.649	1.4548
450	03/02/2008	14:50:00	0	-3.7136	12.651	1.4544
451	03/02/2008	15:00:00	0	-3.7138	12.649	1.4542
452	03/02/2008	15:10:00	0	-3.7133	12.65	1.4547
453	03/02/2008	15:20:00	0	-3.7142	12.65	1.4538
454	03/02/2008	15:30:00	0	-3.7136	12.651	1.4544
455	03/02/2008	15:40:00	0	-3.7138	12.652	1.4542
456	03/02/2008	15:50:00	0	-3.714	12.651	1.454
457	03/02/2008	16:00:00	0	-3.7145	12.652	1.4535
458	03/02/2008	16:10:00	0	-3.7144	12.653	1.4536
459	03/02/2008	16:20:00	0	-3.7143	12.652	1.4537
460	03/02/2008	16:30:00	0	-3.7148	12.653	1.4532
461	03/02/2008	16:40:00	0	-3.7146	12.651	1.4534
462	03/02/2008	16:50:00	0	-3.7148	12.653	1.4532
463	03/02/2008	17:00:00	0	-3.7148	12.653	1.4532
464	03/02/2008	17:10:00	0	-3.7149	12.652	1.4531
465	03/02/2008	17:20:00	0	-3.7152	12.652	1.4528
466	03/02/2008	17:30:00	0	-3.7151	12.652	1.4529
467	03/02/2008	17:40:00	0	-3.7153	12.652	1.4527
468	03/02/2008	17:50:00	0	-3.7159	12.653	1.4521
469	03/02/2008	18:00:00	0	-3.7158	12.653	1.4522
470	03/02/2008	18:10:00	0	-3.7162	12.653	1.4518
471	03/02/2008	18:20:00	0	-3.7157	12.651	1.4523
472	03/02/2008	18:30:00	0	-3.7161	12.652	1.4519
473	03/02/2008	18:40:00	0	-3.7165	12.652	1.4515
474	03/02/2008	18:50:00	0	-3.7159	12.653	1.4521
475	03/02/2008	19:00:00	0	-3.7168	12.655	1.4512
476	03/02/2008	19:10:00	0	-3.7167	12.653	1.4513
477	03/02/2008	19:20:00	0	-3.7168	12.653	1.4512
478	03/02/2008	19:30:00	0	-3.7162	12.652	1.4518
479	03/02/2008	19:40:00	0	-3.7169	12.653	1.4511
480	03/02/2008	19:50:00	0	-3.7168	12.651	1.4512
481	03/02/2008	20:00:00	0	-3.7172	12.652	1.4508
482	03/02/2008	20:10:00	0	-3.7169	12.654	1.4511
483	03/02/2008	20:20:00	0	-3.7172	12.652	1.4508
484	03/02/2008	20:30:00	0	-3.7174	12.654	1.4506
485	03/02/2008	20:40:00	0	-3.7182	12.654	1.4498
486	03/02/2008	20:50:00	0	-3.7178	12.653	1.4502
487	03/02/2008	21:00:00	0	-3.7176	12.654	1.4504
488	03/02/2008	21:10:00	0	-3.7187	12.655	1.4493
489	03/02/2008	21:20:00	0	-3.7183	12.654	1.4497
490	03/02/2008	21:30:00	0	-3.7181	12.656	1.4499
491	03/02/2008	21:40:00	0	-3.719	12.655	1.449
492	03/02/2008	21:50:00	0	-3.7185	12.655	1.4495
493	03/02/2008	22:00:00	0	-3.7192	12.656	1.4488
494	03/02/2008	22:10:00	0	-3.7192	12.655	1.4488
495	03/02/2008	22:20:00	0	-3.719	12.655	1.449
496	03/02/2008	22:30:00	0	-3.7194	12.656	1.4486
497	03/02/2008	22:40:00	0	-3.7196	12.657	1.4484
498	03/02/2008	22:50:00	0	-3.7199	12.656	1.4481
499	03/02/2008	23:00:00	0	-3.7202	12.656	1.4478
500	03/02/2008	23:10:00	0	-3.7203	12.656	1.4477
501	03/02/2008	23:20:00	0	-3.7203	12.657	1.4477
502	03/02/2008	23:30:00	0	-3.7207	12.657	1.4473
503	03/02/2008	23:40:00	0	-3.7212	12.657	1.4468
504	03/02/2008	23:50:00	0	-3.721	12.657	1.447
505	04/02/2008	00:00:00	0	-3.7214	12.658	1.4466
506	04/02/2008	00:10:00	0	-3.7213	12.658	1.4467
507	04/02/2008	00:20:00	0	-3.7216	12.658	1.4464
508	04/02/2008	00:30:00	0	-3.722	12.657	1.446
509	04/02/2008	00:40:00	0	-3.722	12.658	1.446
510	04/02/2008	00:50:00	0	-3.7211	12.659	1.4469
511	04/02/2008	01:00:00	0	-3.7218	12.659	1.4462
512	04/02/2008	01:10:00	0	-3.7221	12.659	1.4459
513	04/02/2008	01:20:00	0	-3.7226	12.659	1.4454
514	04/02/2008	01:30:00	0	-3.7229	12.66	1.4451
515	04/02/2008	01:40:00	0	-3.7226	12.66	1.4454
516	04/02/2008	01:50:00	0	-3.723	12.66	1.445
517	04/02/2008	02:00:00	0	-3.723	12.661	1.445
518	04/02/2008	02:10:00	0	-3.7227	12.661	1.4453
519	04/02/2008	02:20:00	0	-3.7233	12.662	1.4447
520	04/02/2008	02:30:00	0	-3.7231	12.661	1.4449
521	04/02/2008	02:40:00	0	-3.7228	12.661	1.4452
522	04/02/2008	02:50:00	0	-3.7232	12.661	1.4448
523	04/02/2008	03:00:00	0	-3.724	12.663	1.444
524	04/02/2008	03:10:00	0	-3.7237	12.663	1.4443
525	04/02/2008	03:20:00	0	-3.7239	12.663	1.4441
526	04/02/2008	03:30:00	0	-3.7238	12.663	1.4442
527	04/02/2008	03:40:00	0	-3.724	12.663	1.444
528	04/02/2008	03:50:00	0	-3.7239	12.663	1.4441
529	04/02/2008	04:00:00	0	-3.7241	12.663	1.4439
530	04/02/2008	04:10:00	0	-3.7242	12.664	1.4438
531	04/02/2008	04:20:00	0	-3.7244	12.665	1.4436
532	04/02/2008	04:30:00	0	-3.7248	12.665	1.4432
533	04/02/2008	04:40:00	0	-3.7243	12.665	1.4437
534	04/02/2008	04:50:00	0	-3.725	12.665	1.443
535	04/02/2008	05:00:00	0	-3.7247	12.666	1.4433
536	04/02/2008	05:10:00	0	-3.7255	12.664	1.4425
537	04/02/2008	05:20:00	0	-3.7252	12.665	1.4428
538	04/02/2008	05:30:00	0	-3.7251	12.666	1.4429
539	04/02/2008	05:40:00	0	-3.7255	12.665	1.4425
540	04/02/2008	05:50:00	0	-3.7258	12.664	1.4422
541	04/02/2008	06:00:00	0	-3.7251	12.665	1.4429
542	04/02/2008	06:10:00	0	-3.726	12.667	1.442
543	04/02/2008	06:20:00	0	-3.7262	12.665	1.4418
544	04/02/2008	06:30:00	0	-3.7254	12.665	1.4426
545	04/02/2008	06:40:00	0	-3.7258	12.664	1.4422
546	04/02/2008	06:50:00	0	-3.7266	12.665	1.4414
547	04/02/2008	07:00:00	0	-3.7259	12.665	1.4421
548	04/02/2008	07:10:00	0	-3.7265	12.666	1.4415
549	04/02/2008	07:20:00	0	-3.7261	12.665	1.4419

550	04/02/2008	07:30:00	0	-3.727	12.665	1.441
551	04/02/2008	07:40:00	0	-3.7267	12.666	1.4413
552	04/02/2008	07:50:00	0	-3.7266	12.665	1.4414
553	04/02/2008	08:00:00	0	-3.7265	12.667	1.4415
554	04/02/2008	08:10:00	0	-3.7271	12.667	1.4409
555	04/02/2008	08:20:00	0	-3.7275	12.667	1.4405
556	04/02/2008	08:30:00	0	-3.7272	12.667	1.4408
557	04/02/2008	08:40:00	0	-3.7274	12.667	1.4406
558	04/02/2008	08:50:00	0	-3.7278	12.667	1.4402
559	04/02/2008	09:00:00	0	-3.7276	12.667	1.4404
560	04/02/2008	09:10:00	0	-3.7281	12.667	1.4399
561	04/02/2008	09:20:00	0	-3.7281	12.668	1.4399
562	04/02/2008	09:30:00	0	-3.728	12.667	1.44
563	04/02/2008	09:40:00	0	-3.7286	12.666	1.4394
564	04/02/2008	09:50:00	0	-3.7279	12.667	1.4401
565	04/02/2008	10:00:00	0	-3.7288	12.667	1.4392
566	04/02/2008	10:10:00	0	-3.7291	12.667	1.4389
567	04/02/2008	10:20:00	0	-3.729	12.668	1.439
568	04/02/2008	10:30:00	0	-3.7287	12.667	1.4393
569	04/02/2008	10:40:00	0	-3.7298	12.668	1.4382
570	04/02/2008	10:50:00	0	-3.729	12.669	1.439
571	04/02/2008	11:00:00	0	-3.7292	12.668	1.4388
572	04/02/2008	11:10:00	0	-3.7294	12.668	1.4386
573	04/02/2008	11:20:00	0	-3.7303	12.669	1.4377
574	04/02/2008	11:30:00	0	-3.7296	12.668	1.4384
575	04/02/2008	11:40:00	0	-3.7299	12.668	1.4381
576	04/02/2008	11:50:00	0	-3.7303	12.669	1.4377
577	04/02/2008	12:00:00	0	-3.7298	12.67	1.4382
578	04/02/2008	12:10:00	0	-3.7308	12.669	1.4372
579	04/02/2008	12:20:00	0	-3.7303	12.671	1.4377
580	04/02/2008	12:30:00	0	-3.7302	12.669	1.4378
581	04/02/2008	12:40:00	0	-3.7303	12.67	1.4377
582	04/02/2008	12:50:00	0	-3.7305	12.67	1.4375
583	04/02/2008	13:00:00	0	-3.731	12.67	1.437
584	04/02/2008	13:10:00	0	-3.7311	12.671	1.4369
585	04/02/2008	13:20:00	0	-3.7312	12.67	1.4368
586	04/02/2008	13:30:00	0	-3.7304	12.671	1.4376
587	04/02/2008	13:40:00	0	-3.7312	12.672	1.4368
588	04/02/2008	13:50:00	0	-3.7309	12.673	1.4371
589	04/02/2008	14:00:00	0	-3.7315	12.672	1.4365
590	04/02/2008	14:10:00	0	-3.7316	12.674	1.4364
591	04/02/2008	14:20:00	0	-3.7314	12.672	1.4366
592	04/02/2008	14:30:00	0	-3.7314	12.673	1.4366
593	04/02/2008	14:40:00	0	-3.7307	12.673	1.4373
594	04/02/2008	14:50:00	0	-3.7314	12.673	1.4366
595	04/02/2008	15:00:00	0	-3.7315	12.674	1.4365
596	04/02/2008	15:10:00	0	-3.7313	12.675	1.4367
597	04/02/2008	15:20:00	0	-3.7318	12.675	1.4362
598	04/02/2008	15:30:00	0	-3.7321	12.675	1.4359
599	04/02/2008	15:40:00	0	-3.7315	12.675	1.4365
600	04/02/2008	15:50:00	0	-3.731	12.675	1.437
601	04/02/2008	16:00:00	0	-3.732	12.676	1.436
602	04/02/2008	16:10:00	0	-3.7326	12.675	1.4354
603	04/02/2008	16:20:00	0	-3.732	12.675	1.436
604	04/02/2008	16:30:00	0	-3.7322	12.676	1.4358
605	04/02/2008	16:40:00	0	-3.7326	12.675	1.4354
606	04/02/2008	16:50:00	0	-3.7316	12.676	1.4364
607	04/02/2008	17:00:00	0	-3.7321	12.675	1.4359
608	04/02/2008	17:10:00	0	-3.7323	12.676	1.4357
609	04/02/2008	17:20:00	0	-3.7327	12.676	1.4353
610	04/02/2008	17:30:00	0	-3.7324	12.675	1.4356
611	04/02/2008	17:40:00	0	-3.7322	12.675	1.4358
612	04/02/2008	17:50:00	0	-3.7326	12.678	1.4354
613	04/02/2008	18:00:00	0	-3.732	12.677	1.436
614	04/02/2008	18:10:00	0	-3.7331	12.677	1.4349
615	04/02/2008	18:20:00	0	-3.7331	12.675	1.4349
616	04/02/2008	18:30:00	0	-3.7325	12.677	1.4355
617	04/02/2008	18:40:00	0	-3.7329	12.676	1.4351
618	04/02/2008	18:50:00	0	-3.7334	12.676	1.4346
619	04/02/2008	19:00:00	0	-3.7333	12.676	1.4347
620	04/02/2008	19:10:00	0	-3.7332	12.676	1.4348
621	04/02/2008	19:20:00	0	-3.7339	12.675	1.4341
622	04/02/2008	19:30:00	0	-3.7334	12.675	1.4346
623	04/02/2008	19:40:00	0	-3.7337	12.676	1.4343
624	04/02/2008	19:50:00	0	-3.7335	12.676	1.4345
625	04/02/2008	20:00:00	0	-3.7331	12.676	1.4349
626	04/02/2008	20:10:00	0	-3.7336	12.675	1.4344
627	04/02/2008	20:20:00	0	-3.7342	12.676	1.4338
628	04/02/2008	20:30:00	0	-3.7338	12.675	1.4342
629	04/02/2008	20:40:00	0	-3.7344	12.675	1.4336
630	04/02/2008	20:50:00	0	-3.7342	12.675	1.4338
631	04/02/2008	21:00:00	0	-3.734	12.675	1.434
632	04/02/2008	21:10:00	0	-3.733	12.675	1.435
633	04/02/2008	21:20:00	0	-3.7342	12.675	1.4338
634	04/02/2008	21:30:00	0	-3.7348	12.675	1.4332
635	04/02/2008	21:40:00	0	-3.7351	12.675	1.4329
636	04/02/2008	21:50:00	0	-3.7347	12.676	1.4333
637	04/02/2008	22:00:00	0	-3.735	12.676	1.433
638	04/02/2008	22:10:00	0	-3.741	12.676	1.427
639	04/02/2008	22:20:00	0	-3.7353	12.675	1.4327
640	04/02/2008	22:30:00	0	-3.7352	12.676	1.4328
641	04/02/2008	22:40:00	0	-3.7357	12.677	1.4323
642	04/02/2008	22:50:00	0	-3.7355	12.675	1.4325
643	04/02/2008	23:00:00	0	-3.7359	12.676	1.4321
644	04/02/2008	23:10:00	0	-3.7363	12.676	1.4317
645	04/02/2008	23:20:00	0	-3.7348	12.677	1.4332
646	04/02/2008	23:30:00	0	-3.7362	12.676	1.4318
647	04/02/2008	23:40:00	0	-3.7363	12.678	1.4317
648	04/02/2008	23:50:00	0	-3.7363	12.677	1.4317
649	05/02/2008	00:00:00	0	-3.7365	12.677	1.4315
650	05/02/2008	00:10:00	0	-3.7359	12.678	1.4321
651	05/02/2008	00:20:00	0	-3.7367	12.677	1.4313
652	05/02/2008	00:30:00	0	-3.7362	12.678	1.4318
653	05/02/2008	00:40:00	0	-3.7364	12.678	1.4316
654	05/02/2008	00:50:00	0	-3.7369	12.677	1.4311
655	05/02/2008	01:00:00	0	-3.7372	12.678	1.4308
656	05/02/2008	01:10:00	0	-3.737	12.679	1.431
657	05/02/2008	01:20:00	0	-3.7365	12.678	1.4315
658	05/02/2008	01:30:00	0	-3.7378	12.679	1.4302
659	05/02/2008	01:40:00	0	-3.7369	12.679	1.4311
660	05/02/2008	01:50:00	0	-3.7375	12.678	1.4305



