FILE COPY

OLIN CORPORATION
RI ANALYTICAL - WILMINGTON
SDG: WIL-26
SF3645

KATAHDIN ANALYTICAL SERVICES, INC.
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
OLIN CORPORATION
RI ANALYTICAL - WILMINGTON
WIL-26
SF3645

Sample Receipt

The following samples were received on June 19, 2012 and were logged in under Katahdin Analytical Services work order number SF3645 for a hardcopy due date of June 29, 2012.

KATAHDIN Sample No.	OLIN CORPORATION Sample Identification
SF3645-1	OC-SD-EDSD/SW7-XXX

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

Organics Analysis

The sample of SDG WIL-26 was analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846 , 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

8033M DMF Analysis

Sample WG110168-4 was analyzed as a duplicate of sample SF3645-1, as per the client's request of one duplicate sample per 20 samples.

Sample SF3645-1 was manually integrated for the extraction surrogate diethylformamide. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of SDG WIL-26 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Annual Book of ASTM Standards", Method D2216-98 "Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass".

All analyses were performed within analytical holding times. All quality control criteria were met.

There were no other protocol deviations or observations noted by the organics laboratory staff.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond 070512

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: Olin/AMEC		KAS PM: JO		Sampled By: Client	
Project:		KIMS Entry By: GN		Delivered By: FedEx	
KAS Work Order#: SF3645		KIMS Review By:		Received By: GN	
SDG #:	Cooler: 1 of 1			Date/Time Rec.: 6-19-12/09:00	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 5.7
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: **Aqueous:** No bubble larger than a pea				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Katahdin 1 of 1 Sediment

Client:	Olin Corporation	Client Project #:	6107120016
Address:	3855 North Ocoee St. Suite 200	Work Site ID:	Wilmington, MA
	Cleveland, TN 37312	Reports Sent To:	James Cashwell
Phone:	423-336-4511	Fax:	423-336-1466
Email		Email Rpt:	

Requested Turnaround Time (SPECIFY): Standard X Rush ____ (Lab Approval Required)

Regulatory Programs: MADEP MCP ____ Superfund ____

Report Requirements Level IV Package ____ Level II Package ____

EDD Requirements: MACTEC EQUIS EZ EDD ______

INVOICE INFO [redacted]

Company Name:	Olin Corp
Company Contact:	ERG Accounts Payable
Address:	Same as Client
Phone:	
Email	

[illegible]

SF3645

Sample ID	Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Composite (C) or Grab (G)	Total # of Containers	DMF (Mod 8033 - GC/NPD)	Comments (Special Instructions)
<--Preservative Type (4)							-	
<--Bottle Type (5)							G	
α-SD-EDSD/SW7-XXX	6/18/12 1125		FS	SD	G	1	X	

Special Instructions For Lab

Notes:

1.) Fraction: T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable

2.) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank

3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil

4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water

5.) Bottle Type: G = Glass, P = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass, AV = 40mL VOA Amber Glass Vial,

Cr+6 = 24 hour hold time

Formaldehyde = 3 day hold time

Relinquished: [signature] **Date:** 6/18/12 **Time:** 1530 **Received:** FedEx **Date:** 6/18/12 **Time** 1530

Relinquished: ______ **Date:** __/__/__ **Time:** ____ **Received:** [signature] **Date:** 6/19/12 **Time** 0400

[illegible]

000006

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 19, 2012
12:53 PM

Login Number: SF3645

Account: OLINCO001 Web
Olin Corporation

Project:

Primary Report Address:
Mr. Chris Ricardi
AMEC E&I
P.O. Box 7050 DTS

Portland,ME 04112-7050
Christian.Ricardi@amec.com

Primary Invoice Address:
Olin Corporatin
Angela Goodner
3855 North Ocoee St
Suite 200
Cleveland,TN 37310

Report CC Addresses:

Mr. James Cashwell
Olin Corporation
3855 North Ocoee St
Suite 200
Cleveland,TN 37312

Ms. Kelly Chatterton
AMEC E&I
107 Audubon Rd.
Suite 301
Wakefield,MA 01880

Invoice CC Addresses:

Quote/Incoming: OLWIL

Login Information:

ANALYSIS INSTRUCTIONS	:	Use quick forms. Batch as many as possible. See special acceptance limits in QAPP. Include Lab Dup as batch QC, 1:20.
CHECK NO.	:	
CLIENT PO#	:	REWI0021 CONTRACT-ERRE9844
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	5.7
DELIVERY SERVICES	:	Fedex
EDD FORMAT	:	KAS075-CSV
LOGIN INITIALS	:	GN
PM	:	JO
PROJECT NAME	:	RI Analytical - Wilmington
QC LEVEL	:	IV
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Merge results. Data summary needs all forms. Send full CDs to K. Chatterton, C. Ricardi and James Cashwell.
SDG ID	:	WIL-26
SDG STATUS	:	Begin/End

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SF3645-1	OC-SD-EDSD/SW7-XXX	18-JUN-12 11:25	19-JUN-12			29-JUN-12	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8033M	02-JUL-12	4oz Glass	1	
Solid	S	TS	18-JUL-12	4oz Glass		

Total Samples: *1* ***Total Analyses:*** *2*

JP
06.19.12

0000007

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Olin Corporation
Project: RI Analytical - Wilmington
PO No:
Sample Date: 06/18/12
Received Date: 06/19/12
Extraction Date: 06/27/12
Analysis Date: 03-JUL-2012 13:25
Report Date: 07/05/2012
Matrix: SOIL
% Solids: 80.9

Lab ID: SF3645-1
Client ID: OC-SD-EDSD/SW7-XXX
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.21	1.0	0.20	0.21	0.13
	diethylformamide		104%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Olin Corporation
Project: RI Analytical - Wilmington
PO No:
Sample Date: 06/18/12
Received Date: 06/19/12
Extraction Date: 06/27/12
Analysis Date: 03-JUL-2012 13:54
Report Date: 07/05/2012
Matrix: SOIL
% Solids: 80.9

Lab ID: WG110168-4
Client ID: OC-SD-EDSD/SW7-XXX
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.18	1.0	0.20	0.18	0.11
	diethylformamide		107%				

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: RI Analytical - Wilmington
PO No:
Sample Date:
Received Date:
Extraction Date: 06/27/12
Analysis Date: 03-JUL-2012 11:40
Report Date: 07/05/2012
Matrix: SOIL
% Solids: 100

Lab ID: WG110168-1
Client ID: WG110168-Blank
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.20	1.0	0.20	0.20	0.13
	diethylformamide		100%				

FORM 2
SOIL DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4	TOT OUT
01	WG110168-BLANK	WG110168-1	100				0
02	WG110168-LCS	WG110168-2	124				0
03	WG110168-LCSD	WG110168-3	115				0
04	OC-SD-EDSD/SW7-XXX	SF3645-1	104				0
05	OC-SD-EDSD/SW7-XXX	WG110168-4	107				0
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							

SMC1 = diethylformamide QC LIMITS (70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: RI Analytical - Wilmington
PO No:
Sample Date:
Received Date:
Extraction Date: 06/27/12
Analysis Date: 07/03/12
Report Date: 07/05/2012
Matrix: SOIL

Lab ID: WG110168-2& WG110168-3
Client ID: WG110168-LCS & WG110168-LCSD
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
dimethylformamide	11	11	NA	9.8	9.6	90	88	2	50	70-130

FORM III DMF-2

6FG1024.d & 6FG1025.d

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG110168-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Lab File ID: 6FG1023 Lab Sample ID: WG110168-1

Date Analyzed: 07/03/12 Time Analyzed: 1140

GC Column: STABILWAX ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: GC06

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG110168-LCS	WG110168-2	6FG1024	07/03/12	1154
02	WG110168-LCSD	WG110168-3	6FG1025	07/03/12	1208
03	OC-SD-EDSD/SW7-XXX	SF3645-1	6FG1028	07/03/12	1325
04	OC-SD-EDSD/SW7-XXX	WG110168-4	6FG1030	07/03/12	1354
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
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22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IVDMF

FORM 6
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Instrument ID: GC06 Calibration Date(s): 07/03/12 07/03/12

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 0904 1057

LAB FILE ID: RF0.02: 6FG1014 RF0.05: 6FG1015 RF0.1: 6FG1016
RF0.25: 6FG1017 RF0.5: 6FG1018 RF1: 6FG1020

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
dimethylformamide	246	964	2059	5360	12035	26055	LINR	1.633e-002	3.837e-005	0.99765	0.99000
diethylformamide	3641	9256	19540	54282	91296		LINR	7.877e-002	4.352e-005	0.99862	0.99000

FORM VI DMF

FORM 6
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Instrument ID: GC06 Calibration Date(s): 07/03/12 07/03/12

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 0904 1057

RF0.005: 6FG1013

COMPOUND	RF0.005	CURVE	COEFFICENTS A0	A1	%RSD OR R^2	MAX %RSD OR R^2
dimethylformamide	46	LINR	1.633e-002	3.837e-005	0.99765	0.99000
diethylformamide	1175	LINR	7.877e-002	4.352e-005	0.99862	0.99000

FORM VI DMF

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Instrument ID: GC06 Calibration Date: 07/03/12 Time: 1422

Lab File ID: 6FG1032 Init. Calib. Date(s): 07/03/12 07/03/12

Init. Calib. Times: 0904 1057

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2391800	0.2500000	23232.000	0.01	-4.33	25.00	LINR
diethylformamide	2.5922000	2.5000000	23101.000	0.01	3.69	25.00	LINR

FORM VII PEST

FORM 8
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 07/03/12 07/03/12

Instrument ID: GC06

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.67

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01		ICAL 0.005	07/03/12	0904	2.68	
02		ICAL 0.02	07/03/12	0932	2.67	
03		ICAL 0.05	07/03/12	0946	2.65	
04		ICAL 0.1	07/03/12	1000	2.68	
05		ICAL 0.25	07/03/12	1015	2.67	
06		ICAL 0.5	07/03/12	1029	2.67	
07		ICAL 1.0	07/03/12	1057		
08	WG110168-BLANK	WG110168-1	07/03/12	1140	2.67	
09	WG110168-LCS	WG110168-2	07/03/12	1154	2.67	
10	WG110168-LCSD	WG110168-3	07/03/12	1208	2.67	
11	OC-SD-EDSD/SW7-XXX	SF3645-1	07/03/12	1325	2.67	
12	OC-SD-EDSD/SW7-XXX	WG110168-4	07/03/12	1354	2.67	
13		CV 0.25	07/03/12	1422	2.67	
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
S1 = diethylformamide (+/- 0.20 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII DMF

Report of Analytical Results

Client: Mr. Chris Ricardi
AMEC E&I
P.O. Box 7050 DTS
Portland,ME 04112-7050

Lab Sample ID: SF3645-1
Report Date: 27-JUN-12
Client PO: REWI0021 CONTRACT-ERRE9844
Project: RI Analytical - Wilmington
SDG: WIL-26

Sample Description	Matrix	Date Sampled	Date Received
OC-SD-EDSD/SW7-XXX	SL	18-JUN-12	19-JUN-12

