UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B203062

Dimock Residential GW Site- 1203006 1203017	Analysis Surfactants (MBAS)	Matrix Aqueous

Method criteria			Analyst Initials	Date
Analysis performed within holding time?	YES	*	DK	03/09/2012
Samples for COD and sulfide analysis preserved accordingly? Narrative written if necessary?	NA		DK	03/09/2012

Calibration criteria		Analyst Initials	Date
Initial calibration includes a minimum of 5 standards and a blank?	YES	DK	03/09/2012
Correlation coefficient greater than or equal to 0.995?	YES	DK	03/09/2012

Blank spike QC			Analyst Initials	Date
LCS recovery within acceptance criteria?	YES	*	DK	03/09/2012
LCS's analyzed at the required frequency?	YES	*	DK	03/09/2012
LCS RPD less than or equal to 20?	YES	*	DK	03/09/2012

Matrix spike QC			Analyst Initials	Date
Matrix spikes performed at the required frequency?	YES	*	DK	03/09/2012
Matrix spike recovery within acceptance criteria?	YES	*	DK	03/09/2012
If no. is analyte concentration > 1.0 X the spike concentration?	NA		DK	03/09/2012

Continuing calibration		Analyst Initials	Date
ICV/CCV and ICB/CCB analyzed every 10 samples and at the end of the run?	YES	DK	03/09/2012
ICV/CCV recoveries within 10% of the true value?	YES	DK	03/09/2012
ICB/CCB result less than the reporting limit?	YES	DK	03/09/2012

Data review	Analyst Initials	Date

* = Automated Response from Promium

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B203062

Dimock Residential GW Site- 1203006 1203017	Analysis Surfactants (MBAS)	Matrix Aqueous

Was data peer reviewed?	YES *	JH	03/12/2012

* = Automated Response from Promium

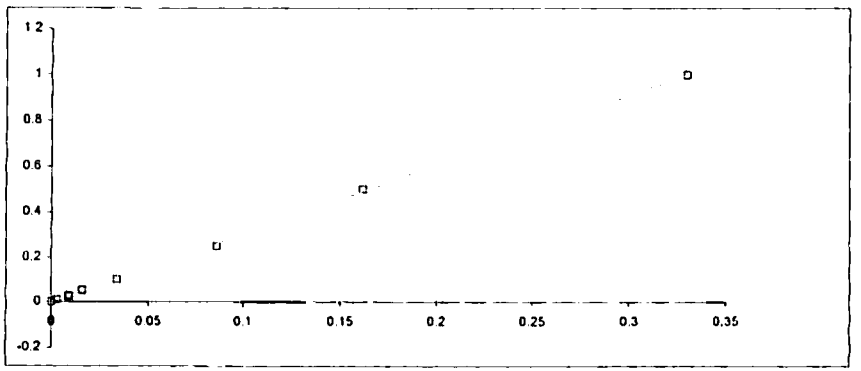
Initial Calibration Date: 1/26/2012	Batch ID: B203062
Analyst: Dkay	Analysis Date/Time: 3/9/12 10:35
Units: mg/L	Wavelength: 652
Analyte: Anionic Surfactants	

Measured Response	Standards I.D.	Actual Concentration	Calculated Value (linear)
0		0	-0.001
0.003	D2A2528	0.01	0.008
0.009	D2A2529	0.025	0.026
0.016	D2A2530	0.05	0.047
0.034	D2A2531	0.1	0.102
0.086	D2A2532	0.25	0.260
0.162	D2A2533	0.5	0.491
0.33	D2A2534	1.0	1.002

LINEAR EQUATION

y=a+bx

a=	0.0004308
b=	0.3289682
r=	0.9998816



Calculation: mg/L = (Raw value from curve) * DF

Calculation: mg/kg = (Raw value from curve) * (Extract Vol./Sample Wt.) * DF

B	C	D	E	F	H	J	M	N
Sample ID	Client ID	SampType	Sample Absorbance	Analytical Time	Sample Vol (mls)	Dilution Factor	RawVal	Final Conc. mg/L
ICV			0.155	10:35	100	1	0.470	0.470
ICB			0	10:35	100	1	-0.001	-0.001
1203017-01	FB21	Sample	0.001	10:35	100	1	0.002	0.002
1203017-02	HW50	Sample	-0.001	10:35	100	1	-0.004	-0.004
B203062-BS1	-	LCS	0.176	10:35	100	1	0.534	0.534
B203062-BSD1	-	LCS Dup	0.172	10:35	100	1	0.521	0.521
B203062-MS1	1203017-02	Matrix Spike	0.160	10:35	100	1	0.485	0.485
CCV			0.154	10:35	100	1	0.467	0.467
CCB				10:35	100	1	-0.001	-0.001