661	05/02/2008	02:00:00	0	-3.7368	12.68	1.4312
662	05/02/2008	02:10:00	0	-3.7372	12.679	1.4308
663	05/02/2008	02:20:00	0	-3.7372	12.679	1.4308
664	05/02/2008	02:30:00	0	-3.7368	12.68	1.4312
665	05/02/2008	02:40:00	0	-3.7377	12.68	1.4303
666	05/02/2008	02:50:00	0	-3.7371	12.68	1.4309
667	05/02/2008	03:00:00	0	-3.7373	12.681	1.4307
668	05/02/2008	03:10:00	0	-3.7381	12.681	1.4299
669	05/02/2008	03:20:00	0	-3.7372	12.68	1.4308
670	05/02/2008	03:30:00	0	-3.7374	12.682	1.4306
671	05/02/2008	03:40:00	0	-3.7378	12.681	1.4302
672	05/02/2008	03:50:00	0	-3.7371	12.682	1.4309
673	05/02/2008	04:00:00	0	-3.7374	12.683	1.4306
674	05/02/2008	04:10:00	0	-3.7374	12.682	1.4306
675	05/02/2008	04:20:00	0	-3.738	12.683	1.43
676	05/02/2008	04:30:00	0	-3.7378	12.685	1.4302
677	05/02/2008	04:40:00	0	-3.7381	12.684	1.4299
678	05/02/2008	04:50:00	0	-3.7377	12.683	1.4303
679	05/02/2008	05:00:00	0	-3.7377	12.684	1.4303
680	05/02/2008	05:10:00	0	-3.7375	12.684	1.4305
681	05/02/2008	05:20:00	0	-3.7371	12.683	1.4309
682	05/02/2008	05:30:00	0	-3.7374	12.684	1.4306
683	05/02/2008	05:40:00	0	-3.7376	12.683	1.4304
684	05/02/2008	05:50:00	0	-3.7377	12.684	1.4303
685	05/02/2008	06:00:00	0	-3.7372	12.685	1.4308
686	05/02/2008	06:10:00	0	-3.737	12.686	1.431
687	05/02/2008	06:20:00	0	-3.7368	12.686	1.4312
688	05/02/2008	06:30:00	0	-3.7373	12.685	1.4307
689	05/02/2008	06:40:00	0	-3.7378	12.685	1.4302
690	05/02/2008	06:50:00	0	-3.737	12.684	1.431
691	05/02/2008	07:00:00	0	-3.7372	12.685	1.4308
692	05/02/2008	07:10:00	0	-3.734	12.684	1.434
693	05/02/2008	07:20:00	0	-3.7367	12.684	1.4313
694	05/02/2008	07:30:00	0	-3.7373	12.684	1.4307
695	05/02/2008	07:40:00	0	-3.737	12.684	1.431
696	05/02/2008	07:50:00	0	-3.7381	12.683	1.4299
697	05/02/2008	08:00:00	0	-3.7362	12.683	1.4318
698	05/02/2008	08:10:00	0	-3.7383	12.684	1.4297
699	05/02/2008	08:20:00	0	-3.7374	12.683	1.4306
700	05/02/2008	08:30:00	0	-3.7376	12.684	1.4304
701	05/02/2008	08:40:00	0	-3.7387	12.683	1.4293
702	05/02/2008	08:50:00	0	-3.7378	12.683	1.4302
703	05/02/2008	09:00:00	0	-3.7371	12.683	1.4309
704	05/02/2008	09:10:00	0	-3.7377	12.681	1.4303
705	05/02/2008	09:20:00	0	-3.7377	12.683	1.4303
706	05/02/2008	09:30:00	0	-3.7375	12.684	1.4305
707	05/02/2008	09:40:00	0	-3.7382	12.685	1.4298
708	05/02/2008	09:50:00	0	-3.7381	12.684	1.4299
709	05/02/2008	10:00:00	0	-3.7409	12.683	1.4271
710	05/02/2008	10:10:00	0	-3.7385	12.683	1.4295
711	05/02/2008	10:20:00	0	-3.739	12.684	1.429
712	05/02/2008	10:30:00	0	-3.7387	12.684	1.4293
713	05/02/2008	10:40:00	0	-3.7392	12.683	1.4288
714	05/02/2008	10:50:00	0	-3.7384	12.683	1.4296
715	05/02/2008	11:00:00	0	-3.7383	12.683	1.4297
716	05/02/2008	11:10:00	0	-3.7383	12.683	1.4297
717	05/02/2008	11:20:00	0	-3.7388	12.684	1.4292
718	05/02/2008	11:30:00	0	-3.7397	12.684	1.4283
719	05/02/2008	11:40:00	0	-3.739	12.684	1.429
720	05/02/2008	11:50:00	0	-3.7394	12.683	1.4286
721	05/02/2008	12:00:00	0	-3.7399	12.684	1.4281
722	05/02/2008	12:10:00	0	-3.7396	12.683	1.4284
723	05/02/2008	12:20:00	0	-3.7391	12.685	1.4289
724	05/02/2008	12:30:00	0	-3.7395	12.683	1.4285
725	05/02/2008	12:40:00	0	-3.7386	12.684	1.4294
726	05/02/2008	12:50:00	0	-3.7398	12.684	1.4282
727	05/02/2008	13:00:00	0	-3.7386	12.686	1.4294
728	05/02/2008	13:10:00	0	-3.7398	12.684	1.4282
729	05/02/2008	13:20:00	0	-3.7391	12.686	1.4289
730	05/02/2008	13:30:00	0	-3.74	12.686	1.428
731	05/02/2008	13:40:00	0	-3.7391	12.685	1.4289
732	05/02/2008	13:50:00	0	-3.7391	12.685	1.4289
733	05/02/2008	14:00:00	0	-3.7387	12.685	1.4293
734	05/02/2008	14:10:00	0	-3.74	12.687	1.428
735	05/02/2008	14:20:00	0	-3.7393	12.687	1.4287
736	05/02/2008	14:30:00	0	-3.7389	12.686	1.4291
737	05/02/2008	14:40:00	0	-3.7401	12.686	1.4279
738	05/02/2008	14:50:00	0	-3.7392	12.687	1.4288
739	05/02/2008	15:00:00	0	-3.7388	12.688	1.4292
740	05/02/2008	15:10:00	0	-3.7402	12.689	1.4278
741	05/02/2008	15:20:00	0	-3.7385	12.689	1.4295
742	05/02/2008	15:30:00	0	-3.739	12.689	1.429
743	05/02/2008	15:40:00	0	-3.7402	12.69	1.4278
744	05/02/2008	15:50:00	0	-3.7385	12.689	1.4295
745	05/02/2008	16:00:00	0	-3.7384	12.69	1.4296
746	05/02/2008	16:10:00	0	-3.7386	12.69	1.4294
747	05/02/2008	16:20:00	0	-3.739	12.69	1.429
748	05/02/2008	16:30:00	0	-3.7388	12.691	1.4292
749	05/02/2008	16:40:00	0	-3.7399	12.691	1.4281
750	05/02/2008	16:50:00	0	-3.7385	12.692	1.4295
751	05/02/2008	17:00:00	0	-3.7383	12.695	1.4297
752	05/02/2008	17:10:00	0	-3.7387	12.694	1.4293
753	05/02/2008	17:20:00	0	-3.7392	12.696	1.4288
754	05/02/2008	17:30:00	0	-3.7384	12.694	1.4296
755	05/02/2008	17:40:00	0	-3.7391	12.695	1.4289
756	05/02/2008	17:50:00	0	-3.7383	12.695	1.4297
757	05/02/2008	18:00:00	0	-3.7384	12.696	1.4296
758	05/02/2008	18:10:00	0	-3.739	12.695	1.429
759	05/02/2008	18:20:00	0	-3.7391	12.695	1.4289
760	05/02/2008	18:30:00	0	-3.7389	12.694	1.4291
761	05/02/2008	18:40:00	0	-3.738	12.694	1.43
762	05/02/2008	18:50:00	0	-3.7387	12.693	1.4293
763	05/02/2008	19:00:00	0	-3.738	12.693	1.43
764	05/02/2008	19:10:00	0	-3.7382	12.692	1.4298
765	05/02/2008	19:20:00	0	-3.7373	12.692	1.4307
766	05/02/2008	19:30:00	0	-3.7381	12.691	1.4299
767	05/02/2008	19:40:00	0	-3.7378	12.689	1.4302
768	05/02/2008	19:50:00	0	-3.7385	12.689	1.4295
769	05/02/2008	20:00:00	0	-3.7373	12.688	1.4307
770	05/02/2008	20:10:00	0	-3.7377	12.689	1.4303
771	05/02/2008	20:20:00	0	-3.7383	12.688	1.4297