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	81. %	1		SM2540G	WG109729	22-JUN-12 14:44:00	ASTM D2216	22-JUN-12	NAT	

Katahdin Analytical Services A0000013

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG109729	ASTM D2216	22-JUN-12	22-JUN-12	U 1 %	1 %

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG109729-2	LCS	WG109729	22-JUN-12	22-JUN-12	%	90	90.	100	80-120	

DMF DATA

QC Summary Section

FORM 2
SOIL DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Level:(low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4	TOT OUT
01	WG110168-BLANK	WG110168-1	100				0
02	WG110168-LCS	WG110168-2	124				0
03	WG110168-LCSD	WG110168-3	115				0
04	OC-SD-EDSD/SW7-XXX	SF3645-1	104				0
05	OC-SD-EDSD/SW7-XXX	WG110168-4	107				0
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							

SMC1 = diethylformamide QC LIMITS (70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG110168-BLANK

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Lab File ID: 6FG1023 Lab Sample ID: WG110168-1

Date Analyzed: 07/03/12 Time Analyzed: 1140

GC Column: STABILWAX ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: GC06

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG110168-LCS	WG110168-2	6FG1024	07/03/12	1154
02	WG110168-LCSD	WG110168-3	6FG1025	07/03/12	1208
03	OC-SD-EDSD/SW7-XXX	SF3645-1	6FG1028	07/03/12	1325
04	OC-SD-EDSD/SW7-XXX	WG110168-4	6FG1030	07/03/12	1354
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IVDMF

FORM 8
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 07/03/12 07/03/12

Instrument ID: GC06

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 2.67

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01		ICAL 0.005	07/03/12	0904	2.68	
02		ICAL 0.02	07/03/12	0932	2.67	
03		ICAL 0.05	07/03/12	0946	2.65	
04		ICAL 0.1	07/03/12	1000	2.68	
05		ICAL 0.25	07/03/12	1015	2.67	
06		ICAL 0.5	07/03/12	1029	2.67	
07		ICAL 1.0	07/03/12	1057		
08	WG110168-BLANK	WG110168-1	07/03/12	1140	2.67	
09	WG110168-LCS	WG110168-2	07/03/12	1154	2.67	
10	WG110168-LCSD	WG110168-3	07/03/12	1208	2.67	
11	OC-SD-EDSD/SW7-XXX	SF3645-1	07/03/12	1325	2.67	
12	OC-SD-EDSD/SW7-XXX	WG110168-4	07/03/12	1354	2.67	
13		CV 0.25	07/03/12	1422	2.67	
14						
15						
16						
17						
18						
19						
20						

QC LIMITS
S1 = diethylformamide (+/- 0.20 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII DMF

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Olin Corporation
Project: RI Analytical - Wilmington
PO No:
Sample Date: 06/18/12
Received Date: 06/19/12
Extraction Date: 06/27/12
Analysis Date: 03-JUL-2012 13:25
Report Date: 07/05/2012
Matrix: SOIL
% Solids: 80.9

Lab ID: SF3645-1
Client ID: OC-SD-EDSD/SW7-XXX
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.21	1.0	0.20	0.21	0.13
	diethylformamide		104%				

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1028.d
Report Date: 05-Jul-2012 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1028.d
Lab Smp Id: SF3645-1 Client Smp ID: OC-SD-EDSD/SW7-XXX
Inj Date : 03-JUL-2012 13:25
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,SF3645-1
Misc Info : SW846 8033M
Comment :
Method : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:57 Cal File: 6FG1020.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Final Volume (L)
Ws	0.00120	Weight of Sample (Kg)
M	19.112	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (mg/L)	FINAL (mg/Kgdrywt)	REVIEW CODE
$ 2 diethylformamide	2.666	2.667	-0.001	10105	0.51855	21.4(M)	M5

AC
7-5-12

QC Flag Legend

M - Compound response manually integrated.

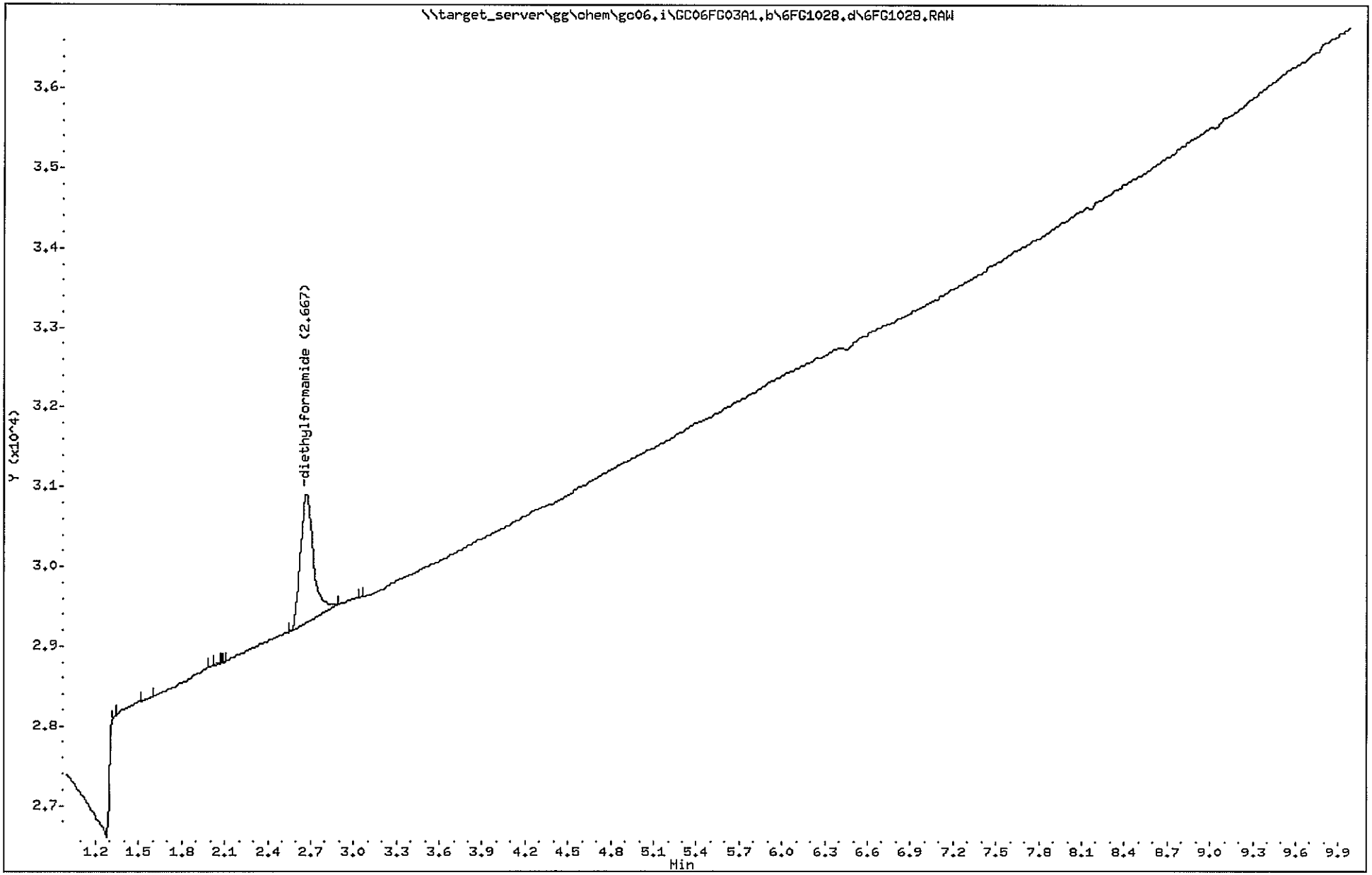
Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1028.d
Date : 03-JUL-2012 13:25
Client ID: OC-SD-EDSD/SW7-XXX
Sample Info: DMFA07A.M,GC06FG03A1.B,1,SF3645-1

Instrument: go06.i

Operator: AC

Column phase: Stabilwax

Column diameter: 0.53



Katahdin Analytical Services 1000011

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client: Olin Corporation
Project: RI Analytical - Wilmington
PO No:
Sample Date: 06/18/12
Received Date: 06/19/12
Extraction Date: 06/27/12
Analysis Date: 03-JUL-2012 13:54
Report Date: 07/05/2012
Matrix: SOIL
% Solids: 80.9

Lab ID: WG110168-4
Client ID: OC-SD-EDSD/SW7-XXX
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.18	1.0	0.20	0.18	0.11
	diethylformamide		107%				

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1030.d
Report Date: 05-Jul-2012 09:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1030.d
Lab Smp Id: WG110168-4 Client Smp ID: OC-SD-EDSD/SW7-XXX
Inj Date : 03-JUL-2012 13:54
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,WG110168-4
Misc Info : SW846 8033M
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:57 Cal File: 6FG1020.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Final Volume (L)
Ws	0.00140	Weight of Sample (Kg)
M	19.112	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (mg/L)	CONCENTRATIONS FINAL (mg/Kgdrywt)	REVIEW CODE
$ 2 diethylformamide	2.666	2.667	-0.001	10536	0.53731	19.0(M)	M5

AC
7.5.12

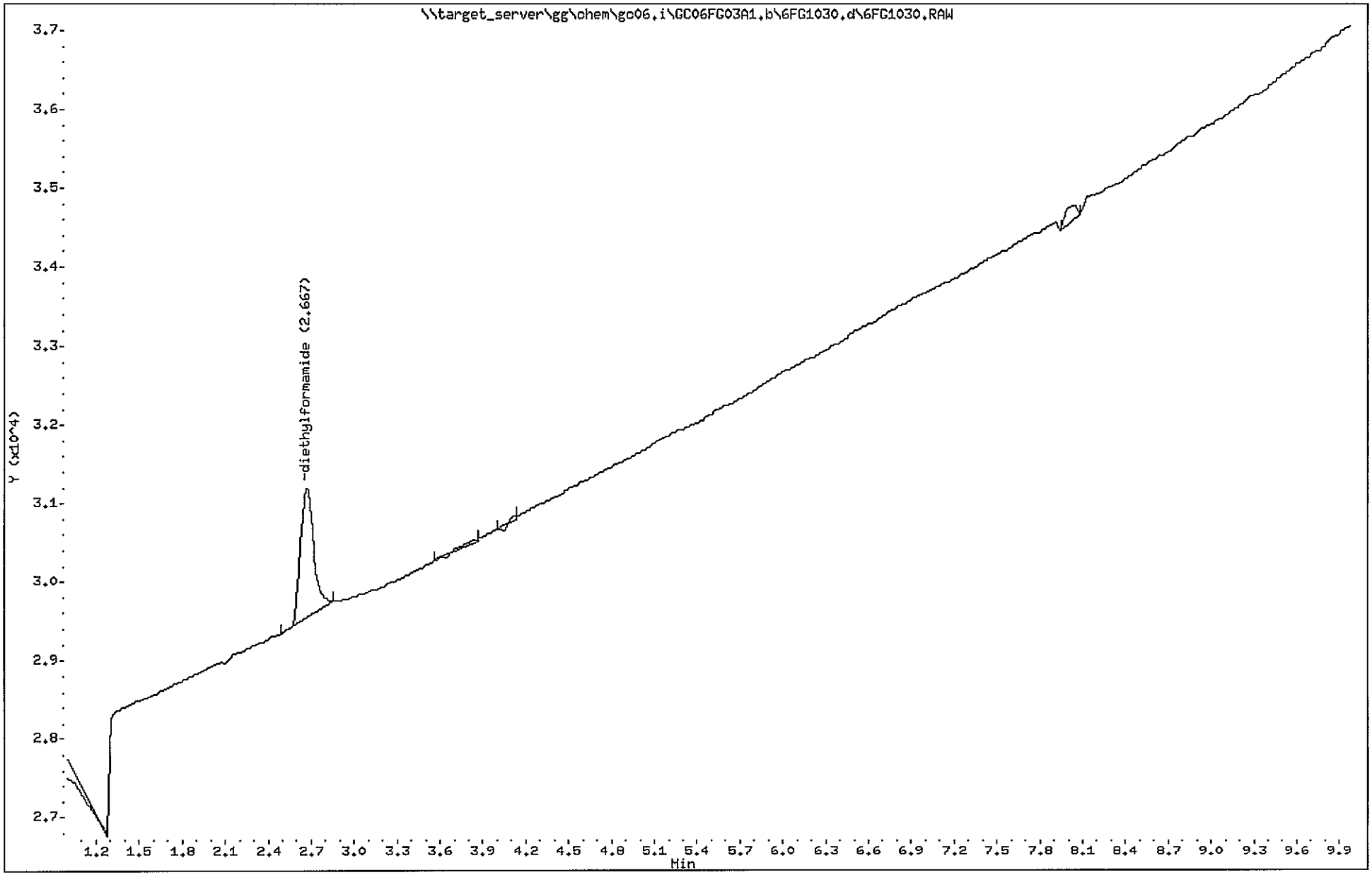
QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1030.d
Date : 03-JUL-2012 13:54
Client ID: OC-SD-EDSD/SW7-XXX
Sample Info: DMFA07A.M,GC06FG03A1.B,1,WG110168-4