DIM0073843

DIM0073832

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Analysis: Surfactants (MBAS)
Preparation Method: MBAS Extraction
Batch ID: B203062
Matrix: Aqueous

Prepared by: DK
Prepared on: 03/09/2012

Standards and Reagents

Standard	Description	Exp Date
D2A1817	Phenolthalein Indicator solution	01/17/2014
D2B0806	Chloroform	02/07/2017
D2C0507	Wash Solution, MBAS	03/05/2014
D2C0508	Methylene Blue Reagent	03/05/2014
D2C0603	MBAS Intermediate Std., 10.0 mg/L	03/06/2014
D2C0605	MBAS AQC, ERA P180-776 Dil.	03/06/2014

Project Name	Sample ID	Chloride value	Spike ID	Source ID
Dimock Residential GW Site- 1203006	1203017-01	<300		
	1203017-02	<300		
	B203062-BS1	<300	D2C0605	
	B203062-BSD1	<300	D2C0605	
	B203062-MS1	<300	D2C0603	1203017-02

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B203052

Dimock Residential GW Site- 1203006 1203011	Analysis Surfactants (MBAS)	Matrix Aqueous

Method criteria			Analyst Initials	Date
Analysis performed within holding time?	YES	*	DK	03/07/2012
Samples for COD and sulfide analysis preserved accordingly? Narrative written if necessary?	NA		DK	03/07/2012

Calibration criteria		Analyst Initials	Date
Initial calibration includes a minimum of 5 standards and a blank?	YES	DK	03/07/2012
Correlation coefficient greater than or equal to 0.995?	YES	DK	03/07/2012

Blank spike QC			Analyst Initials	Date
LCS recovery within acceptance criteria?	YES	*	DK	03/07/2012
LCS's analyzed at the required frequency?	YES	*	DK	03/07/2012
LCS RPD less than or equal to 20?	YES	*	DK	03/07/2012

Matrix spike QC			Analyst Initials	Date
Matrix spikes performed at the required frequency?	YES	*	DK	03/07/2012
Matrix spike recovery within acceptance criteria?	YES	*	DK	03/07/2012
If no, is analyte concentration > 1.0 X the spike concentration?	NA		DK	03/07/2012

Continuing calibration		Analyst Initials	Date
ICV/CCV and ICB/CCB analyzed every 10 samples and at the end of the run?	YES	DK	03/07/2012
ICV/CCV recoveries within 10% of the true value?	YES	DK	03/07/2012
ICB/CCB result less than the reporting limit?	YES	DK	03/07/2012

Data review	Analyst Initials	Date

= Automated Response from Promium

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B203052

Dimock Residential GW Site- 1203006 1203011	Analysis Surfactants (MBAS)	Matrix Aqueous

Was data peer reviewed?	YES *	JH	03/07/2012

* = Automated Response from Promium

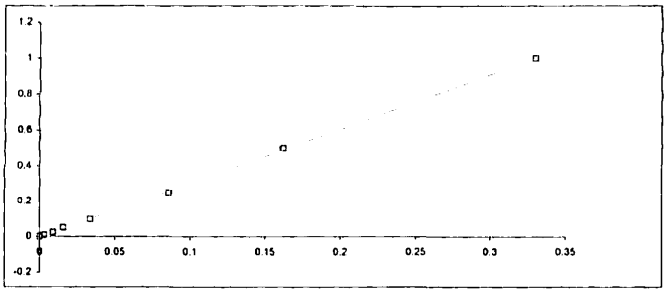
Initial Calibration Date: 1/26/2012	Batch ID: B203052
Analyst: Dkay	Analysis Date/Time: 3/7/12 13:18
Units: mg/L	Wavelength: 652
Analyte: Anionic Surfactants	

Measured Response	Standards I.D.	Actual Concentration	Calculated Value (linear)
0		0	-0.001
0.003	D2A2528	0.01	0.008
0.009	D2A2529	0.025	0.026
0.016	D2A2530	0.05	0.047
0.034	D2A2531	0.1	0.102
0.086	D2A2532	0.25	0.260
0.162	D2A2533	0.5	0.491
0.33	D2A2534	1.0	1.002