772	05/02/2008	20:30:00	0	-3.7381	12.689	1.4299
773	05/02/2008	20:40:00	0	-3.7381	12.689	1.4299
774	05/02/2008	20:50:00	0	-3.7375	12.688	1.4305
775	05/02/2008	21:00:00	0	-3.7375	12.688	1.4305
776	05/02/2008	21:10:00	0	-3.7384	12.688	1.4296
777	05/02/2008	21:20:00	0	-3.738	12.688	1.43
778	05/02/2008	21:30:00	0	-3.739	12.688	1.429
779	05/02/2008	21:40:00	0	-3.7384	12.688	1.4296
780	05/02/2008	21:50:00	0	-3.7376	12.688	1.4304
781	05/02/2008	22:00:00	0	-3.7381	12.688	1.4299
782	05/02/2008	22:10:00	0	-3.7398	12.688	1.4282
783	05/02/2008	22:20:00	0	-3.7391	12.687	1.4289
784	05/02/2008	22:30:00	0	-3.7391	12.688	1.4289
785	05/02/2008	22:40:00	0	-3.7388	12.687	1.4292
786	05/02/2008	22:50:00	0	-3.7385	12.688	1.4295
787	05/02/2008	23:00:00	0	-3.7396	12.687	1.4284
788	05/02/2008	23:10:00	0	-3.739	12.687	1.429
789	05/02/2008	23:20:00	0	-3.7389	12.688	1.4291
790	05/02/2008	23:30:00	0	-3.7393	12.688	1.4287
791	05/02/2008	23:40:00	0	-3.7398	12.687	1.4282
792	05/02/2008	23:50:00	0	-3.7398	12.687	1.4282
793	06/02/2008	00:00:00	0	-3.7405	12.688	1.4275
794	06/02/2008	00:10:00	0	-3.7398	12.688	1.4282
795	06/02/2008	00:20:00	0	-3.7393	12.687	1.4287
796	06/02/2008	00:30:00	0	-3.7395	12.688	1.4285
797	06/02/2008	00:40:00	0	-3.7398	12.687	1.4282
798	06/02/2008	00:50:00	0	-3.74	12.687	1.428
799	06/02/2008	01:00:00	0	-3.74	12.688	1.428
800	06/02/2008	01:10:00	0	-3.7397	12.688	1.4283
801	06/02/2008	01:20:00	0	-3.7403	12.688	1.4277
802	06/02/2008	01:30:00	0	-3.7402	12.688	1.4278
803	06/02/2008	01:40:00	0	-3.7402	12.69	1.4278
804	06/02/2008	01:50:00	0	-3.7396	12.688	1.4284
805	06/02/2008	02:00:00	0	-3.7401	12.689	1.4279
806	06/02/2008	02:10:00	0	-3.7398	12.688	1.4282
807	06/02/2008	02:20:00	0	-3.7397	12.689	1.4283
808	06/02/2008	02:30:00	0	-3.74	12.688	1.428
809	06/02/2008	02:40:00	0	-3.7401	12.688	1.4279
810	06/02/2008	02:50:00	0	-3.7406	12.689	1.4274
811	06/02/2008	03:00:00	0	-3.7404	12.691	1.4276
812	06/02/2008	03:10:00	0	-3.7402	12.689	1.4278
813	06/02/2008	03:20:00	0	-3.74	12.691	1.428
814	06/02/2008	03:30:00	0	-3.7393	12.689	1.4287
815	06/02/2008	03:40:00	0	-3.7398	12.692	1.4282
816	06/02/2008	03:50:00	0	-3.739	12.691	1.429
817	06/02/2008	04:00:00	0	-3.739	12.692	1.429
818	06/02/2008	04:10:00	0	-3.7388	12.694	1.4292
819	06/02/2008	04:20:00	0	-3.7388	12.694	1.4292
820	06/02/2008	04:30:00	0	-3.739	12.695	1.429
821	06/02/2008	04:40:00	0	-3.74	12.696	1.428
822	06/02/2008	04:50:00	0	-3.7393	12.696	1.4287
823	06/02/2008	05:00:00	0	-3.7389	12.696	1.4291
824	06/02/2008	05:10:00	0	-3.7388	12.696	1.4292
825	06/02/2008	05:20:00	0	-3.7384	12.696	1.4296
826	06/02/2008	05:30:00	0	-3.7383	12.696	1.4297
827	06/02/2008	05:40:00	0	-3.7393	12.696	1.4287
828	06/02/2008	05:50:00	0	-3.7385	12.696	1.4295
829	06/02/2008	06:00:00	0	-3.7384	12.696	1.4296
830	06/02/2008	06:10:00	0	-3.739	12.696	1.429
831	06/02/2008	06:20:00	0	-3.7385	12.696	1.4295
832	06/02/2008	06:30:00	0	-3.7387	12.697	1.4293
833	06/02/2008	06:40:00	0	-3.7375	12.697	1.4305
834	06/02/2008	06:50:00	0	-3.739	12.698	1.429
835	06/02/2008	07:00:00	0	-3.7379	12.697	1.4301
836	06/02/2008	07:10:00	0	-3.7379	12.697	1.4301
837	06/02/2008	07:20:00	0	-3.738	12.698	1.43
838	06/02/2008	07:30:00	0	-3.7377	12.698	1.4303
839	06/02/2008	07:40:00	0	-3.7386	12.698	1.4294
840	06/02/2008	07:50:00	0	-3.7385	12.697	1.4295
841	06/02/2008	08:00:00	0	-3.7387	12.698	1.4293
842	06/02/2008	08:10:00	0	-3.7377	12.697	1.4303
843	06/02/2008	08:20:00	0	-3.7374	12.696	1.4306
844	06/02/2008	08:30:00	0	-3.7387	12.694	1.4293
845	06/02/2008	08:40:00	0	-3.7367	12.694	1.4313
846	06/02/2008	08:50:00	0	-3.7376	12.694	1.4304
847	06/02/2008	09:00:00	0	-3.7369	12.692	1.4311
848	06/02/2008	09:10:00	0	-3.738	12.693	1.43
849	06/02/2008	09:20:00	0	-3.7374	12.692	1.4306
850	06/02/2008	09:30:00	0	-3.7379	12.692	1.4301
851	06/02/2008	09:40:00	0	-3.7375	12.692	1.4305
852	06/02/2008	09:50:00	0	-3.7378	12.691	1.4302
853	06/02/2008	10:00:00	0	-3.737	12.691	1.431
854	06/02/2008	10:10:00	0	-3.7385	12.69	1.4295
855	06/02/2008	10:20:00	0	-3.7374	12.69	1.4306
856	06/02/2008	10:30:00	0	-3.7368	12.69	1.4312
857	06/02/2008	10:40:00	0	-3.7367	12.689	1.4313
858	06/02/2008	10:50:00	0	-3.7378	12.689	1.4302
859	06/02/2008	11:00:00	0	-3.7379	12.69	1.4301
860	06/02/2008	11:10:00	0	-3.7375	12.69	1.4305
861	06/02/2008	11:20:00	0	-3.7382	12.69	1.4298
862	06/02/2008	11:30:00	0	-3.7375	12.69	1.4305
863	06/02/2008	11:40:00	0	-3.7369	12.69	1.4311
864	06/02/2008	11:50:00	0	-3.7383	12.69	1.4297
865	06/02/2008	12:00:00	0	-3.7368	12.69	1.4312
866	06/02/2008	12:10:00	0	-3.7383	12.69	1.4297
867	06/02/2008	12:20:00	0	-3.738	12.69	1.43
868	06/02/2008	12:30:00	0	-3.7379	12.688	1.4301
869	06/02/2008	12:40:00	0	-3.7382	12.691	1.4298
870	06/02/2008	12:50:00	0	-3.7372	12.69	1.4308
871	06/02/2008	13:00:00	0	-3.7365	12.69	1.4315
872	06/02/2008	13:10:00	0	-3.7368	12.69	1.4312
873	06/02/2008	13:20:00	0	-3.738	12.69	1.43
874	06/02/2008	13:30:00	0	-3.7367	12.689	1.4313
875	06/02/2008	13:40:00	0	-3.738	12.691	1.43
876	06/02/2008	13:50:00	0	-3.7378	12.691	1.4302
877	06/02/2008	14:00:00	0	-3.7373	12.69	1.4307
878	06/02/2008	14:10:00	0	-3.7368	12.691	1.4312
879	06/02/2008	14:20:00	0	-3.7372	12.691	1.4308
880	06/02/2008	14:30:00	0	-3.7369	12.691	1.4311
881	06/02/2008	14:40:00	0	-3.738	12.693	1.43
882	06/02/2008	14:50:00	0	-3.7371	12.692	1.4309

883	06/02/2008	15:00:00	0	-3.7374	12.692	1.4306
884	06/02/2008	15:10:00	0	-3.7376	12.693	1.4304
885	06/02/2008	15:20:00	0	-3.7377	12.694	1.4303
886	06/02/2008	15:30:00	0	-3.7368	12.695	1.4312
887	06/02/2008	15:40:00	0	-3.7373	12.697	1.4307
888	06/02/2008	15:50:00	0	-3.7363	12.696	1.4317
889	06/02/2008	16:00:00	0	-3.7367	12.696	1.4313
890	06/02/2008	16:10:00	0	-3.7371	12.697	1.4309
891	06/02/2008	16:20:00	0	-3.7368	12.697	1.4312
892	06/02/2008	16:30:00	0	-3.7364	12.697	1.4316
893	06/02/2008	16:40:00	0	-3.7365	12.698	1.4315
894	06/02/2008	16:50:00	0	-3.7367	12.697	1.4313
895	06/02/2008	17:00:00	0	-3.7363	12.698	1.4317
896	06/02/2008	17:10:00	0	-3.7355	12.697	1.4325
897	06/02/2008	17:20:00	0	-3.7371	12.697	1.4309
898	06/02/2008	17:30:00	0	-3.7367	12.698	1.4313
899	06/02/2008	17:40:00	0	-3.7359	12.7	1.4321
900	06/02/2008	17:50:00	0	-3.7364	12.7	1.4316
901	06/02/2008	18:00:00	0	-3.7357	12.7	1.4323
902	06/02/2008	18:10:00	0	-3.7354	12.702	1.4326
903	06/02/2008	18:20:00	0	-3.7348	12.702	1.4332
904	06/02/2008	18:30:00	0	-3.735	12.702	1.433
905	06/02/2008	18:40:00	0	-3.7348	12.702	1.4332
906	06/02/2008	18:50:00	0	-3.7353	12.703	1.4327
907	06/02/2008	19:00:00	0	-3.7346	12.702	1.4334
908	06/02/2008	19:10:00	0	-3.7355	12.704	1.4325
909	06/02/2008	19:20:00	0	-3.7346	12.702	1.4334
910	06/02/2008	19:30:00	0	-3.7353	12.703	1.4327
911	06/02/2008	19:40:00	0	-3.7348	12.702	1.4332
912	06/02/2008	19:50:00	0	-3.7338	12.7	1.4342
913	06/02/2008	20:00:00	0	-3.7352	12.7	1.4328
914	06/02/2008	20:10:00	0	-3.734	12.699	1.434
915	06/02/2008	20:20:00	0	-3.7345	12.697	1.4335
916	06/02/2008	20:30:00	0	-3.7344	12.696	1.4336
917	06/02/2008	20:40:00	0	-3.7337	12.695	1.4343
918	06/02/2008	20:50:00	0	-3.7332	12.696	1.4348
919	06/02/2008	21:00:00	0	-3.734	12.695	1.434
920	06/02/2008	21:10:00	0	-3.7343	12.694	1.4337
921	06/02/2008	21:20:00	0	-3.7338	12.693	1.4342
922	06/02/2008	21:30:00	0	-3.7337	12.692	1.4343
923	06/02/2008	21:40:00	0	-3.7343	12.692	1.4337
924	06/02/2008	21:50:00	0	-3.7336	12.692	1.4344
925	06/02/2008	22:00:00	0	-3.7339	12.691	1.4341
926	06/02/2008	22:10:00	0	-3.7333	12.691	1.4347
927	06/02/2008	22:20:00	0	-3.7342	12.69	1.4338
928	06/02/2008	22:30:00	0	-3.7346	12.69	1.4334
929	06/02/2008	22:40:00	0	-3.734	12.69	1.434
930	06/02/2008	22:50:00	0	-3.7339	12.691	1.4341
931	06/02/2008	23:00:00	0	-3.733	12.691	1.435
932	06/02/2008	23:10:00	0	-3.7338	12.691	1.4342
933	06/02/2008	23:20:00	0	-3.7334	12.691	1.4346
934	06/02/2008	23:30:00	0	-3.734	12.69	1.434
935	06/02/2008	23:40:00	0	-3.733	12.691	1.435
936	06/02/2008	23:50:00	0	-3.7325	12.69	1.4355
937	07/02/2008	00:00:00	0	-3.7329	12.691	1.4351
938	07/02/2008	00:10:00	0	-3.7341	12.691	1.4339
939	07/02/2008	00:20:00	0	-3.7333	12.691	1.4347
940	07/02/2008	00:30:00	0	-3.7327	12.691	1.4353
941	07/02/2008	00:40:00	0	-3.7337	12.692	1.4343
942	07/02/2008	00:50:00	0	-3.7333	12.691	1.4347
943	07/02/2008	01:00:00	0	-3.7333	12.69	1.4347
944	07/02/2008	01:10:00	0	-3.7327	12.69	1.4353
945	07/02/2008	01:20:00	0	-3.7331	12.691	1.4349
946	07/02/2008	01:30:00	0	-3.7325	12.69	1.4355
947	07/02/2008	01:40:00	0	-3.7334	12.691	1.4346
948	07/02/2008	01:50:00	0	-3.7329	12.69	1.4351
949	07/02/2008	02:00:00	0	-3.7322	12.692	1.4358
950	07/02/2008	02:10:00	0	-3.7328	12.691	1.4352
951	07/02/2008	02:20:00	0	-3.7324	12.692	1.4356
952	07/02/2008	02:30:00	0	-3.7329	12.692	1.4351
953	07/02/2008	02:40:00	0	-3.7324	12.692	1.4356
954	07/02/2008	02:50:00	0	-3.7327	12.692	1.4353
955	07/02/2008	03:00:00	0	-3.7322	12.691	1.4358
956	07/02/2008	03:10:00	0	-3.7321	12.692	1.4359
957	07/02/2008	03:20:00	0	-3.7325	12.692	1.4355
958	07/02/2008	03:30:00	0	-3.7315	12.691	1.4365
959	07/02/2008	03:40:00	0	-3.732	12.693	1.436
960	07/02/2008	03:50:00	0	-3.732	12.694	1.436
961	07/02/2008	04:00:00	0	-3.7327	12.694	1.4353
962	07/02/2008	04:10:00	0	-3.7311	12.693	1.4369
963	07/02/2008	04:20:00	0	-3.7311	12.694	1.4369
964	07/02/2008	04:30:00	0	-3.7316	12.696	1.4364
965	07/02/2008	04:40:00	0	-3.7312	12.696	1.4368
966	07/02/2008	04:50:00	0	-3.731	12.697	1.437
967	07/02/2008	05:00:00	0	-3.7311	12.697	1.4369
968	07/02/2008	05:10:00	0	-3.732	12.696	1.436
969	07/02/2008	05:20:00	0	-3.7311	12.694	1.4369
970	07/02/2008	05:30:00	0	-3.731	12.697	1.437
971	07/02/2008	05:40:00	0	-3.7306	12.696	1.4374
972	07/02/2008	05:50:00	0	-3.7308	12.697	1.4372
973	07/02/2008	06:00:00	0	-3.7303	12.698	1.4377
974	07/02/2008	06:10:00	0	-3.7306	12.698	1.4374
975	07/02/2008	06:20:00	0	-3.73	12.699	1.438
976	07/02/2008	06:30:00	0	-3.7305	12.698	1.4375
977	07/02/2008	06:40:00	0	-3.7299	12.699	1.4381
978	07/02/2008	06:50:00	0	-3.7298	12.697	1.4382
979	07/02/2008	07:00:00	0	-3.7302	12.698	1.4378
980	07/02/2008	07:10:00	0	-3.7296	12.698	1.4384
981	07/02/2008	07:20:00	0	-3.7295	12.698	1.4385
982	07/02/2008	07:30:00	0	-3.73	12.696	1.438
983	07/02/2008	07:40:00	0	-3.7309	12.697	1.4371
984	07/02/2008	07:50:00	0	-3.7307	12.696	1.4373
985	07/02/2008	08:00:00	0	-3.73	12.695	1.438
986	07/02/2008	08:10:00	0	-3.7303	12.696	1.4377
987	07/02/2008	08:20:00	0	-3.7293	12.694	1.4387
988	07/02/2008	08:30:00	0	-3.7291	12.695	1.4389
989	07/02/2008	08:40:00	0	-3.7296	12.694	1.4384
990	07/02/2008	08:50:00	0	-3.7298	12.695	1.4382
991	07/02/2008	09:00:00	0	-3.7305	12.693	1.4375
992	07/02/2008	09:10:00	0	-3.73	12.692	1.438
993	07/02/2008	09:20:00	0	-3.7299	12.691	1.4381