Instrument: gc06.i

Operator: AC
Column phase: Stabilwax
Column diameter: 0.53



Katahdin Analytical Services 1000014

Standards Data Section

FORM 6
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Instrument ID: GC06 Calibration Date(s): 07/03/12 07/03/12

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 0904 1057

LAB FILE ID: RF0.02: 6FG1014 RF0.05: 6FG1015 RF0.1: 6FG1016
RF0.25: 6FG1017 RF0.5: 6FG1018 RF1: 6FG1020

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2	MAX %RSD OR R^2
dimethylformamide	246	964	2059	5360	12035	26055	LINR	1.633e-002	3.837e-005	0.99765	0.99000
diethylformamide	3641	9256	19540	54282	91296		LINR	7.877e-002	4.352e-005	0.99862	0.99000

FORM VI DMF

FORM 6
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Instrument ID: GC06 Calibration Date(s): 07/03/12 07/03/12

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 0904 1057

RF0.005: 6FG1013

COMPOUND	RF0.005	CURVE	COEFFICENTS A0	A1	%RSD OR R^2	MAX %RSD OR R^2
dimethylformamide	46	LINR	1.633e-002	3.837e-005	0.99765	0.99000
diethylformamide	1175	LINR	7.877e-002	4.352e-005	0.99862	0.99000

FORM VI DMF

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1013.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1013.d
Lab Smp Id: ICAL 0.005
Inj Date : 03-JUL-2012 09:04
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,ICAL 0.005
Misc Info : ICAL 0.005
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 02-JUL-2012 18:49 Cal File: 6FG1010.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

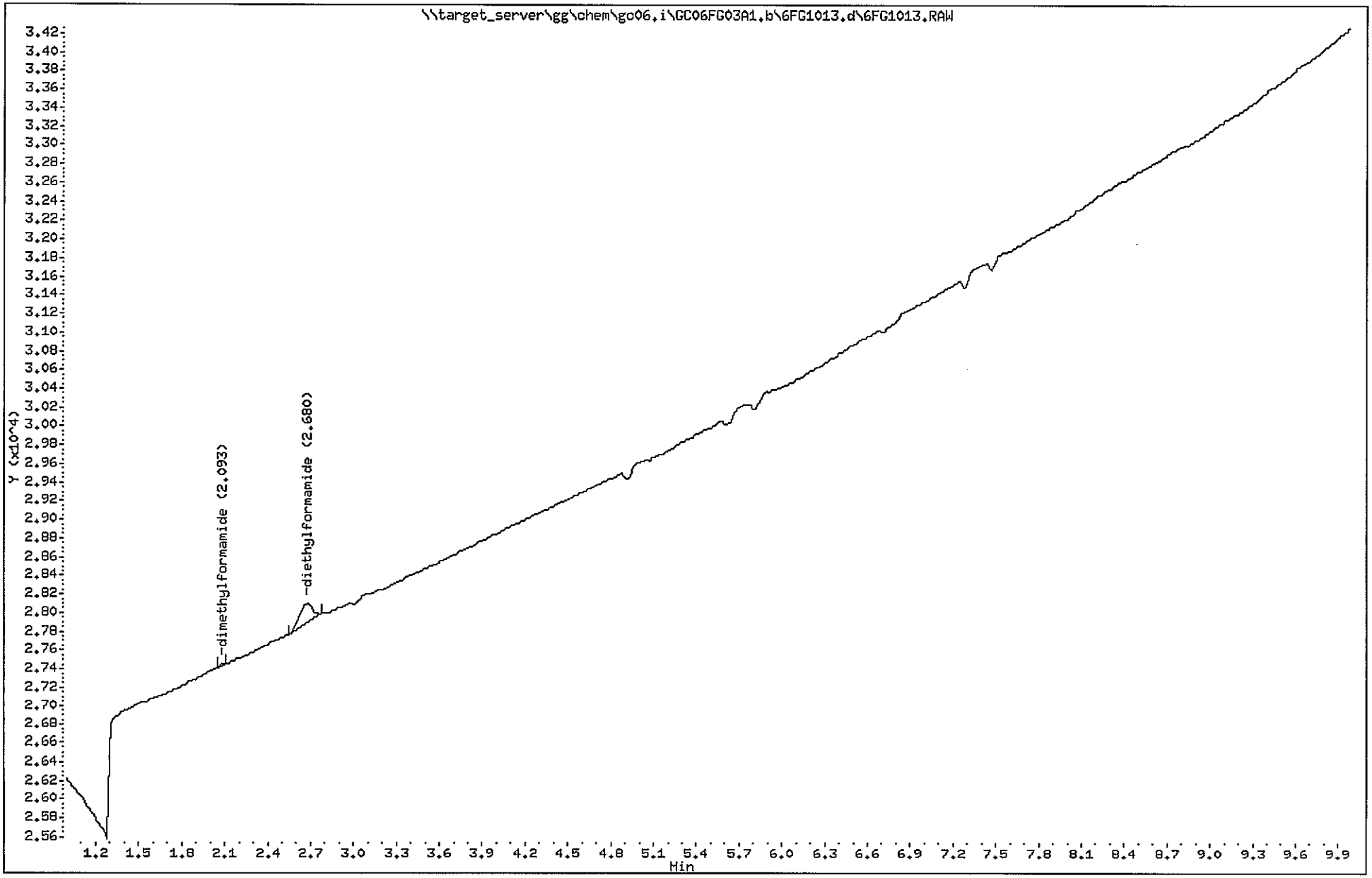
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.093	2.067	0.026	46	0.00500	0.0181(aM)	MS
$ 2 diethylformamide	2.680	2.667	0.013	1175	0.10000	0.130(M)	AC 7-5-12

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1013.d
Date : 03-JUL-2012 09:04
Client ID:
Sample Info: DMFA07A.M,GC06FG03A1.B,1,ICAL 0.005
Purge Volume: 0.0
Column phase: Stabilwax

Instrument: go06.i
Operator: AC
Column diameter: 0.53



Katahdin Analytical Services 1000019

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1014.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1014.d
Lab Smp Id: ICAL 0.02
Inj Date : 03-JUL-2012 09:32
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,ICAL 0.02
Misc Info : ICAL 0.02
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 09:32 Cal File: 6FG1014.RAW
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

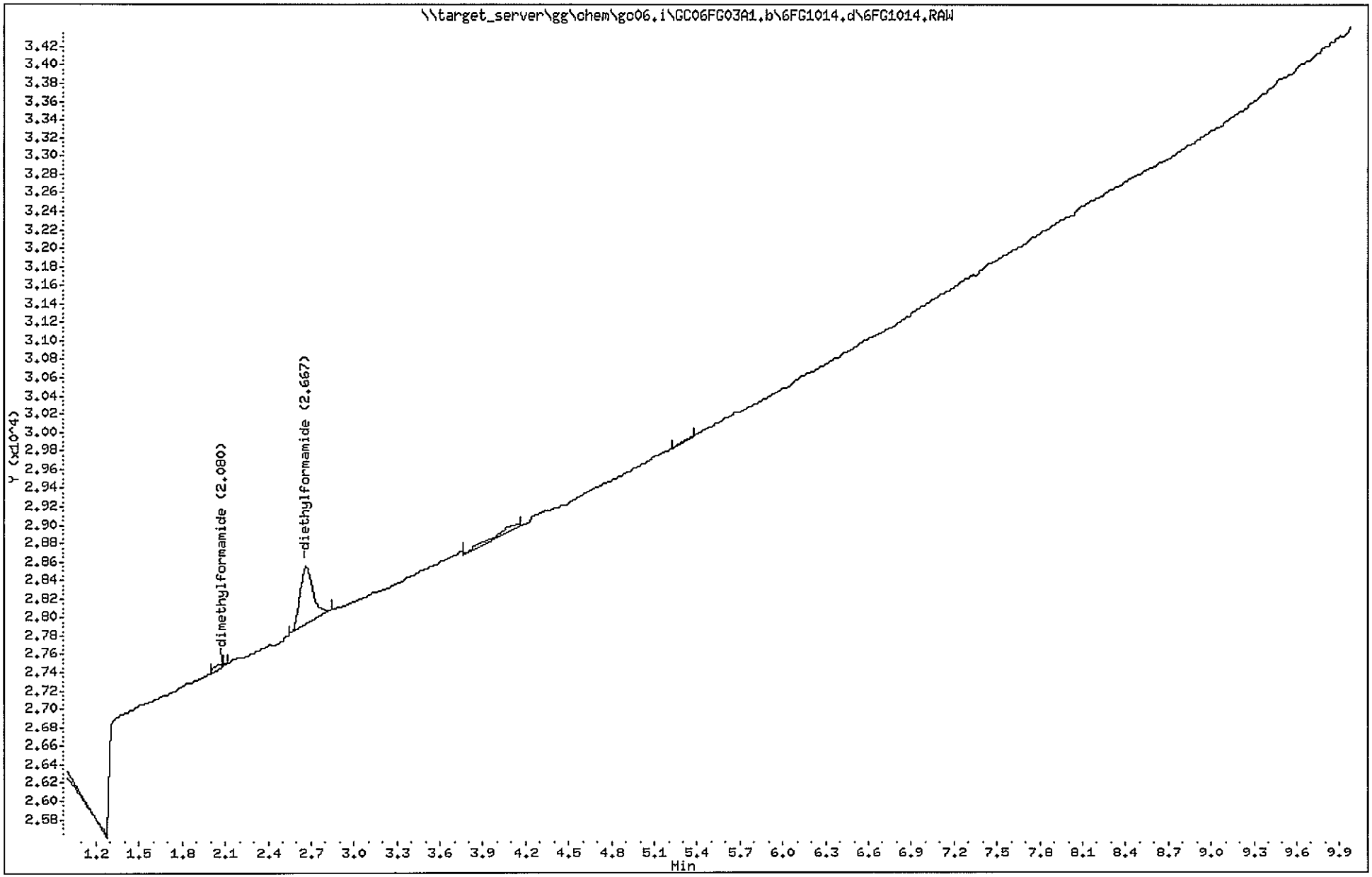
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.080	2.067	0.013	246	0.02000	0.0258(M)	MS AC 7-5-12
$ 2 diethylformamide	2.666	2.667	-0.001	3641	0.25000	0.237(M)	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1014.d
Date : 03-JUL-2012 09:32
Client ID:
Sample Info: DHFA07A.M,GC06FG03A1.B,1,ICAL 0.02
Purge Volume: 0.0
Column phase: Stabilwax

Instrument: go06.i
Operator: AC
Column diameter: 0.53



Katahdin Analytical Services 1000021

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1015.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1015.d
Lab Smp Id: ICAL 0.05
Inj Date : 03-JUL-2012 09:46
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,ICAL 0.05
Misc Info : ICAL 0.05
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 09:46 Cal File: 6FG1015.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

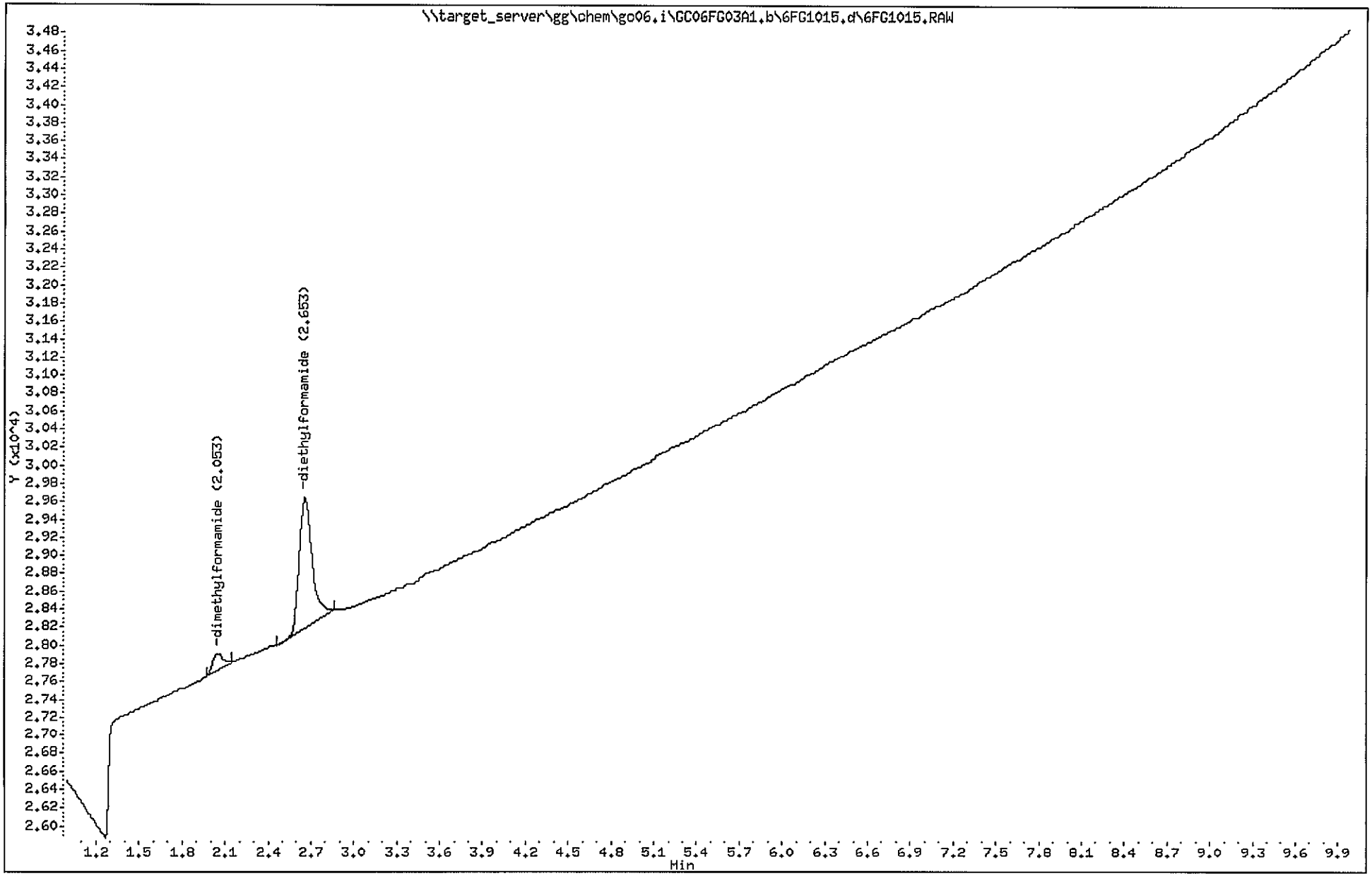
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.053	2.067	-0.014	964	0.05000	0.0533(M)	MS
$ 2 diethylformamide	2.653	2.667	-0.014	9256	0.50000	0.482	AC 7-5-12

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1015.d
Date : 03-JUL-2012 09:46
Client ID:
Sample Info: DMFA07A.M,GC06FG03A1.B,1,ICAL 0.05
Purge Volume: 0.0
Column phase: Stabilwax

Instrument: go06.i
Operator: AC
Column diameter: 0.53



Katahdin Analytical Services 1000023

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1016.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1016.d
Lab Smp Id: ICAL 0.1
Inj Date : 03-JUL-2012 10:00
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,ICAL 0.1
Misc Info : ICAL 0.1
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:00 Cal File: 6FG1016.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

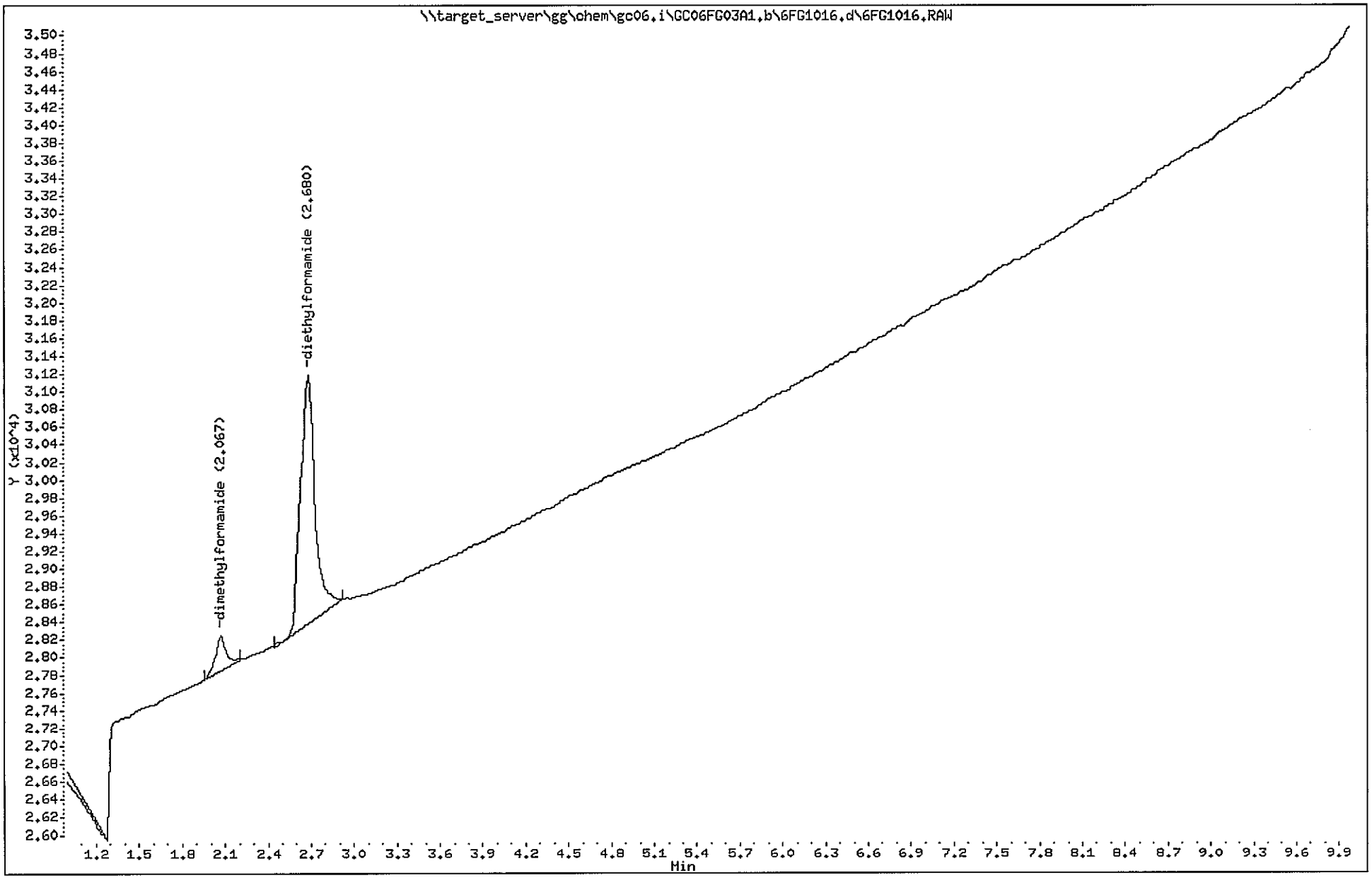
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.066	2.067	-0.001	2059	0.10000	0.0953(M)	MS AC 7-5-12
$ 2 diethylformamide	2.680	2.667	0.013	19540	1.00000	0.929	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1016.d
Date : 03-JUL-2012 10:00
Client ID:
Instrument: gc06.i
Sample Info: DMFA07A.M,GC06FG03A1.B,1,ICAL 0.1
Purge Volume: 0.0
Operator: AC
Column phase: Stabilwax
Column diameter: 0.53



Katahdin Analytical Services 1000025

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1017.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1017.d
Lab Smp Id: ICAL 0.25
Inj Date : 03-JUL-2012 10:15
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,ICAL 0.25
Misc Info : ICAL 0.25
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:15 Cal File: 6FG1017.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