994	07/02/2008	09:30:00	0	-3.7301	12.692	1.4379
995	07/02/2008	09:40:00	0	-3.7288	12.69	1.4392
996	07/02/2008	09:50:00	0	-3.7296	12.69	1.4384
997	07/02/2008	10:00:00	0	-3.7327	12.688	1.4353
998	07/02/2008	10:10:00	0	-3.729	12.69	1.439
999	07/02/2008	10:20:00	0	-3.73	12.689	1.438
1000	07/02/2008	10:30:00	0	-3.7295	12.689	1.4385
1001	07/02/2008	10:40:00	0	-3.7308	12.689	1.4372
1002	07/02/2008	10:50:00	0	-3.7308	12.688	1.4372
1003	07/02/2008	11:00:00	0	-3.7308	12.689	1.4372
1004	07/02/2008	11:10:00	0	-3.7296	12.687	1.4384
1005	07/02/2008	11:20:00	0	-3.7312	12.688	1.4368
1006	07/02/2008	11:30:00	0	-3.7295	12.688	1.4385
1007	07/02/2008	11:40:00	0	-3.7304	12.687	1.4376
1008	07/02/2008	11:50:00	0	-3.731	12.688	1.437
1009	07/02/2008	12:00:00	0	-3.7299	12.688	1.4381
1010	07/02/2008	12:10:00	0	-3.7305	12.687	1.4375
1011	07/02/2008	12:20:00	0	-3.7302	12.688	1.4378
1012	07/02/2008	12:30:00	0	-3.7308	12.687	1.4372
1013	07/02/2008	12:40:00	0	-3.732	12.688	1.436
1014	07/02/2008	12:50:00	0	-3.7316	12.688	1.4364
1015	07/02/2008	13:00:00	0	-3.731	12.688	1.437
1016	07/02/2008	13:10:00	0	-3.7309	12.687	1.4371
1017	07/02/2008	13:20:00	0	-3.7309	12.688	1.4371
1018	07/02/2008	13:30:00	0	-3.7323	12.688	1.4357
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1027	07/02/2008	15:00:00	0	-3.7318	12.688	1.4362
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1144	08/02/2008	10:30:00	0	-3.7289	12.694	1.4391

**G. REPTILE SURVEY REPORT  
(12 pages)**

MGT TEESSIDE LTD

## **REPTILE SURVEY – PROPOSED TEES RENEWABLE ENERGY PLANT**

July 2008

**Prepared by**  
Parsons Brinckerhoff Ltd  
Queen Victoria House  
Redland Hill  
Bristol  
BS6 6US

**Prepared for**  
MGT Teesside Ltd.  
16 Old Queen Street  
London  
SW1H 9HP

**Report Title : REPTILE SURVEY – PROPOSED TEES  
RENEWABLE ENERGY PLANT**

**Report Status : FINAL**

**Job No : 63265**

**Date : July 2008**

**Prepared by : HANNAH BROUGHTON**

**Checked by : URSULA DIGBY**

**Approved by : RICHARD WEARMOUTH**





## **CONTENTS**

### **Page**

#### **SECTION 1 INTRODUCTION, OBJECTIVES AND GEOGRAPHICAL SCOPE**

#### **SECTION 2 METHODOLOGY AND LIMITATIONS**

2.1	Desk study	3
2.2	Presence / absence survey	3
2.3	Limitations	3

#### **SECTION 3 RESULTS**

3.1	Desk study and habitat assessment	6
3.2	Presence / absence survey	6

#### **SECTION 4 SUMMARY AND RECOMMENDATIONS**

## SECTION 1

# **INTRODUCTION, OBJECTIVES AND GEOGRAPHICAL SCOPE**

## **1 INTRODUCTION, OBJECTIVES AND GEOGRAPHICAL SCOPE**

- 1.1.1 Parsons Brinckerhoff Ltd was commissioned by MGT Teesside Ltd to undertake a reptile survey at the proposed Tees Renewable Energy Plant (Tees REP) site in Teesport to inform the baseline conditions assessment of the EIA<sup>1</sup> for this development.
- 1.1.2 The proposed development is to be situated on land adjacent to the main southern dock at Teesport on the south bank of the Tees, approximately 5 km east of Middlesbrough and 6 km west of Redcar at approximate grid reference 454300, 523230 as shown in Figure 1. The Tees estuary is situated immediately north and east of the proposed development site. Situated to the south and west of the proposed development site is predominately industrial or previously industrial land with areas of wasteland interspersed with roads.
- 1.1.3 The proposed development site comprises an area of approximately 14 ha, which is inclusive of land proposed for laydown and storage as well as that proposed for a new dedicated 400 kV underground cable, refer to Figure 2 for the footprint.
- 1.1.4 An Extended Phase 1 Habitat Survey was undertaken by experienced ecologists on 3<sup>rd</sup> April 2008. The presence of protected but generally common and widespread UK reptile species (namely common lizard (*Lacerta vivipara*) and slow work (*Anguis fragilis*)) was identified as a potentially important ecological constraint during the Extended Phase 1 Habitat Survey, given the presence of suitable supporting habitat within the study area.
- 1.1.5 The more common species of reptile are protected by the Wildlife and Countryside Act 1981 (as amended). It is an offence under this legislation to intentionally kill, injure or take these species.
- 1.1.6 The purpose of the reptile survey was to determine reptile presence or absence from the proposed development area, and hence to determine the need for any further surveys and mitigation measures for the development. This report presents the results of this survey, a summary of the habitat in relation to reptile suitability and the relevant parts of the desk study carried out for the EIA.

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<sup>1</sup> Parsons Brinckerhoff (2008) Tees Renewable Energy Plant Environmental Impact Assessment

## SECTION 2

# METHODOLOGY AND LIMITATIONS

## **2 METHODOLOGY AND LIMITATIONS**

### **2.1 Desk study**

2.1.1 A desk study was carried out to inform the EIA for this development. The following were included in the consultation:

- The Reptile Atlas of North East England;
- Tees Valley Wildlife Trust;
- EYE Project – Regional Environmental Data Hub.

2.1.2 To gain further knowledge of ecological issues in the wider area, the following were searched:

- NBN Gateway;
- Multi-Agency Geographic Information for the Countryside (MAGIC);
- UK Biodiversity Action Plan (BAP); and
- The Tees Valley local BAP, which reflects the aims and objectives of the national plans for the habitats and species found in the local area.

### **2.2 Presence / absence survey**

2.2.1 The survey was carried out by experienced ecologists using standard methodologies as recommended in the Herpetofauna Workers' Manual<sup>2</sup>.

2.2.2 Sixty seven artificial refugia were placed around the site in the most optimal areas for reptiles. These were left to 'settle in' for ten days prior to the first survey check. The locations of these are illustrated in Figure 3. The artificial refugia consisted of 0.5m<sup>2</sup> pieces of roofing felt.

2.2.3 The artificial refugia were checked on seven dates in April and May and once in June under suitable weather conditions. In addition, a number of existing refugia (e.g. pieces of scrap wood) were also checked. Checking of refugia consisted of carefully lifting them and recording any findings. Areas away from refugia were also checked for openly basking individuals.

### **2.3 Limitations**

2.3.1 The survey was predominately carried out between mid April and the beginning of May, which can be relatively cold in the north-east of England. However, the weather conditions for the visits were largely optimal (refer to Table 1) and an additional visit (survey number 8) was undertaken during June. Hence, together with information from the desk study and habitat assessment, it is considered that the results are valid.

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<sup>2</sup> Joint Nature Conservation Committee (2003). *Herpetofauna Workers' Manual*. JNCC, Peterborough

- 2.3.2 Reptile activity follows seasonal patterns and changes over the course of the year (for example during active foraging periods or during hibernation).and from year to year (depending on recruitment from neighbouring sites). Therefore, the absence of activity recorded during this survey does not necessarily provide a comprehensive picture of local reptile activity long-term.
- 2.3.3 This survey reflects what was recorded on the site at the time of survey. Under certain conditions, habitats can change rapidly (due to lapsed management for example), and reptiles will colonise new areas in short periods of time.

### SECTION 3

## **RESULTS**

### **3 RESULTS**

#### **3.1 Desk study and habitat assessment**

3.1.1 The Reptile Atlas of North East England<sup>3</sup> reports that common lizards have been recorded on both sides of the river in industrial waste ground at Teesmouth and to a lesser extent, slow worms (*Anguis fragilis*) have been recorded in the wider area at Hartlepool and Redcar.

3.1.2 The proposed development site comprises hard standing and buildings, interspersed with semi-improved grassland and areas of occasional scrub and ruderal vegetation. The periphery of the site contains large areas of rubble and other man-made debris. These features offer potential habitat for reptiles. However, the site is disturbed, lacks vegetation cover across much of it, and has a lack of south facing slopes for basking. In addition, the position of the site (next to the river) generally produces a windy and cold environment which is unfavoured by reptiles.