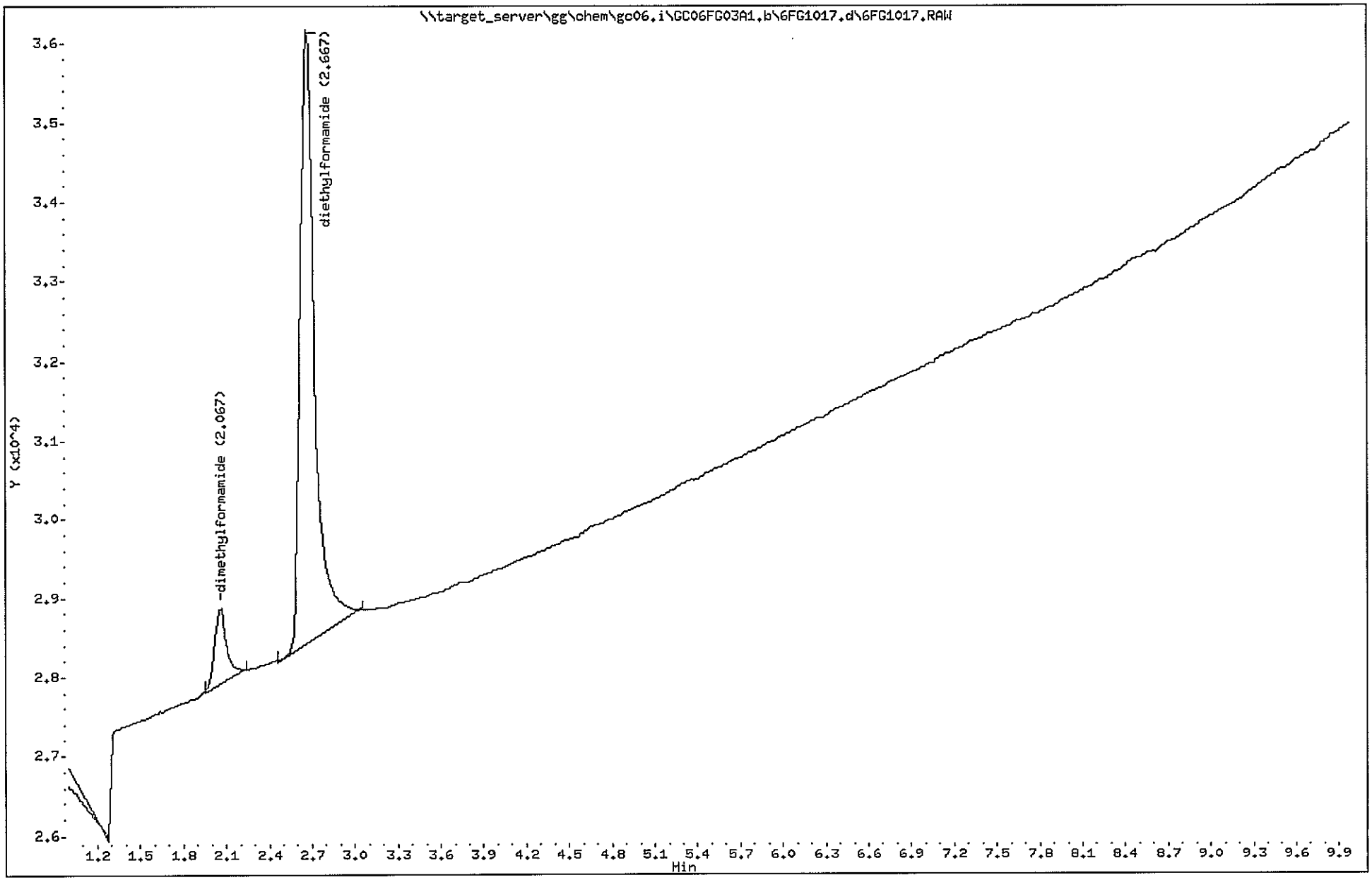
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.066	2.067	-0.001	5360	0.25000	0.222(M)	MS AC 7-5-12
$ 2 diethylformamide	2.666	2.667	-0.001	54282	2.50000	2.44(M)	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1017.d
Date : 03-JUL-2012 10:15
Client ID:
Sample Info: DMFA07A.M,GC06FG03A1.B,1,ICAL 0.25
Purge Volume: 0.0
Column phase: Stabilwax

Instrument: gc06.i
Operator: AC
Column diameter: 0.53



Katahdin Analytical Services 1000027

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1018.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1018.d
Lab Smp Id: ICAL 0.5
Inj Date : 03-JUL-2012 10:29
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,ICAL 0.5
Misc Info : ICAL 0.5
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:29 Cal File: 6FG1018.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

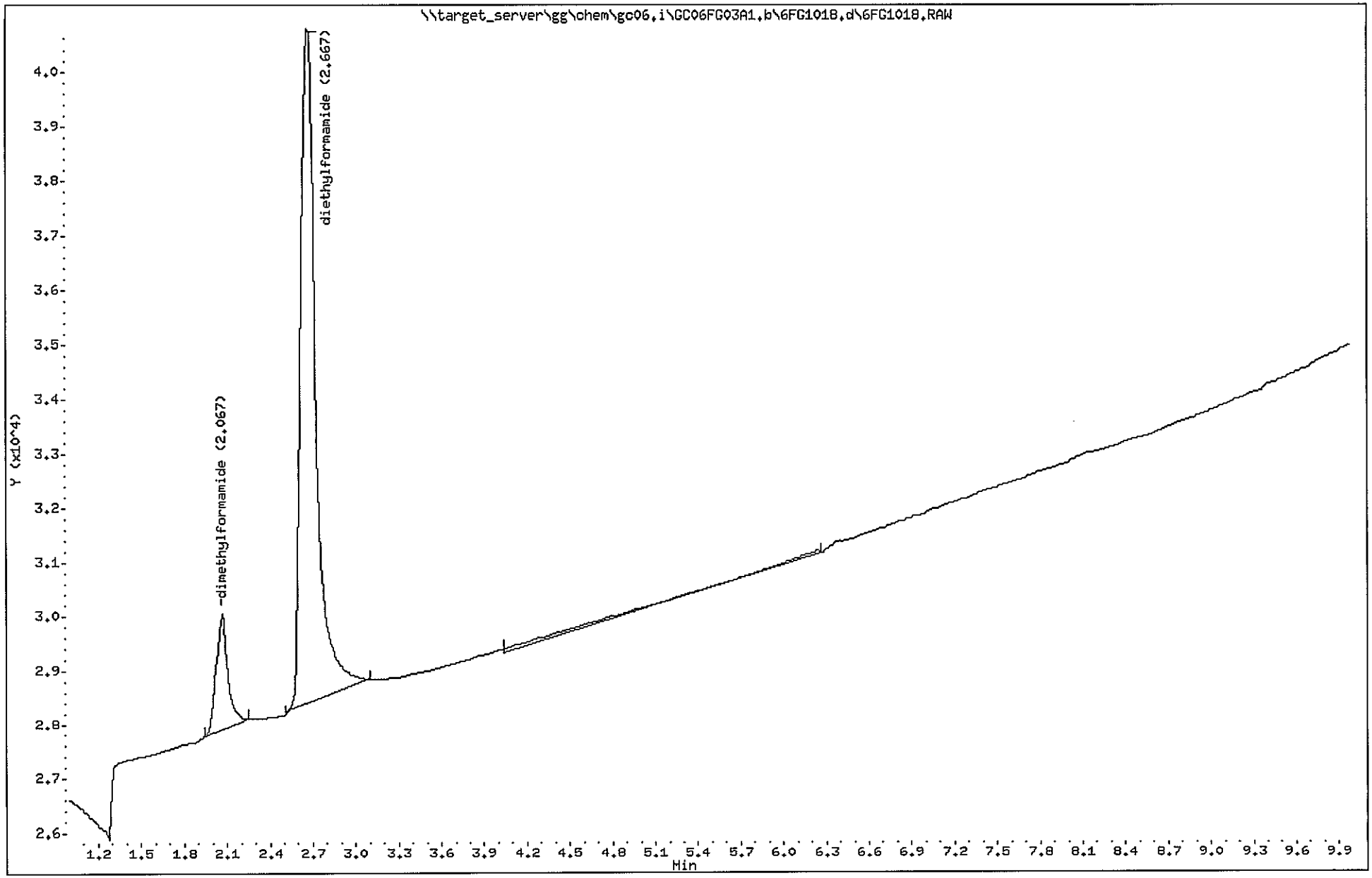
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.066	2.067	-0.001	12035	0.50000	0.478(M)	MS AC 7-5-12
$ 2 diethylformamide	2.666	2.667	-0.001	91296	4.00000	4.05(AM)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1018.d
Date : 03-JUL-2012 10:29
Client ID:
Instrument: gc06.i
Sample Info: DMFA07A.M,GC06FG03A1.B,1,ICAL 0.5
Purge Volume: 0.0
Operator: AC
Column phase: Stabilwax
Column diameter: 0.53



Katahdin Analytical Services 1000029

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1020.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1020.d
Lab Smp Id: ICAL 1.0
Inj Date : 03-JUL-2012 10:57
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,ICAL 1.0
Misc Info : ICAL 1.0
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:57 Cal File: 6FG1020.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

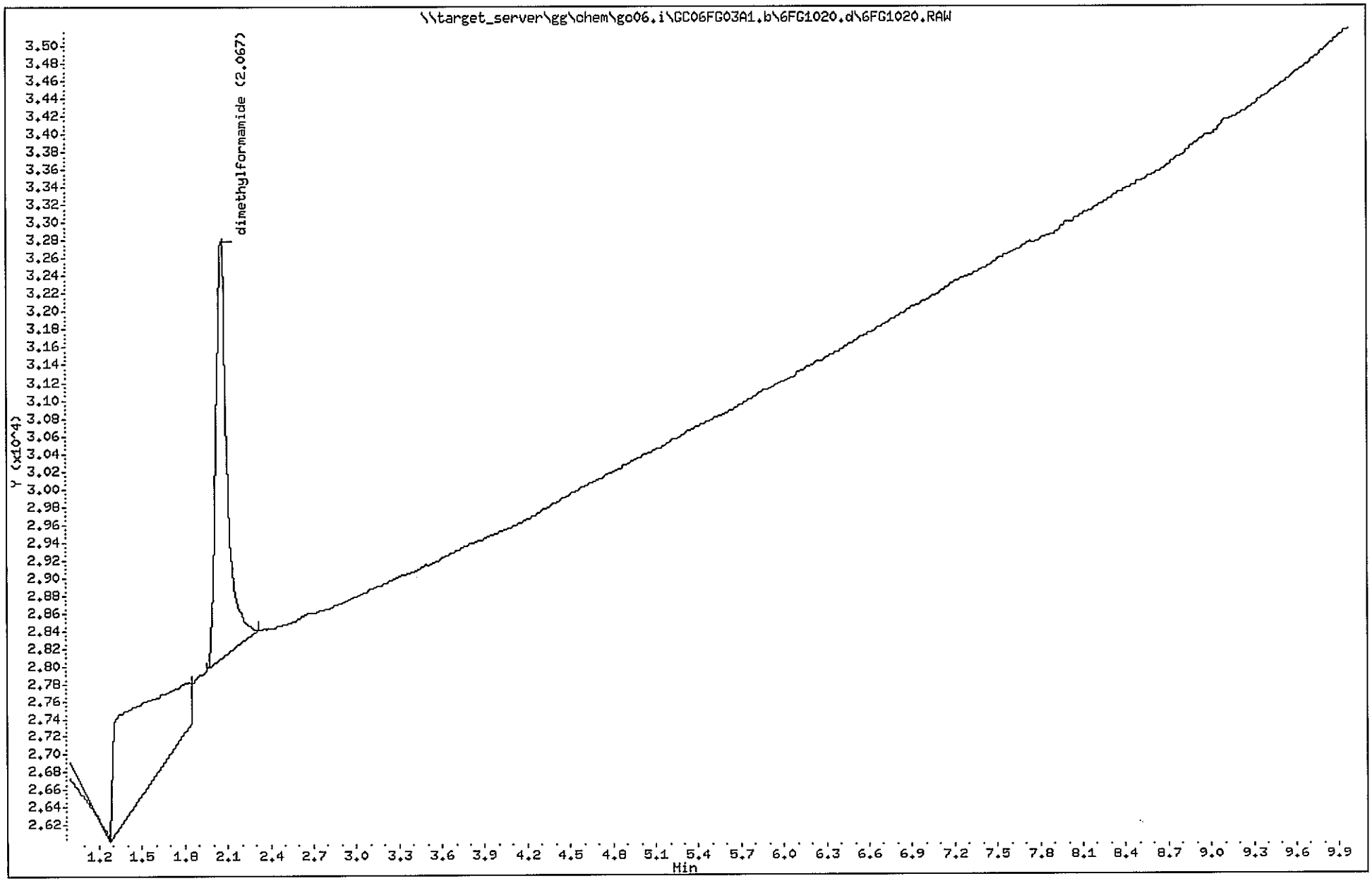
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.066	2.067	-0.001	26055	1.00000	1.02(AM)	M5 A 7-5-12