#### **3.2 Presence / absence survey**

3.2.1 Results of the presence / absence survey, together with the survey conditions, are presented in Table 1.

**Table 1. Results of presence / absence survey**

<b>Date</b>	<b>Temperature (°C)</b>	<b>Weather</b>	<b>Timing</b>	<b>Results</b>
21/4/08	11	Dry, part cloudy	Morning	No reptiles
22/4/08	10	Dry, part cloudy	Morning	No reptiles
22/4/08	13	Dry, part cloudy	Afternoon	No reptiles
24/4/08	11	Showers, sunny	Morning	No reptiles
1/5/08	10	Dry, sunny, slight breeze	Morning	No reptiles
2/5/08	11	Dry, part cloudy	Morning	No reptiles
7/5/08	14	Dry, sunny	Morning	No reptiles
8/5/08	16	Dry, sunny	Morning	No reptiles
20/6/08	16	Dry, sunny, occasional cloud	Afternoon	No reptiles

<sup>3</sup> Reptile Atlas of North East England, J. L. Durkin (January, 2008).



#### SECTION 4

### **SUMMARY AND RECOMMENDATIONS**

**4 SUMMARY AND RECOMMENDATIONS**

- 4.1.1 A reptile presence/absence survey was carried out at the proposed Tees REP development area following best practice guidance over seven occasions in April and May 2008. Although the survey conformed to standard guidelines, an additional survey date was added later in the season (at the end of June) as a precaution, in consideration of the exposed nature of the location.
- 4.1.2 No reptiles were found during the eight survey visits and the habitat was considered sub-optimal. There are no historical records of reptiles within the development area. It can be concluded that it is highly likely that reptiles are currently absent from the proposed development area.
- 4.1.3 It is considered that no further surveys or mitigation measures in relation to reptiles are required for the proposed development.

**H. CITATION SHEETS  
(24 pages)**

**COUNTY:** CLEVELAND    **SITE NAME:** COWPEN MARSH

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

**Local Planning Authorities:** Hartlepool Borough Council, Stockton-on-Tees Borough Council

**National Grid Reference:** NZ 500529

<b>Area:</b> 25.7 (ha.)	63.5 (ac.)	Hartlepool
91.1 (ha.)	225.1 (ac.)	Stockton
116.8 (ha.)	288.6 (ac.)	Total

**Ordnance Survey Sheets 1:50,000:** 93                      **1:25,000:** NZ 42, NZ 52

**First Notified:** 1966\*

**Revision Date:** 1988

**Date Notified:** 12/1/89

**Other Information:**

1. This site forms part of 'Teesmouth Flats' and Marshes', a complex of sites listed in 'A Nature Conservation Review' edited by D A Ratcliffe (1977). Cambridge University Press.
2. Teesmouth Flats and Marshes are of international importance and meet the criteria for designation under the terms of the European Community Directive 79/409 EEC or the Conservation of Wild Birds and for inclusion on the list of Wetlands of International Importance under the Ramsar Convention.
3. During the 1988 revision the boundary of the site has been amended to both extend the site and exclude a small area of land previously notified\*.
4. Part of Cowpen Marsh is managed as a nature reserve by the Cleveland Nature Conservation Trust.

**Description:**

The site known as Cowpen Marsh includes the largest saltmarsh between Lindisfarne and the Humber Estuary and together with adjacent coastal grazing marshes and mudflats it provides an important wintering site for migratory wildfowl and wading birds. It forms an integral part of Tees Estuary, a site of international importance for overwintering shore birds.

Along the southern side of Greatham Creek the saltmarsh is dominated by common saltmarsh grass *Puccinellia maritima* with sea aster *Aster tripolium*. Higher levels of the marsh support species-rich associations of red fescue *Festuca rubra*, sea plantain *Plantago maritima*, sea arrowgrass *Triglochin maritima*, greater sea-spurry *Spergularia media* and sea milkwort *Glaux maritima* and there is an unusual community of common sea-lavender *Limonium vulgare* with thrift *Armeria maritima* which occurs here close to the northern edge of its range in eastern Britain. North of the creek pioneer communities of glasswort *Salicornia* spp. and annual seablight on the intertidal mud are succeeded by common saltmarsh-grass and sea aster.

The coastal grazing marsh, which comprises semi-improved neutral grassland dominated by common bent *Agrostis capillaris*, Yorkshire-fog *Holcus lanatus* and red fescue is divided by shallow, seasonally damp, fleets supporting tufted hairgrass *Deschampsia cespitosa*, creeping bent *Agrostis stolonifera*, floating sweet-grass *Glyceria fluitans* and marsh foxtail *Alopecurus geniculatus*. Other deep water fleets, some brackish support sea club-rush *Scirpus maritimus*, grey club-rush *Schoenoplectus tabernaemontanii*, wild celery *Apium graveolens*, reed sweet-grass *Glyceria maxima* and brackish water-crowfoot *Ranunculus baudotii* with celery-leaved buttercup

*Ranunculus scleratus*, sea rush *Juncus maritimus* and mare's-tail *Hippurus vulgaris* along their grazed margins.

Greatham Creek and Cowpen Marsh together provide important roosting and feeding grounds for large numbers of migratory wildfowl and wading birds which also feed on the intertidal flats around the Tees Estuary. More than 1000 birds have been recorded here on a regular basis throughout the winter months including peak counts of wigeon (300), teal (420), curlew (520), redshank (610), bar-tailed godwit (145), lapwing (600), golden plover (770) and dunlin (320). The grazing marsh supports breeding mallard, teal, moorhen, coot, redshank, snipe, lapwing, reedbunting and yellow wagtail.

\* Under Section 23 of the National Parks and Access to the Countryside Act, 1949.

File ref:

**County:** Cleveland **Site Name:** **Hartlepool  
Submerged Forest**

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

**Local Planning Authority:** Hartlepool Borough Council

**National Grid Reference:** NZ 520315 **Area:** 19.7 (ha) 48.6 (ac)

**Ordnance Survey Sheet 1:50 000** 93 **1:10 000** NZ 53 SW

**First Notified:** 1988

**Other Information:**

This site is identified as of national importance in the Flandrian Sea-Level Changes block of the Geological Conservation Review.

**Description:**

The coast at Hartlepool provides important stratigraphic evidence for Flandrian sea-level changes in Eastern England. The interest comprises a sequence of inorganic and organic deposits, including a peat bed, in the intertidal area. The deposits have yielded pollen molluscs, and archaeological remains, which together with radiocarbon dating have been used to establish the pattern of relative sea-level change over the last 5,000 years.

SITE NOTIFIED TO THE SECRETARY OF STATE ON 19 OCTOBER 1999

COUNTY: REDCAR & CLEVELAND SITE NAME: LOVELL HILL POOLS

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended

Local Planning Authorities: REDCAR AND CLEVELAND BOROUGH COUNCIL, Tees Valley Joint Strategy Unit

National Grid Reference: NZ 596189 Area: 9.2 (ha.)

Ordnance Survey Sheets 1:50,000: Sheet 93 1:10,000: Sheet NZ 51 NE

First Notified: 1999

Other Information:

Great crested newt, *Triturus cristatus*, is specially protected under the Wildlife and Countryside Act 1981 (as amended), and under The Conservation (Natural Habitats, &c.) Regulations 1994.

Description and Reasons for Notification:

Lovell Hill Pools is set within an undulating, well-wooded agricultural landscape to the north of the North York Moors. The site supports an outstanding assemblage of dragonflies and damselflies.

The pools owe their origin to mining subsidence, and comprise a series of shallow water bodies fringed by swamp vegetation, damp neutral grassland, willow carr and scrub. The intimate mosaic of habitats provides sheltered breeding and feeding sites for flying insects in general and *Odonata*, dragonflies and damselflies, in particular. The following species are known to breed at the site; azure damselfly *Coenagrion puella*, variable damselfly *Coenagrion pulchellum*, common blue damselfly *Enallagma cyathigerum*, large red damselfly *Pyrrhosoma nymphula*, blue-tailed damselfly *Ischnura elegans*, emerald damselfly *Lestes sponsa*, southern hawker *Aeshna cyanea*, common hawker *Aeshna juncea*, four-spotted chaser *Libellula quadrimaculata*, ruddy darter *Sympetrum sanguineum* and common darter *Sympetrum striolatum*.

The variable damselfly is scarce nationally and is found here on the northern-eastern edge of its range. This species prefers ponds with abundant emergent vegetation, and numbers have declined nationally in recent decades.

Other invertebrates of restricted distribution in north-east England, present on the site, include the dingy skipper butterfly *Erynnis tages*, a pondskater; *Gerris lateralis*, and a water spider; *Argyroneta aquatica*.

The pools and surrounding habitats also support populations of both great crested newt *Triturus cristatus* and smooth newt *T. vulgaris*.

COUNTY: CLEVELAND

SITE NAME: REDCAR ROCKS

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended

Local Planning Authority: LANGBAURGH BOROUGH COUNCIL

National Grid Reference: NZ 605253–NZ 620253      Area: 31.1 (ha.) 76.8 (ac.)

Ordnance Survey Sheets 1:50,000: 94      1:10,000: NZ 62 NW

First Notified: 1984

Other Information:

This is a new site identified as of national importance in the Geological Conservation Review.

Description:

Redcar Rocks represent the finest exposures of rock in the Lower Lias north of the Market Weighton Swell i.e. in the Yorkshire Basin. They display most of the stratigraphical interval missing from classic sections along the Yorkshire coast and are composed of calcareous shales containing characteristic fossil ammonites such as *Alsatites liasicus* and *Arnioceras semicostatum*. These span both Hettangian and Sinemurian Stages (i.e. *liasicus* and *semicostatum* zones) and are thus of key importance in relation to better known sections in Yorkshire. This rock sequence is atypical of the Lower Lias since, elsewhere in Britain, Blue Lias facies are normally found.

When exposed at low tide the rocks and sands provide an important feeding ground for several species of wading birds e.g. knot, turnstone, sanderling and purple sandpiper, especially during the winter months. These compliment other areas of rocky foreshore within South Gare and Coatham Sands SSSI, including Coatham Rocks and the 'German Charlies'.



COUNTY: CLEVELAND

SITE NAME: SEAL SANDS

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended

Local Planning Authorities: HARTLEPOOL BOROUGH COUNCIL and Stockton-on-Tees Borough Council

National Grid Reference: NZ 529260

Area: 4	9.37 (ha.)	121.99 (ac.)	Hartlepool
	245.0 (ha.)	605.41 (ac.)	Stockton
	294.37 (ha.)	727.4 (ac.)	Total

Ordnance Survey Sheets 1:50,000: 93      1:10,000: NZ 52 NW; SW

First Notified: 1966\*

Date of Revision: 1983/84

Other Information:

1. This site forms part of 'Teessmouth Flats and Marshes', a complex of sites listed in 'A Nature Conservation Review' edited by D A Ratcliffe (1977) Cambridge University Press.
2. Teessmouth Flats and Marshes are of international importance and meet the criteria for designation under the terms of the European Community Directive 79/409/EEC on the Conservation of Wild Birds and for inclusion on the list of Wetlands of International Importance under the Ramsar Convention.
3. During the 1983/84 revision the boundary has been amended by both reduction and extension, including the reallocation of a small area of the adjacent 'Seaton Dunes and Common SSSI'.

Description:

Seal Sands are the only extensive area of intertidal mudflats, with tidal channels on the East coast of England between the Lindisfarne National Nature Reserve to the north and the Humber Estuary to the south, a distance of 200 miles. These mudflats are of great ornithological importance attracting large numbers of migratory wildfowl (c. 4,000) and wading birds (c. 24,000) especially during the winter months.

Of particular note are internationally important concentrations of shelduck (c. 3,200 during peak counts) which feed on Seal Sands. These represent approximately 2% of the total Western European population. In addition, sizeable flocks of mallard, teal and widgeon, as well as diving duck such as pochard, goldeneye and tufted duck congregate on Seal Sands to roost and feed particularly during cold spells. The most important species of wading birds using Seal Sands as their main feeding ground during the winter months of the year are knot (c. 10,000 at peak counts) and redshank (c. 1,050 at peak counts), which both occur in internationally significant numbers at Teessmouth – (i.e. 3–5% and 1% of the

total Western European populations, respectively). The mudflats are also used as feeding ground by other species of wading birds including dunlin, oystercatcher, ringed plover, curlew, bar-tailed godwit, lapwing, grey plover and turnstone. When the mudflats are inundated at high tide their use as a feeding ground is complemented by adjacent areas of reclaimed land which also serve as roosting sites. The reclaimed enclosures with shallow lagoons in the southern sector of the site and the developing sand-dunes on the Seal Sands Peninsula are particularly important in this respect.

\*Under Section 23 of the National Parks and Access to the Countryside Act 1949.

**COUNTY:** CLEVELAND    **SITE NAME:** SEATON DUNES AND COMMON

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

**Local Planning Authority:** Hartlepool Borough Council

**National Grid Reference:** NZ 535285                      **Area:** 312.1 (ha.) 771.2 (ac.)

**Ordnance Survey Sheets 1:50,000:** 93                      **1:10,000:** NZ 52 NW

**First Notified:** 1966\*                      **Revision Date:** 1985

**Other Information:**

1. This site forms part of 'Teesmouth Flats and Marshes', a complex of sites listed in 'A Nature Conservation Review' edited by D A Ratcliffe (1977). Cambridge University Press.
2. Teesmouth Flats and Marshes are of international importance and meet the criteria for designation under the terms of the European Community Directive 79--09/EEC on the Conservation of Wild Birds and for inclusion on the list of Wetlands of International Importance under the Ramsar Convention.
3. The boundary of the site has been modified.