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1020.d
Date : 03-JUL-2012 10:57
Client ID:
Instrument: go06.i
Sample Info: DMFA07A.M,GC06FG03A1.B,1,ICAL 1.0
Purge Volume: 0.0
Operator: AC
Column phase: Stabilwax
Column diameter: 0.53



Katahdin Analytical Services 1000031

FORM 7B
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-26

Instrument ID: GC06 Calibration Date: 07/03/12 Time: 1422

Lab File ID: 6FG1032 Init. Calib. Date(s): 07/03/12 07/03/12

Init. Calib. Times: 0904 1057

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2391800	0.2500000	23232.000	0.01	-4.33	25.00	LINR
diethylformamide	2.5922000	2.5000000	23101.000	0.01	3.69	25.00	LINR

FORM VII PEST

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1032.d
Report Date: 05-Jul-2012 10:00

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1032.d
Lab Smp Id: CV 0.25
Inj Date : 03-JUL-2012 14:22
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,CV 0.25
Misc Info : CV 0.25
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:57 Cal File: 6FG1020.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12
Processing Host: T8-D4700

Concentration Formula: Amt * DF * (Vt/Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

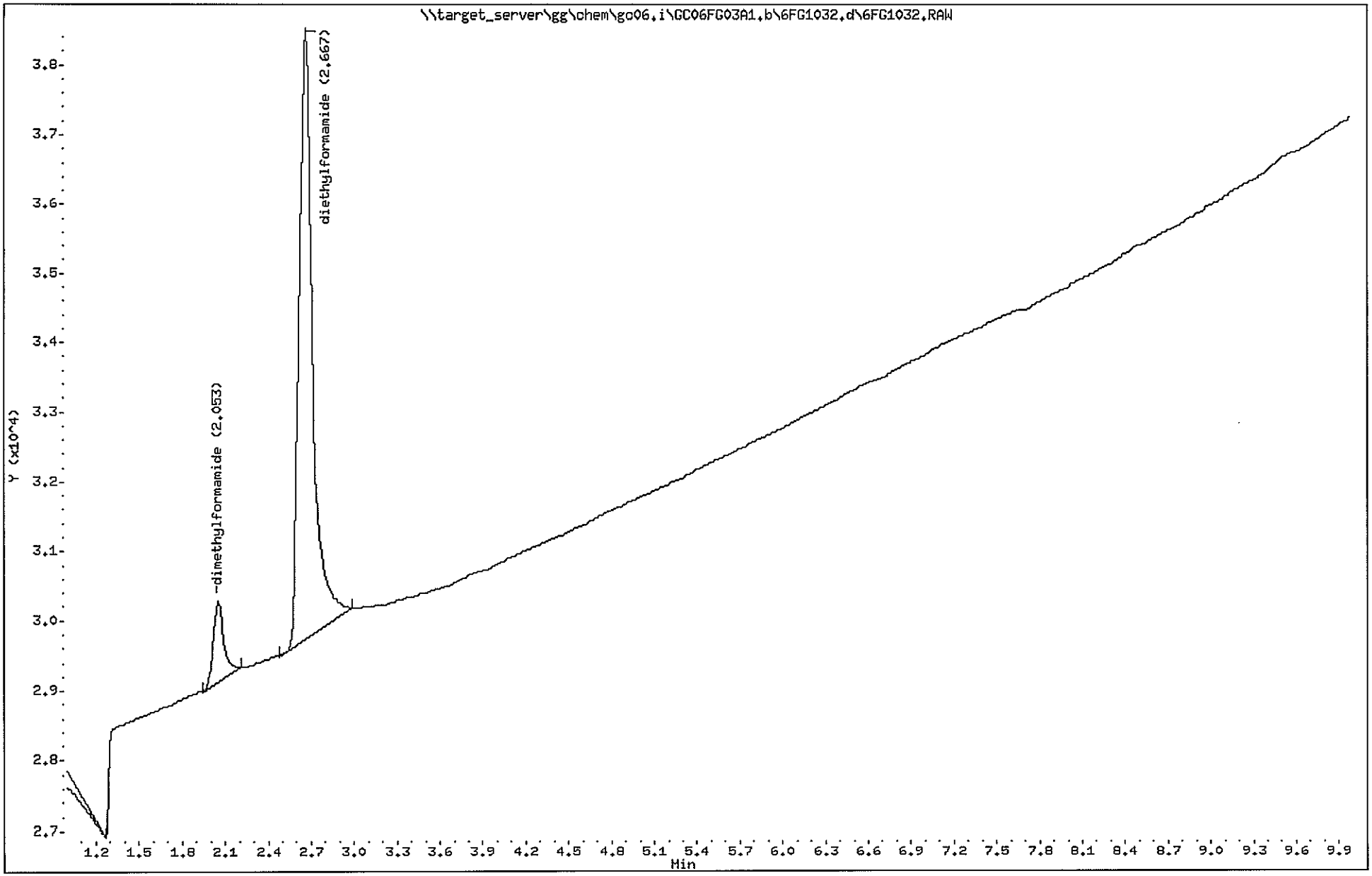
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (mg/L)	AMOUNTS ON-COL (mg/L)	REVIEW CODE
1 dimethylformamide	2.053	2.067	-0.014	5808	0.25000	0.239(M)	M5
$ 2 diethylformamide	2.666	2.667	-0.001	57752	2.50000	2.59	

AC
7-5-12

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1032.d
Date : 03-JUL-2012 14:22
Client ID:
Instrument: go06.i
Sample Info: DMFA07A.M,GC06FG03A1.B,1,CV 0.25
Purge Volume: 0.0
Operator: AC
Column phase: Stabilwax
Column diameter: 0.53



Katahdin Analytical Services 1000034

Raw QC Data Section

KATAHDIN ANALYTICAL SERVICES
Report of Analytical Results

Client:
Project: RI Analytical - Wilmington
PO No:
Sample Date:
Received Date:
Extraction Date: 06/27/12
Analysis Date: 03-JUL-2012 11:40
Report Date: 07/05/2012
Matrix: SOIL
% Solids: 100

Lab ID: WG110168-1
Client ID: WG110168-Blank
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.20	1.0	0.20	0.20	0.13
	diethylformamide		100%				

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1023.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1023.d
Lab Smp Id: WG110168-1 Client Smp ID: WG110168-Blank
Inj Date : 03-JUL-2012 11:40
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,WG110168-1
Misc Info : SW846 8033M
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:57 Cal File: 6FG1020.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Final Volume (L)
Ws	0.00100	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (mg/L)	FINAL (mg/Kgdrywt)	REVIEW CODE
$ 2 diethylformamide	2.666	2.667	-0.001	9673	0.49975	20.0(M)	

MS
AC
7-5-12

QC Flag Legend

M - Compound response manually integrated.

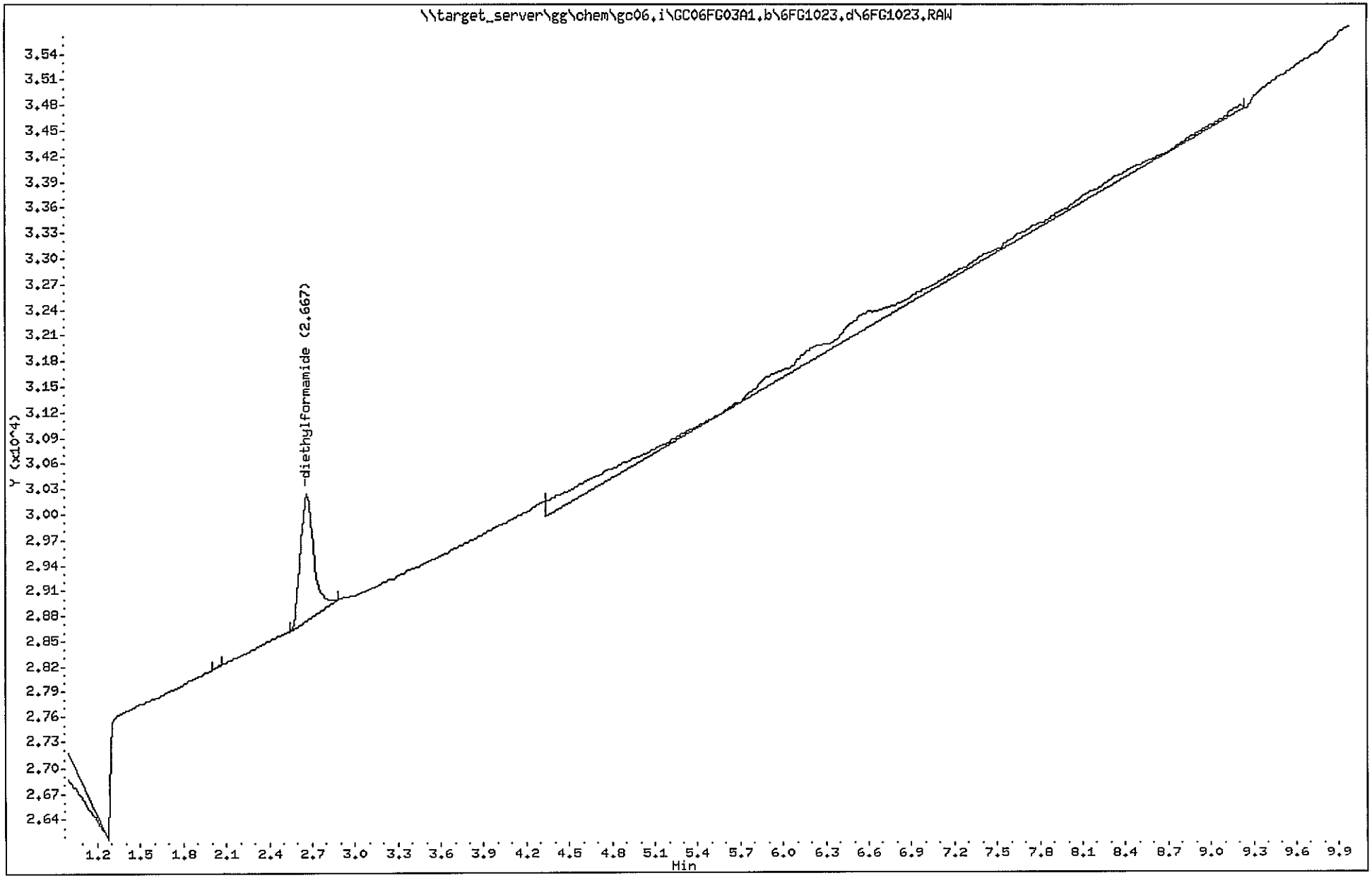
Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1023.d
Date : 03-JUL-2012 11:40
Client ID: WG110168-Blank
Sample Info: DMFA07A.M,GC06FG03A1.B,1,WG110168-1