**Description:**

Seaton Dunes and Common is an area of considerable importance for its flora, invertebrate fauna, and bird life. The range of habitats present include sandy, muddy and rocky foreshore, dunes, dune slacks and dune grassland, as well as relict saltmarsh, grazed freshwater marsh with dykes (known locally as fleets and stells) pools and seawalls.

Marram grass *Ammophila arenaria* dominates the main dunes with large populations of sea lyme grass *Elymus arenarius*, sand couch *Agropyron junceiforme* and sea rocket *Cakile maritima* on their seaward side. The dune flora is particularly rich and includes the nationally rare rush-leaved fescue *Festuca juncifolia* and sea couch *Agropyron pungens* and its northernmost locality, as well as purple milk vetch *Astragalus danicus*, blue fleabane *Erigeron acer* and yellow wort *Blackstonia perfoliata* which have a limited distribution and are associated with the lime-rich slag of the dune covered sea walls. On the landward side of the dunes there is an extensive growth of sea buckthorn *Hippophae rhamnoides* and areas of dune slack supporting large populations of common spotted and marsh orchids *Dactylorhiza* spp. as well as their hybrids including several locally rare forms. The remainder of the site is primarily dune grassland and grazed freshwater marsh with associated fleets, stells, pools and seawalls dominated by various grasses, rushes and reeds with uncommon plants such as strawberry clover *Trifolium fragiferum*, wild celery *Apium graveolens*, knotted hedge parsley *Torilis nodosa* and adder's tongue fern *Ophioglossum vulgatum*. A small area of relict saltmarsh vegetation is present including stiff saltmarsh grass *Puccinellia rupestris* of local distribution throughout Britain.

The snail *Hydrobia ventrosa* is present at its most northerly site on the East Coast of England. In addition, two nationally rare species of beetle occur here, namely, *Hydnobius perrisi* and *Philonthus atratus* as well as the rare spider *Silometopus incurvatus*.

Seaton Sands, North Gare Sands and Seaton Snook dunes provide important winter feeding grounds and roost sites for various species of wading birds including sanderling, knot, ringed plover, turnstone, oystercatcher, dunlin and grey plover. The Teesmouth population of sanderling exceeds internationally important levels and up to half of the 1200 birds (5.7% of the W. European population) feed and roost within the

SSSI. Similarly, large populations of knot winter at Teesmouth, when up to 10,000 birds (3% of the W. European population) may roost on Seaton Snook Dunes during high tide. The populations of other species of wading birds reach nationally significant levels, with up to 200 ringed plover (about 1% of the W. European population) and approximately 250 turnstone (2.4% of the UK wintering population) present within the site prior to migration. Large numbers of common, arctic and sandwich terns (3,500 at peak counts) also frequent the Seaton Snook area on migration.

\* Under Section 23 of the National Parks and Access to the Countryside Act, 1949.

SITE NOTIFIED TO THE SECRETARY OF STATE ON 19 OCTOBER 1988

COUNTY: CLEVELAND SITE NAME: SOUTH GARE & COATHAM  
SANDS

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the  
Wildlife and Countryside Act, 1981, as amended.

Local Planning Authority: LANGBAURGH BOROUGH COUNCIL

National Grid Reference: NZ 547262–NZ 617264 Area: 381.2 (ha.) 941.9  
(ac.)

Ordnance Survey Sheets 1:50,000: 93 and 94 1:10,000: NZ 52 NW &  
NE, 62 NW

First Notified: \*1971

Date of Revision: 1988

Other Information:

1. This site forms part of 'Teesmouth Flats and Marshes' a complex of sites listed in 'A Nature Conservation Review' edited by D A Ratcliffe (1977). Cambridge University Press.
2. Teesmouth Flats and Marshes are of international importance and meet the criteria for designation under the terms of the European Community Directive 79/409/EEC on the Conservation of Wild Birds and for inclusion on the list of Wetlands of International Importance under the Ramsar Convention.
3. The boundary of this site has been considerably extended.

Description:

The site known as South Gare and Coatham Sands is of considerable interest for its flora, invertebrate fauna and birdlife. The range of habitats present includes extensive tracts of intertidal mud and sand, sand dunes, saltmarsh and freshwater marsh which have all developed since the construction of the South Gare breakwater with tipped slag during the 1860's. Also exposed at low tide are areas of rocky foreshore along the breakwater, three slag banks known as the German Charlies, and Coatham Rocks.

The sand dunes are dominated by marram grass *Ammophila arenaria* but also support one of the largest continuous stands of lyme grass *Leymus arenarius* in Britain. Sea couch-grass *Elymus pycnanthus*, is present here at the northern limit of its range. The dune slacks support large populations of northern marsh orchid *Dactylorhiza purpurella*, early marsh orchid *D. incarnata* and fragrant orchid *Gymnadenia conopsea*. Other plants of particular interest within the dune system, and associated with lime-rich areas of tipped slag, are yellow wort *Blackstonia perfoliata*, lesser centaury *Centaureum pulchellum*, knotted hedge parsley *Torilis nodosa*, carline thistle *Carlina vulgaris*, strawberry clover *Trifolium fragiferum* and the nationally rare grass, rush-leaved fescue *Festuca*

*juncifolia*. Within the developing saltmarsh notable plants include sea wormwood *Artemisia maritima*, lesser sea spurrey *Spergularia marina*, lax-flowered sea lavender *Limonium humile*, sea purslane *Halimione portulacoides* and smallest hare's ear *Bupleurum tenuissimum*. Parsley water dropwort *Oenanthe lachenalii* is of particular interest amongst the fresh water marsh communities dominated by great reedmace *Typha latifolia*, rushes *Juncus* spp. and sedges *Carex* spp.

The invertebrate fauna of South Gare is rich including several species of butterfly; several uncommon beetles, notably *Broscus cephalotes* and *Enochrus quadripunctatus*; and rare spiders such as *Silometopus incurvatus* and *Dysdera crocata*.

Areas of mud and sand-flat on Bran Sands provide important winter feeding grounds for bar-tailed godwit, curlew, redshank, dunlin and grey plover. Further intertidal areas along Coatham Sands support an internationally important population of sanderling (1200 birds, some 8% of the West European population). Both areas support ringed plover on passage migration (c. 150 birds). Knots feed along the intertidal areas, the breakwater and on the mussel beds of the German Charlies and Coatham Rocks with peak counts of 6000 birds (some 2% of the West European population). These latter areas also support turnstone (c. 180 birds), purple sandpiper and oystercatcher.

\*Under Section 23 of the National Parks and Access to the Countryside Act, 1949.

SITE NOTIFIED TO THE SECRETARY OF STATE ON 28 JULY 1997

COUNTY: CLEVELAND                      SITE NAME: TEES AND HARTLEPOOL  
FORESHORE AND WETLANDS

Status:     Site of Special Scientific Interest (SSSI) notified under Section 28 of the  
Wildlife and Countryside Act, 1981, as amended.

Local Planning Authorities: HARTLEPOOL BOROUGH COUNCIL, Stockton-on-Tees  
Borough Council

National Grid References:              NZ 516348, NZ 519327, NZ 517261, NZ 493232,  
NZ 505224, NZ 509229, NZ 513230, NZ 524220

Area:        255.62 (ha.)

Ordnance Survey Sheets 1:50,000: 93     1:10,000:    NZ 42 SE, NZ 43 NE, NZ 52 NW  
NZ 52 SW, NZ 53 SW

First Notified: 1997

Other Information:

Tees and Hartlepool Foreshore and Wetlands fulfils criteria for consideration as part of the Teesmouth and Cleveland Coast site, listed as a wetland of international importance under the Ramsar Convention and as a Special Protection Area under the European Community Directive 79/409/EEC on the Conservation of Wild Birds.

This site abuts Hart Warren Dunes SSSI and Seal Sands SSSI.

Description and Reason for Notification:

Tees and Hartlepool Foreshore and Wetlands comprises several coastal areas which are an integral part of the complex of wetlands, estuarine and maritime sites supporting the internationally important population of wildfowl and waders on the Tees Estuary.

The successive reclamation and development of the Tees Estuary has resulted in the loss of most of the upper shore as feeding and roosting areas for waterfowl. At high tide the birds have to disperse to inland wetlands or more distant coastal locations. Research has shown that the birds move in regular patterns around the estuary utilising different sites at different stages of the tide.

In winter the site supports nationally important numbers of purple sandpiper, sanderling and shoveler. Counts have also shown that proportions of the total Tees population of other birds regularly feed and roost on parts of this site, in particular sanderling, knot, purple sandpiper and turnstone along the north Hartlepool shore and Hartlepool Headland; redshank, curlew, teal and shelduck on Greenabella Marsh; shoveler, teal, wigeon, gadwall, lapwing and golden plover on Saltholme Pool and Dorman's Pools; redshank and shelduck on the North Tees mudflats.

Saltholme and Dorman's Pools and Haverton Hole support a nationally important assemblage of breeding birds which includes shoveler, pochard, little ringed plover and great crested and little grebe.



# Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

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**1. Name and address of the compiler of this form:****Joint Nature Conservation Committee**

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: [RIS@JNCC.gov.uk](mailto:RIS@JNCC.gov.uk)

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

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**2. Date this sheet was completed/updated:**

Designated: 15 August 1995

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**3. Country:**

UK (England)

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**4. Name of the Ramsar site:**

Teessmouth and Cleveland Coast

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**5. Map of site included:**Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.**a) hard copy** (required for inclusion of site in the Ramsar List): yes ✓ -or- no**b) digital (electronic) format** (optional): Yes

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**6. Geographical coordinates (latitude/longitude):**

54 37 50 N

01 07 07 W

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**7. General location:**

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Middlesbrough

Teessmouth and Cleveland Coast lies 48 km south-east of the city of Newcastle-upon-Tyne on the north-east coast of England.

**Administrative region:** Cleveland; Durham; Hartlepool; Redcar and Cleveland; Stockton-on-Tees

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**8. Elevation** (average and/or max. & min.) (metres): **9. Area** (hectares): 1247.31

Min. -1

Max. 4

Mean 1

**10. Overview:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Medium-large site encompassing a range of habitats (sand and mudflats, rocky shore, saltmarsh, freshwater marsh and sand dunes) on and around an estuary which has been much-modified by human activities. Together these habitats support internationally important numbers of waterbirds.

**11. Ramsar Criteria:**

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

**5, 6**

**12. Justification for the application of each Criterion listed in 11. above:**

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 5

**Assemblages of international importance:****Species with peak counts in winter:**

9528 waterfowl (5 year peak mean 1998/99-2002/2003)

**Ramsar criterion 6 – species/populations occurring at levels of international importance.**

**Qualifying Species/populations (as identified at designation):****Species with peak counts in spring/autumn:**

Common redshank , *Tringa totanus totanus*,

883 individuals, representing an average of 0.7% of the GB population (5 year peak mean 1998/9-2002/3)

**Species with peak counts in winter:**

Red knot , *Calidris canutus islandica*, W & Southern Africa

(wintering)

2579 individuals, representing an average of 0.9% of the GB population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See [www.bto.org/survey/webs/webs-alerts-index.htm](http://www.bto.org/survey/webs/webs-alerts-index.htm).

Details of bird species occurring at levels of National importance are given in Section 20

**13. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

**a) biogeographic region:**

Atlantic

**b) biogeographic regionalisation scheme** (include reference citation):

Council Directive 92/43/EEC

**14. Physical features of the site:**

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	basic, neutral, shingle, sand, mud, clay, alluvium, peat, sedimentary, sandstone, sandstone/mudstone, boulder
Geomorphology and landscape	lowland, coastal, floodplain, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), open coast (including bay), enclosed coast (including embayment), estuary, lagoon, pools, intertidal rock
Nutrient status	eutrophic, mesotrophic
pH	circumneutral
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Durham, 1971–2000) ( <a href="http://www.metoffice.com/climate/uk/averages/19712000/sites/durham.html">www.metoffice.com/climate/uk/averages/19712000/sites/durham.html</a> ) Max. daily temperature: 12.5° C Min. daily temperature: 5.2° C Days of air frost: 52.0 Rainfall: 643.3 mm Hrs. of sunshine: 1374.6

**General description of the Physical Features:**

Teesmouth and Cleveland Coast includes a range of coastal habitats – sand- and mud-flats, rocky shore, saltmarsh, freshwater marsh and sand dunes – on and around an estuary which has been considerably modified by human activities.

**15. Physical features of the catchment area:**

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Teesmouth and Cleveland Coast includes a range of coastal habitats – sand- and mud-flats, rocky shore, saltmarsh, freshwater marsh and sand dunes – on and around an estuary which has been considerably modified by human activities.