Instrument: go06.i

Operator: AC

Column phase: Stabilwax

Column diameter: 0.53



Katahdin Analytical Services 1000038

KATAHDIN ANALYTICAL SERVICES
LAB CONTROL SAMPLE

Client:
Project: RI Analytical - Wilmington
PO No:
Sample Date:
Received Date:
Extraction Date: 06/27/12
Analysis Date: 07/03/12
Report Date: 07/05/2012
Matrix: SOIL

Lab ID: WG110168-2& WG110168-3
Client ID: WG110168-LCS & WG110168-LCSD
SDG: WIL-26
Extracted by: AC
Extraction Method: 8033M
Analyst: AC
Analysis Method: SW846 8033M
Lab Prep Batch: WG110168
Units: mg/Kgdrywt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD	%RPD LIMIT	QC. LIMITS
dimethylformamide	11	11	NA	9.8	9.6	90	88	2	50	70-130

FORM III DMF-2

6FG1024.d & 6FG1025.d

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1024.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1024.d
Lab Smp Id: WG110168-2 Client Smp ID: WG110168-LCS
Inj Date : 03-JUL-2012 11:54
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,WG110168-2
Misc Info : SW846 8033M
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:57 Cal File: 6FG1020.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Final Volume (L)
Ws	0.00100	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (mg/L)	CONCENTRATIONS FINAL (mg/Kgdrywt)	REVIEW CODE
1 dimethylformamide	2.066	2.067	-0.001	5945	0.24444	9.78(M)	MS
$ 2 diethylformamide	2.666	2.667	-0.001	5335	0.31096	12.4(M)	AC 7-5-12

QC Flag Legend

M - Compound response manually integrated.

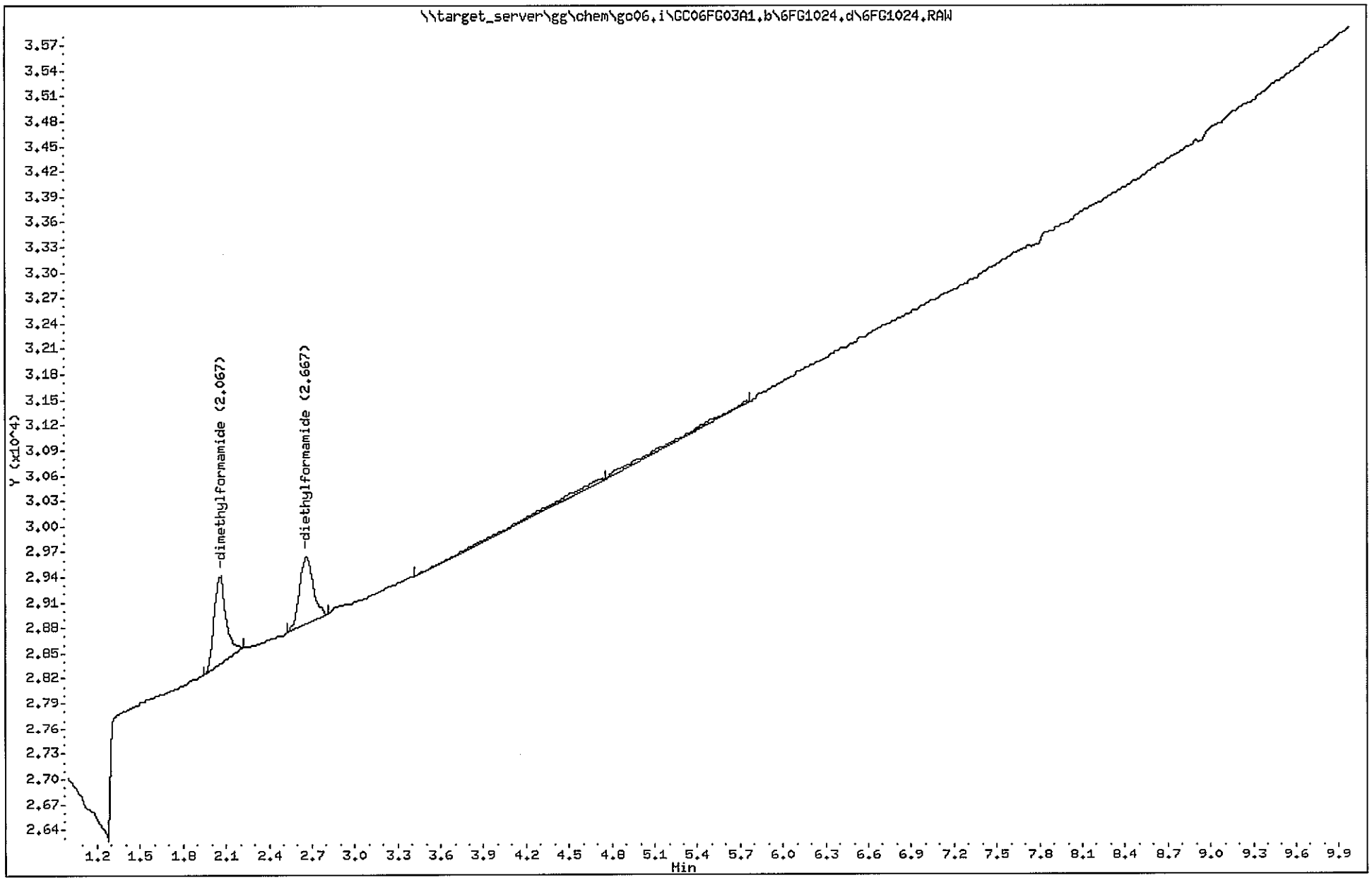
Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1024.d
Date : 03-JUL-2012 11:54
Client ID: WG110168-LCS
Sample Info: DMFA07A.M,GC06FG03A1.B,1,WG110168-2

Instrument: gc06.i

Operator: AC

Column phase: Stabilwax

Column diameter: 0.53



Katahdin Analytical Services 1000041

Data File: \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1025.d
Report Date: 05-Jul-2012 09:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc06.i\GC06FG03A1.b\6FG1025.d
Lab Smp Id: WG110168-3 Client Smp ID: WG110168-LCSD
Inj Date : 03-JUL-2012 12:08
Operator : AC Inst ID: gc06.i
Smp Info : DMFA07A.M,GC06FG03A1.B,1,WG110168-3
Misc Info : SW846 8033M
Comment :
Method : \\TARGET_SERVER\GG\chem\gc06.i\GC06FG03A1.B\DMFA07A.m
Meth Date : 03-Jul-2012 15:04 acronin Quant Type: ESTD
Cal Date : 03-JUL-2012 10:57 Cal File: 6FG1020.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: SW8033M.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Final Volume (L)
Ws	0.00100	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (mg/L)	CONCENTRATIONS FINAL (mg/Kgdrywt)	REVIEW CODE
1 dimethylformamide	2.053	2.067	-0.014	5816	0.23949	9.58(M)	M5
$ 2 diethylformamide	2.666	2.667	-0.001	4815	0.28833	11.5	

AC
7-5-12

QC Flag Legend

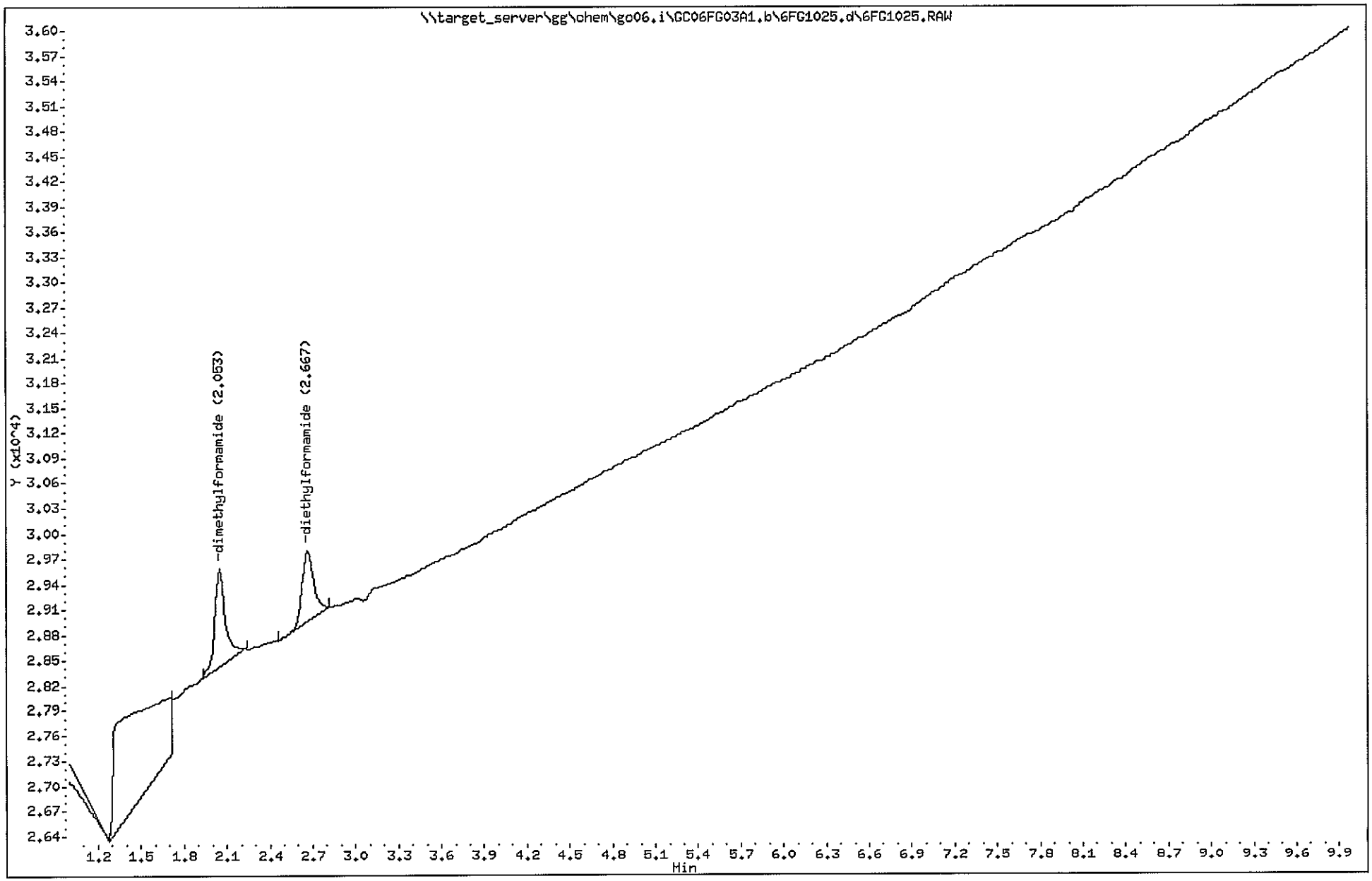
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\go06.i\GC06FG03A1.b\6FG1025.d
Date : 03-JUL-2012 12:08
Client ID: WG110168-LCSD
Sample Info: DMFA07A.M,GC06FG03A1.B,1,WG110168-3

Instrument: go06.i

Operator: AC
Column diameter: 0.53

Column phase: Stabilwax



Katahdin Analytical Services 1000043

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES
GC SOIL PREP LOG

Date of Sample Preparation	Analyst Initials	Sample #	Sample Weight (g)	Volume (mL) Methanol ☐ or DI Water ☒	Spike ID and Volume (µL)	Surrogate ID and Volume (µL)	Method	Comments
6-27-12	AC	WG110168-1	1.00	40	NA	200 GCV2405	8033	
		-2	1.00		100 GCV2403	100		
		-3	1.00					
		SF3645-1	1.15		NA	200		
		-1 Dup	1.45					
							AC 7-5-12	

GC-012 – Revision 1 – 08/18/10

QAGC256

0000025

8033

Katahdin Analytical Services, Inc.
GC Laboratory Instrument Runlog
Instrument: GC06
Amount Injected 1 ul

Methods: SW846 8081 / 8082 / 8151
EPA 504 / 556 / 608
Reviewed by/ Date:

Date	Init.	Result File	Sample ID	Y/N	Method	Column	Comments
4-24-12	JW	6FD1064	CV 0.25	Y	DMFA046A	227	↑ GCV2831
4-25-12	JW	65	water	N			
		66	CV 0.25	N			10x10W
6-28-12	AC	6FF1001	water	N	DMFA086A		Flow bad
		2	water	N			↓ Installed column from 11
7-2-12		6FG1001	W	N	DMFA007A		
		2	0.005				Put in old column
		3	0.05				
		4	W				
		5	W				
		6	ICAL 0.005				
		7	0.02				
		8	0.05				
		9	0.1				
		10	0.25				wrong method
7-3-12		11	W	N			
		12	W	N			
		13	ICAL 0.005	Y			GCV2916
		14	0.02	Y			10
		15	0.05	Y			11
		16	0.1	Y			12
		17	0.25	Y			13
		18	0.5	Y			14
		19	W	N			
		20	ICAL 1.0	Y			15
		21	W	N			
		22	W	N			
		23	WG10168-1	Y			
		24	-2	Y			
		25	-3	Y			
		26	W	N			
		27	W	N			

Katahdin Analytical Services, Inc.
GC Laboratory Instrument Runlog
Instrument: GC06
Amount Injected 1uL

Methods: SW846 8081 / 8082 / 8151
EPA 504 / 556 / 608
Reviewed by/ Date:

Date	Init.	Result File	Sample ID	Y/N	Method	Column	Comments
6-7-3-12	AC	6FG1028	SF3645-1	Y	OMFA007A	227	
		29	W	N			
		30	SF3645-1 dup	N			WG110168-4
		31	W	N			
		32	CV 0.25	Y			
		33	W	Y			

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG109729	ASTM D2216	22-JUN-12	22-JUN-12	U 1 %	1 %

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG109729-2	LCS	WG109729	22-JUN-12	22-JUN-12	%	90	90.	100	80-120	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS
(Refer to BOD Qualifiers Page for BOD footnotes)

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

MCL Maximum Contaminant Level

NL No limit

NFL No Free Liquid Present

FLP Free Liquid Present

NOD No Odor Detected

TON Threshold Odor Number

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 pH
H2 DO
H3 sulfite
H4 residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Mr. Chris Ricardi
AMEC E&I
P.O. Box 7050 DTS
Portland,ME 04112-7050

Lab Sample ID: SF3645-1
Report Date: 27-JUN-12
Client PO: REWI0021 CONTRACT-ERRE9844
Project: RI Analytical - Wilmington
SDG: WIL-26

Sample Description	Matrix	Date Sampled	Date Received
OC-SD-EDSD/SW7-XXX	SL	18-JUN-12	19-JUN-12

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	81. %	1		SM2540G	WG109729	22-JUN-12 14:44:00	ASTM D2216	22-JUN-12	NAT	

Katahdin Analytical Services 5000097

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jun 26 2012, 01:40 pm
Batch: WG109729

Sample	Matrix	Type	Batch	Prep Date	Tare	Initial	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SF3438-1	SL	SAMP	WG109729	22-JUN-12	1.3135 g	6.2226 g	1.879 g	NAT	22-JUN-12	11.5190	12. %		
SF3438-2	SL	SAMP	WG109729	22-JUN-12	1.3047 g	8.778 g	2.5272 g	NAT	22-JUN-12	16.3580	16. %		
SF3443-7	SL	SAMP	WG109729	22-JUN-12	1.3107 g	6.6832 g	6.1326 g	NAT	22-JUN-12	89.7520	90. %		
SF3443-8	SL	SAMP	WG109729	22-JUN-12	1.3056 g	8.3192 g	8.0318 g	NAT	22-JUN-12	95.9020	96. %		
SF3443-9	SL	SAMP	WG109729	22-JUN-12	1.3021 g	7.8268 g	7.5845 g	NAT	22-JUN-12	96.2860	96. %		
SF3482-1	SL	SAMP	WG109729	22-JUN-12	1.2981 g	10.1905 g	7.1979 g	NAT	22-JUN-12	66.3460	66. %		
SF3575-1	SL	SAMP	WG109729	22-JUN-12	1.3204 g	10.6451 g	7.1927 g	NAT	22-JUN-12	62.9760	63. %		
SF3575-10	SL	SAMP	WG109729	22-JUN-12	1.3073 g	9.5163 g	5.7462 g	NAT	22-JUN-12	54.0740	54. %		
SF3575-11	SL	SAMP	WG109729	22-JUN-12	1.3022 g	9.6536 g	9.6153 g	NAT	22-JUN-12	99.5410	100 %		
SF3575-2	SL	SAMP	WG109729	22-JUN-12	1.3177 g	11.2919 g	8.7618 g	NAT	22-JUN-12	74.6340	75. %		
SF3575-3	SL	SAMP	WG109729	22-JUN-12	1.3039 g	10.135 g	7.8911 g	NAT	22-JUN-12	74.5910	74. %		
SF3575-4	SL	SAMP	WG109729	22-JUN-12	1.3082 g	10.262 g	7.8896 g	NAT	22-JUN-12	73.5040	74. %		
SF3575-5	SL	SAMP	WG109729	22-JUN-12	1.3132 g	8.3464 g	6.2528 g	NAT	22-JUN-12	70.2330	70. %		
SF3575-6	SL	SAMP	WG109729	22-JUN-12	1.2945 g	7.9599 g	3.9148 g	NAT	22-JUN-12	39.0770	39. %		
SF3575-7	SL	SAMP	WG109729	22-JUN-12	1.2956 g	8.5283 g	7.2925 g	NAT	22-JUN-12	82.9140	83. %		
SF3575-8	SL	SAMP	WG109729	22-JUN-12	1.3024 g	9.949 g	6.3288 g	NAT	22-JUN-12	58.1320	58. %		
SF3575-9	SL	SAMP	WG109729	22-JUN-12	1.3113 g	11.1522 g	6.6403 g	NAT	22-JUN-12	54.1520	54. %		
SF3645-1	SL	SAMP	WG109729	22-JUN-12	1.3027 g	7.6128 g	6.4068 g	NAT	22-JUN-12	80.8880	81. %		
SF3672-1	SL	SAMP	WG109729	22-JUN-12	1.2984 g	9.4192 g	7.9028 g	NAT	22-JUN-12	81.3270	81. %		
WG109729-1	SL	MBLANK	WG109729	22-JUN-12	1.3073 g	1.8046 g	1.3073 g	NAT	22-JUN-12	0.0000	1 %		
WG109729-2	SL	LCS	WG109729	22-JUN-12	1.3127 g	6.3266 g	5.8482 g	NAT	22-JUN-12	90.4580	90. %	100	
WG109729-3	SL	DUP	WG109729	22-JUN-12	1.3025 g	7.6856 g	7.4542 g	NAT	22-JUN-12	96.3750	96. %		0
WG109729-4	SL	DUP	WG109729	22-JUN-12	1.3021 g	10.1319 g	6.8729 g	NAT	22-JUN-12	63.0910	63. %		0

Comments:

SF3575-1	MS/MSD
SF3575-11	PE Sample
WG109729-1	SF3438-1
WG109729-2	SF3438-1
WG109729-3	SF3443-9
WG109729-4	SF3575-1

Entered by: for CST Date: 06/26/12 Accepted by: Date: 06/26/12

KATAHDIN ANALYTICAL SERVICES, INC.

TOTAL SOLIDS: ASTM D2216 - PQL: 0.10%		TOTAL VOLATILE SOLIDS: SM2540 G / E160.4 - PQL 0.10%		
ANALYST IN: WAT	ANALYST OUT: WT	BALANCE ID: OHAUS - SN: 112401631		
DATE IN: 6/21/12	DATE OUT: 6/22/12	TRUE WT (g)	INITIAL WT (g)	FINAL WT (g)
TIME IN: 16:10	TIME OUT: 11:50	~~2.0000~~ 1.0000	1.0006	1.0006
TEMP IN: 103°C	TEMP OUT: 103°	~~5.0000~~ 50.0000	50.0001	49.9998
Oven ID: 107NCOTHR	Muffle Oven ID: 030807 (assigned)	10.0000	10.0003	9.9997
CHECKED BY: [signature]	DATE: 06/26/12	100.0000	100.0006	100.0002

W6109729
2198610

SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	DISH DRY WT (g)	DISH/ASH WT (g)	TIME
Blank	1					
LCS	2					
SF3438-1	3					
SF3438-2	4					
SF3443-7	5					
-8	6					
-9	7					
-9 Dup	8					
SF3645-1	9					
SF3672-1	10					
SF3482-1	11					
SF3575-1	12					
-1 Dup	13					
-2	14					
-3	15					
-4	16					
-5	17					
-6	18					
-7	19					
-8	20					
-9	21					
-10	22					
-11	23					