**16. Hydrological values:**

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces

**17. Wetland types**

Inland wetland, Marine/coastal wetland

Code	Name	% Area
D	Rocky shores	7
E	Sand / shingle shores (including dune systems)	14
F	Estuarine waters	2
G	Tidal flats	45
H	Salt marshes	7
J	Coastal brackish / saline lagoons	1
K	Coastal fresh lagoons	3

M	Rivers / streams / creeks: permanent	1
Tp	Freshwater marshes / pools: permanent	20

### 18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Teesmouth and Cleveland Coast comprises intertidal sand and mudflats, rocky shore, saltmarsh, freshwater marsh and sand dunes. The Tees Estuary has been much-modified by such activities as land-claim, construction of breakwaters and training walls, and deep dredging. The remaining intertidal areas within the estuary are composed of mud and sand, with some *Enteromorpha* beds in sheltered areas. Outside the estuary mouth, sandflats predominate, but with significant rocky foreshores and reefs at both Redcar and Hartlepool and anthropogenic boulder beds at South Gare. Moderately extensive sand dune systems flank the estuary mouth, while a smaller dune system lies north of Hartlepool; foredunes are dominated by *Ammophila*, *Elytrigia juncea* and *Leymus* communities, fixed dunes by *Festuca rubra* communities. Surviving saltmarsh is very limited in extent, and is largely typified by *Puccinellia*. Behind the dunes and sea-defences a number of significant areas of grazing marsh are found, where *Festuca rubra* saltmarsh persists alongside inundation grassland, a range of swamp communities and several shallow water bodies.

### 19. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site

Higher Plants:

*Festuca arenaria*, *Puccinellia rupestris*, *Ranunculus baudotii* (all Nationally Scarce)

### 20. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

#### Birds

#### Species currently occurring at levels of national importance:

#### Species regularly supported during the breeding season:

Little tern, *Sterna albifrons albifrons*, W Europe 40 pairs, representing an average of 2% of the GB population (Five year mean for 1995 to 1998)

#### Species with peak counts in spring/autumn:

Northern shoveler, *Anas clypeata*, NW & C Europe 7 individuals, representing an average of 0% of the GB population (5 year peak mean 1998/9-2002/3)

Common greenshank, *Tringa nebularia*, Europe/W Africa 7 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)

#### Species Information

Nationally important species occurring on the site

Invertebrates:

*Pherbellia grisescens*, *Thereva valida*, *Longitarsus nigerrimus*, *Dryops nitidulus*, *Macrolea mutica*, *Philonthus dimidiatipennis*, *Trichohydriobius suturalis* (all RDB)

### 21. Social and cultural values:

e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Environmental education/ interpretation

Fisheries production  
 Livestock grazing  
 Non-consumptive recreation  
 Scientific research  
 Sport fishing  
 Sport hunting  
 Transportation/navigation

**22. Land tenure/ownership:**

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+

**23. Current land (including water) use:**

Activity	On-site	Off-site
Nature conservation	+	+
Recreation	+	+
Current scientific research	+	+
Collection of non-timber natural products: (unspecified)	+	
Fishing: commercial		+
Fishing: recreational/sport	+	+
Bait collection	+	
Arable agriculture (unspecified)		+
Permanent pastoral agriculture	+	+
Hunting: recreational/sport	+	+
Industrial water supply		+
Industry		+
Sewage treatment/disposal		+
Harbour/port	+	+
Flood control	+	+
Irrigation (incl. agricultural water supply)		+
Transport route	+	+
Urban development		+

## 24. Factors adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

*Explanation of reporting category:*

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Eutrophication	2			+	+

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?  
Eutrophication - Under Asset Management Plan AMP4 Northumbrian Water is obliged to introduce tertiary treatment to its Billingham Sewage Treatment Works, and to undertake a major investigation into the occurrence and spread of *Enteromorpha* algal mats and water/sediment quality issues.

Is the site subject to adverse ecological change? YES

## 25. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Site management statement/plan implemented	+	
Other	+	+

## 26. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

## 27. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna:

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl &

Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Waterfowl monitoring: Durham University Dept of Biological Sciences as part of the above contract  
Ringing programmes: Tees Ringing Group.

Habitat:

Monitoring of the effects of Northumbrian Water sewage inputs (NWL, EA, EN).

Breeding bird surveys of Teesmouth NNR (EN) and Cowpen Marsh SSSI (Industry Nature Conservation Association).

Annual monitoring of breeding Little Terns (INCA).

Monitoring of seal usage of site and breeding success (INCA).

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### 28. Current conservation education:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

The Teesmouth Field Centre approximately 3000 schoolchildren annually on a variety of study programmes. There are three public hides and several interpretive panels. English Nature, Hartlepool Countryside Wardens and Tees Valley Wildlife Trust undertake regular guided walks and events. British Energy and Huntsman Tioxide have provided hides which are available during guided visits.

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### 29. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality

Land based recreation:

The main activities are walking (especially dog walking), beach recreation, golf, and birdwatching, which take place year-round (though with a pronounced summer peak). The South Gare area has beach huts, car parks and a caravan site. Car parks are also located at North Gare and Seaton Carew. Seaton Carew and Cleveland Golf Clubs have courses adjacent to and impinging slightly on the site. Use is mainly April to September, but golf is played year-round.

Illegal use of motorcycles, quad-bikes and 4WD vehicles is particularly prevalent at South Gare, but is also increasing at Seaton Sands.

Wildfowling is confined to small areas of Cowpen Marsh and Saltholme Pools (1 September to 31 January).

Water based recreation:

In summer, power-boating, jet-skiing, dinghy-sailing and windsurfing all occur but at a low intensity (apart from Coatham Sands, where 'extreme sports' such as kite-surfing are increasing), and primarily on the open coast. Angling is largely confined to breakwaters (year-round), while bait-gathering in intertidal areas can be locally intensive, especially on Bran Sands (adjacent to the South Gare Breakwater).

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### 30. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,  
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay,  
Bristol, BS1 6EB

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### 31. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,  
Northminster Road, Peterborough, PE1 1UA, UK

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### 32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

#### Site-relevant references

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Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**  
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: [ramsar@ramsar.org](mailto:ramsar@ramsar.org)



**NATURA 2000****STANDARD DATA FORM**

FOR SPECIAL PROTECTION AREAS (SPA)

FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)

AND

FOR SPECIAL AREAS OF CONSERVATION (SAC)

**1. Site identification:****1.1 Type**

A

**1.2 Site code**

UK9006061

**1.3 Compilation date**

199508

**1.4 Update**

200003

**1.5 Relationship with other Natura 2000 sites**

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**1.6 Respondent(s)**

International Designations, JNCC, Peterborough

**1.7 Site name**

Teemouth and Cleveland Coast

**1.8 Site indication and designation classification dates**

date site proposed as eligible as SCI	
date confirmed as SCI	
date site classified as SPA	199508
date site designated as SAC	

**2. Site location:****2.1 Site centre location****longitude****latitude**

01 07 07 W

54 37 50 N

**2.2 Site area (ha)**

1247.31

**2.3 Site length (km)****2.5 Administrative region**

NUTS code	Region name	% cover
UK111	Cleveland	100.00%

**2.6 Biogeographic region**
☐

Alpine

☒

Atlantic

☐

Boreal

☐

Continental

☐

Macaronesia

☐

Mediterranean

**3. Ecological information:****3.1 Annex I habitats**

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

### 3.2 Annex I birds and regularly occurring migratory birds not listed on Annex I

		Population				Site assessment			
		Resident	Migratory						
Code	Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
A143	<i>Calidris canutus</i>			5509 I		C		C	
A195	<i>Sterna albifrons</i>		40 P			C		C	
A191	<i>Sterna sandvicensis</i>				1900 I	B		C	
A162	<i>Tringa totanus</i>				1648 I	C		C	

## 4. Site description:

### 4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	54.0
Salt marshes. Salt pastures. Salt steppes	7.0
Coastal sand dunes. Sand beaches. Machair	14.0
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	3.0
Bogs. Marshes. Water fringed vegetation. Fens	20.0
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Evergreen woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Scree. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	2.0
<b>Total habitat cover</b>	<b>100%</b>

### 4.1 Other site characteristics

#### Soil & geology:

Alluvium, Basic, Boulder, Clay, Mud, Neutral, Peat, Sand, Sandstone, Sandstone/mudstone, Sedimentary, Shingle

#### Geomorphology & landscape:

Coastal, Enclosed coast (including embayment), Estuary, Floodplain, Intertidal rock, Intertidal sediments (including sandflat/mudflat), Lagoon, Lowland, Open coast (including bay), Pools, Subtidal sediments (including sandbank/mudbank)

### 4.2 Quality and importance

#### ARTICLE 4.1 QUALIFICATION (79/409/EEC)

##### During the breeding season the area regularly supports:

*Sterna albifrons*  
(Eastern Atlantic - breeding)

1.7% of the population in Great Britain  
Four year mean for 1995 to 1998

##### On passage the area regularly supports:

*Sterna sandvicensis*  
(Western Europe/Western Africa)

6.8% of the population in Great Britain  
Five year mean for 1988 to 1992

#### ARTICLE 4.2 QUALIFICATION (79/409/EEC)

##### Over winter the area regularly supports:

*Calidris canutus*  
(North-eastern Canada/Greenland/Iceland/North-western Europe)

1.6% of the population  
Five year peak mean for 1991/92 to 1995/96

##### On passage the area regularly supports:

*Tringa totanus*  
(Eastern Atlantic - wintering)

1.1% of the East Atlantic Flyway population  
5 year peak mean, 1987 - 1991

#### ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS

##### Over winter the area regularly supports:

21312 waterfowl (5 year peak mean 01/03/2000)

Including:

*Calidris canutus*.

## 4.3 Vulnerability

The natural incursion of coarse marine sediments into the estuary and the eutrophication of sheltered mudflats leading to the spread of dense Enteromorpha beds may impact on invertebrate density and abundance, and hence on waterfowl numbers. Indications are that the observed sediment changes derive from the reassertion of natural coastal processes within the context of an estuary much modified by human activity. An extensive long-term monitoring programme is investigating the effects of the Tees Barrage, while nutrient enrichment from sewage discharges should be ameliorated by the planned introduction of improved treatment facilities and the Environment Agency's acceptance of Seal Sands as a candidate Sensitive Area to Eutrophication. Aside from the eutrophication issue, water quality has shown considerable and sustained improvement, leading to the re-establishment of migratory fish populations and the growth of cormorant and common seal populations. The future development of port facilities in areas adjacent to the site, and in particular of deep water frontages with associated capital dredging, has the potential to cause adverse effect; these issues will be addressed through the planning system/Habitats Regulations, as will incompatible coastal defence schemes. Other issues on this relatively robust site include scrub encroachment on dunes (addressed by Site Management Statements with owners) and recreational, bait-gathering and other disturbance/damage to habitats/species (addressed by WCA 1981, NNR Byelaws and the Tees Estuary Management Plan).

## 5. Site protection status and relation with CORINE biotopes:

### 5.1 Designation types at national and regional level

Code	% cover
UK01 (NNR)	8.0
UK04 (SSSI/ASSI)	100.0

**I. PHASE 1 HABITAT TARGET NOTES  
(1 page)**

## I. PHASE 1 HABITAT TARGET NOTES

Target Note (TN)	Description
1	Semi-improved grassland with intermittent scrub and tall ruderal species. Species comprised fox-tail ( <i>Alopecurus pratensis</i> ), fescue ( <i>Festuca</i> spp.), cocksfoot ( <i>Dactylis glomerata</i> ), and ribwort plantain ( <i>Plantago lanceolata</i> ). Tall ruderal species included mugwort ( <i>Artemisia vulgaris</i> ) and willow-herb ( <i>Chamerion angustifolium</i> ). The scrub species were bramble ( <i>Rubus fruticosus</i> ) and immature willow ( <i>Salix</i> sp.) as well as a garden shrub species which was not identified.
2	A large bund of waste materials and soil, with a mixture of rubble and metal next to semi-improved grassland. The grassland species included yarrow ( <i>Achillea millefolium</i> ), mugwort, fescue and cocksfoot as well as common ragwort ( <i>Senecio jacobea</i> ).
3	Grassland beneath industrial pipes for the gas works and dockside. It was not possible to access the area, but the grassland species looked similar to those identified across the site. It is considered possible that the grassland beneath the pipes could act as a 'corridor' for wildlife as the pipes were situated approximately 0.5m from the ground.
4	Semi-improved grassland. The habitat had a greater proportion of bare ground, with the use of processed slag as the base for vehicular access through the site.
5	A mammal run was identified beneath the boundary fence. It was considered to be fox ( <i>Vulpes vulpes</i> ), as there were no guard hairs, no scratch marks and the entrance hole was too small to indicate badger and too large to indicate other mammals. Habitats included bramble scrub and perennial ryegrass ( <i>Lolium perenne</i> ), some willow herb and moss species.
6	Linear strips of grassland situated between banked areas of processed slag. The grassland areas were approximately 2m wide, and the slag approximately 1m wide, both of which were approximately 50m long.
7	Along the outside of the northern boundary was a strip of grassland and scrub, with pipelines situated above it. The scrub and grassland species were similar to those within the site. Immediately north was the River Tee. Along the edge of the site, within the scrub, was situated a culvert outflow. The water quality was poor with oily residues. Tidal fluctuation seemed to be in the region of 3 – 4 metres.
8	A further area of semi-improved grassland, comprising similar species to those already identified. Substrate for this area of grassland was sand. Grassland strips, with banks of sand spaced between them. Each strip was approximately 2m wide, and sand banks were approximately 0.5m wide.
9	A further area of semi-improved grassland, comprising similar species to those already identified. Substrate for this area of grassland was sand. Grassland strips, with banks of sand spaced between them. Each strip was approximately 2m wide, and sand banks were approximately 0.5m wide.
10	A road bridge crossing over a stream which was culverted and seemed to link to the culvert identified at TN7. The water quality was poor, with oily residues. The immediate surrounds comprised short sward grassland, but identifying the species was difficult due to access constraints.
11	Several disused oil tanks for industrial use. The tanks were in a state of disrepair, but appeared to support some bird species. Habitats included scrub and semi-improved grassland with species such as immature willows with bramble with semi-improved grassland and tall ruderals. The grassland and ruderal species included a species of fescue, fox-tail, ribwort plantain, as well as mugwort and willow herb. The sward height was approximately 20-30cm in height.

**J. NOTABLE AND PROTECTED SPECIES  
(1 page)**

**J. NOTABLE AND PROTECTED SPECIES**

Scientific Name	Common Name	Location	Grid Reference	Distance	Protection Status
<b>Birds</b>					
<i>Anas crecca</i>	Teal	Fine Organics	NZ532244	1.6 km north west	Amber List of Birds of Conservation Concern (2002-2007)
<i>Anthus pratensis</i>	Meadow pippet	Fine Organics	NZ532244	1.6 km north west	Amber List of Birds of Conservation Concern (2002-2007)
<i>Columba oenas</i>	Stock dove	Fine Organics	NZ532244	1.6 km north west	Amber List of Birds of Conservation Concern (2002-2007)
<i>Gallinago gallinago</i>	Snipe	Fine Organics	NZ532244	1.6 km north west	Amber List of Birds of Conservation Concern (2002-2007)
<i>Numenius Arquata</i>	Curlew	Fine Organics	NZ532244	1.6 km north west	Amber List of Birds of Conservation Concern (2002-2007)
<i>Turdus iliacus</i>	Redwing	Fine Organics	NZ532244	1.6 km north west	Amber List of Birds of Conservation Concern (2002-2007)
	Common starling	Fine Organics	NZ532244	1.6 km north west	Amber List of Birds of Conservation Concern (2002-2007), priority species in UK BAP list
<b>Mammals</b>					
<i>Arvicola terrestris</i>	Water vole				Wildlife and Countryside Act 1981
<b>Plants</b>					
<i>Dactylorhiza purpurella</i>	Northern marsh orchid	Fine Organics	NZ532244	1.6 km north west	Priority species in UK BAP list

The water vole is cited in the NBN and occurs 2 km in and around the site, but there are no grid references to accompany this or location of sightings. No other species are recorded within 2 km of the site within the last 10 years.

**K. CULTURAL HERITAGE GAZETTEER  
(4 pages)**



## K. CULTURAL HERITAGE GAZETTEER

HER Ref.	NGR	Grade	Location	Site Type	Period	Description and Reference
<b>Post-medieval</b>						
651	NZ 53380 22910	N/A	River Tees	Find - pottery	Post-medieval	Stone ware flagon. Found in River Tees while dredging.
<b>19<sup>th</sup> Century/Industrial</b>						
2812	NZ 54020 24030	N/A	River Tees	Hospital (ship)	19th century/Industrial	Built in 1885 to designs by Head Wrightson and comprised a floating platform on pontoon supporting two wards and an administration block. During WWI the Royal Navy took the hospital over for accommodation. Sold in 1917.
4358	NZ 53790 21390	N/A	South Bank	Railway station	19th century/Industrial	Eston Junction Station. Small station marked on the Middlesbrough & Redcar Railway, but with no apparent buildings on the OS 1st edition 1857. Appears as a single building on the OS 2nd edition from 1895.
4360	NZ 54930 21830	N/A	Grangetown	Railway station	19th century/Industrial	Eston Grange Station. Appears as a small station on the NER Darlington & Saltburn Branch OS 2nd edition from 1895.
5602	NZ 52150 21050 to 57300 25000	N/A	South Bank to South Gare	Jetty	19th century/Industrial	Training wall at the High Water mark beginning at Normanby Jetty and extending eastwards as far as the South Gare Breakwater. Appears on the OS 2nd edition from 1895.
5608	NZ 53326 21556 to 52900 21967	N/A	South Bank	Jetty	19th century/Industrial	Clay Lane Jetty. Long jetty from High Water mark to Clay Lane Wharf on the south bank of the River Tees. Appears on the OS 2nd edition from 1895.
5609	NZ 52860 21980	N/A	South Bank	Wharf	19th century/Industrial	Clay Lane Wharf. Short section of wharf and end of Clay Lane Jetty. Appears on the OS 2nd edition from 1895.
5610	NZ 52940 22070	N/A	South Bank	Wharf	19th century/Industrial	Eston Wharf. Short section of wharf at end of Eston Jetty. Appears on the OS 2nd edition from 1895.
5611	NZ 52920 22040	N/A	South Bank	Custom House	19th century/Industrial	Custom House. Located at seaward end of Clay Lane Wharf, towards Cargo Fleet. Appears on the OS 2nd edition from 1895.
5612	NZ 53413 21579 to 52967 22067	N/A	South Bank	Jetty	19th century/Industrial	Eston Jetty. Long jetty from High Water mark to Eston Wharf. Appears on the OS 2nd edition from 1895.

HER Ref.	NGR	Grade	Location	Site Type	Period	Description and Reference
5613	NZ 53100 22250	N/A	South Bank	Wharf	19th century/Industrial	'Mooring Stage'. Double line of posts adjoining and upriver of Eston Wharf. Appears on the OS 2nd edition from 1895.
5619	NZ 53700 21250	N/A	South Bank	Iron works	19th century/Industrial	Clay Lane Iron Works. Extensive works, including six furnaces, two reservoirs and a tramway leading to spoil grounds. Appears on the OS 2nd edition from 1895.
5624	NZ 53952 21832	N/A	South Bank	Agricultural chemical works	19th century/Industrial	'Antonien Works (Phosphate Manure)'. Large, single building linked to the South Bank Iron Works by a rail line. Appears on the OS 2nd edition from 1895.
5625	NZ 53900 21500	N/A	South Bank	Iron works	19th century/Industrial	South Bank Iron Works. Large complex of at least five furnaces and two reservoirs, close to the Cleveland Steel Works. Appears on the OS 2nd edition from 1895.
5626	NZ 53720 21380 to 55819 18850	N/A	South Bank	Railway	19th century/Industrial	Eston Branch Railway. Branch line off the Middlesbrough and Redcar Railway. Appears on the OS 1st edition from 1857. By the 2nd edition in 1895 it links Eston Mines with the NER Darlington & Saltburn Branch at Eston Junction
5627	NZ 54080 21230	N/A	South Bank	Workers housing	19th century/Industrial	Single row ('Furnace Row') of terraced cottages built for the workers at the Eston Iron Works. Appears on the OS 1st edition from 1857, west of the Eston Branch Railway.
5628	NZ 54190 21700	N/A	South Bank	Gas works	19th century/Industrial	'Gas Works'. Small gas works, including one gas holder and associated buildings. Appears on the OS 2nd edition from 1895.
5629	NZ 54160 21340	N/A	South Bank	Iron works	19th century/Industrial	Cleveland Iron Works. Numerous furnaces located between Eston Branch Railway and sidings for Cleveland Steel Works, shown on OS 2nd edition 1895.
5631	NZ 54350 21390	N/A	South Bank	Iron works	19th century/Industrial	Eston Iron Works. Small works, with a few small buildings and a linear row of furnaces shown on OS 1st edition 1857. By the 2nd edition in 1895 had expanded become Cleveland Iron Works.
5632	NZ 54200 21800	N/A	South Bank	Spoil ground	19th century/Industrial	Extensive unnamed spoil ground for South Bank Iron Works, with numerous rail lines covering all areas of the site. Appears on OS 2nd edition 1895.
5633	NZ 54450 21460	N/A	South Bank	Steel works	19th century/Industrial	Cleveland Steel Works. Large complex of furnaces, buildings and sidings north of Grangetown and adjacent to the Cleveland Iron Works on OS 2nd edition 1895.
5646	NZ 55115 21773	N/A	Grangetown	Clay pit	19th century/Industrial	'Old Clay pits'; extensive workings to the east of Eston Grange Station, shown on OS 2nd edition 1895.
5647	NZ 55370 22220	N/A	Grangetown	Railway station	19th century/Industrial	Lackenby Station. Appears on OS 1st edition 1857.

HER Ref.	NGR	Grade	Location	Site Type	Period	Description and Reference
5649	NZ 55180 21990	N/A	Grangetown	Brickearth pit	19th century/Industrial	'Brick Field' at Lackenby Station; workings shown to occupy all of the field to the north-east of Lackenby Lane on OS 2nd edition 1895.
5652	NZ 55300 22400	N/A	Grangetown	Spoil ground	19th century/Industrial	Unnamed, lying between High Water mark and railway line on OS 2nd edition 1895
5653	NZ 55430 22230	N/A	Grangetown	Brickyard	19th century/Industrial	'Brick Yard', appears on OS 1st edition 1857. Replaced by HER 5654, OS 2nd edition 1895.
5654	NZ 55460 22250	N/A	Grangetown	Concrete works	19th century/Industrial	'Annealed Concrete Works' shown on OS 2nd edition 1895 on site of former 'Brick Yard' with a spur line to the 'Lackenby Iron Works'.
5658	NZ 55750 22240	N/A	Grangetown	Reservoir	19th century/Industrial	Small reservoir associated with Lackenby Iron Works. Appears on OS 2nd edition 1895.
5659	NZ 55680 22330	N/A	Grangetown	Iron works	19th century/Industrial	Lackenby Iron Works. Located to the north of Lackenby Station, comprising a furnace, a reservoir and a spur line to the River Tees, presumably for dumping slag. Appears on OS 2nd edition 1895.
6046	NZ 53140 22280 to 54890 27080	N/A	South Bank to South Gare	Reclamation wall	19th century/Industrial	Unnamed reclamation walls running from Eston Wharf Mooring Stage to the South Gare Breakwater. Appears on OS 2nd edition 1895.
6047	NZ	N/A	Teesport	Beacon	19th century/Industrial	The 'Ninth Buoy Front Light (Red)'. River Tees navigation light. Appears on OS 2nd edition 1895.
6048	NZ 53180 22320	N/A	South Bank	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6049	NZ 53400 22580	N/A	South Bank	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6050	NZ 53700 22890	N/A	Teesport	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6051	NZ 53900 23100	N/A	Teesport	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6052	NZ 54180 23380	N/A	Teesport	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6053	NZ54420 23630	N/A	Teesport	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6054	NZ 54650 23910	N/A	Teesport	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.

HER Ref.	NGR	Grade	Location	Site Type	Period	Description and Reference
6055	NZ 54680 23910	N/A	Teesport	Beacon	19th century/Industrial	'Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6056	NZ 54840 24350	N/A	Teesport	Beacon	19th century/Industrial	The 'Eight Buoy Scarp Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6063	NZ 54520 23570	N/A	Teesport	Beacon	19th century/Industrial	The 'Ninth Buoy Back Light (Red)'. River Tees navigation light. Appears on OS 2nd edition 1895.
6064	NZ 54600 23380	N/A	Teesport	Beacon	19th century/Industrial	'Old Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
6065	NZ 54590 23220	N/A	Teesport	Beacon	19th century/Industrial	'Old Beacon'. River Tees navigation light. Appears on OS 2nd edition 1895.
<b>Modern</b>						
1831	NZ 54380 21250	N/A	South Bank	Furnaces	Modern	Two surviving Bessemer blast furnaces of the Cleveland Iron Works.
4365	NZ 55900 23600	N/A	Teesport	Bombing decoy site	Modern (World War II)	Former World War II bombing decoy 'QL/QF' site. The 'QF' component was a fire-based decoy, with fires being lit to replicate sites already under attack thus diverting enemy fire away from the real target. The 'QL' component was designed to replicate the furnace glow and railway marshalling yards of the Cleveland Iron Works.
4782	NZ 55240 22110	N/A	Grangetown	Signal box	Modern	Signal box dating to 1954. The box is still in use and stands on the side of the line to the north-east of Grangetown Station.