LINEAR EQUATION

y=a+bx

a=	0.0004306
b=	0.3289682
r=	0.9998816



Calculation: mg/L = (Raw value from curve) * DF

Calculation: mg/kg = (Raw value from curve) * (Extract Vol./Sample Wt.) * DF

B	C	D	E	F	H	J	M	N
Sample ID	Client ID	SampType	Sample Absorbance	Analytical Time	Sample Vol (mls)	Dilution Factor	RawVal	Final Conc. mg/L
ICV			0.161	1:18:00 PM	100	1	0.488	0.488
ICB			0	1:18:00 PM	100	1	-0.001	-0.001
1203011-01	FB20	Sample	-0.002	1:18:00 PM	100	1	-0.007	-0.007
1203011-02	HW61	Sample	0.002	1:18:00 PM	100	1	0.005	0.005
1203011-03	HW61-P	Sample	0.000	1:18:00 PM	100	1	-0.001	-0.001
1203011-04	HW61z	Sample	0.001	1:18:00 PM	100	1	0.002	0.002
B203052-BS1	-	LCS	0.180	1:18:00 PM	100	1	0.546	0.546
B203052-BSD1	-	LCS Dup	0.179	1:18:00 PM	100	1	0.543	0.543
B203052-MS1	1203011-02	Matrix Spike	0.171	1:18:00 PM	100	1	0.518	0.518
CCV			0.157	1:18:00 PM	100	1	0.476	0.476
CCB			0.000	1:18:00 PM	100	1	-0.001	-0.001

DIM0073832

DIM0073847

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Analysis: Surfactants (MBAS)

Preparation Method: MBAS Extraction

Batch ID: B203052

Matrix: Aqueous

Prepared by: DK
Prepared on: 03/07/2012

Standards and Reagents

Standard	Description	Exp Date
D2A1817	Phenolthalein Indicator solution	01/17/2014
D2B0806	Chloroform	02/07/2017
D2C0507	Wash Solution, MBAS	03/05/2014
D2C0508	Methylene Blue Reagent	03/05/2014
D2C0603	MBAS Intermediate Std., 10.0 mg/L	03/06/2014
D2C0605	MBAS AQC, ERA P180-776 Dil.	03/06/2014

Project Name	Sample ID	Chloride value	Spike ID	Source ID
[redacted]	[redacted]	[redacted]		
	1203011-02	<300		
[redacted]	[redacted]	[redacted]		
	1203011-04	<300		
[redacted]	[redacted]	[redacted]	[redacted]	
	B203052-BSD1	<300	D2C0605	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B203040

Dimock Residential GW Site- 1203006 1203006	Analysis Surfactants (MBAS)	Matrix Aqueous

Method criteria			Analyst Initials	Date
Analysis performed within holding time?	YES	*	DK	03/06/2012
Samples for COD and sulfide analysis preserved accordingly? Narrative written if necessary?	NA		DK	03/06/2012

Calibration criteria		Analyst Initials	Date
Initial calibration includes a minimum of 5 standards and a blank?	YES	DK	03/06/2012
Correlation coefficient greater than or equal to 0.995?	YES	DK	03/06/2012

Blank spike QC			Analyst Initials	Date
LCS recovery within acceptance criteria?	YES	*	DK	03/06/2012
LCS's analyzed at the required frequency?	YES	*	DK	03/06/2012
LCS RPD less than or equal to 20?	YES	*	DK	03/06/2012

Matrix spike QC			Analyst Initials	Date
Matrix spikes performed at the required frequency?	YES	*	DK	03/06/2012
Matrix spike recovery within acceptance criteria?	YES	*	DK	03/06/2012
If no, is analyte concentration > 1.0 X the spike concentration?	NA		DK	03/06/2012

Continuing calibration		Analyst Initials	Date
ICV/CCV and ICB/CCB analyzed every 10 samples and at the end of the run?	YES	DK	03/06/2012
ICV/CCV recoveries within 10% of the true value?	YES	DK	03/06/2012
ICB/CCB result less than the reporting limit?	YES	DK	03/06/2012

Data review	Analyst Initials	Date

= Automated Response from Promium

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B203040

Dimock Residential GW Site- 1203006 1203006	Analysis Surfactants (MBAS)	Matrix Aqueous

Was data peer reviewed? YES * JH 03/06/2012

= Automated Response from Promium

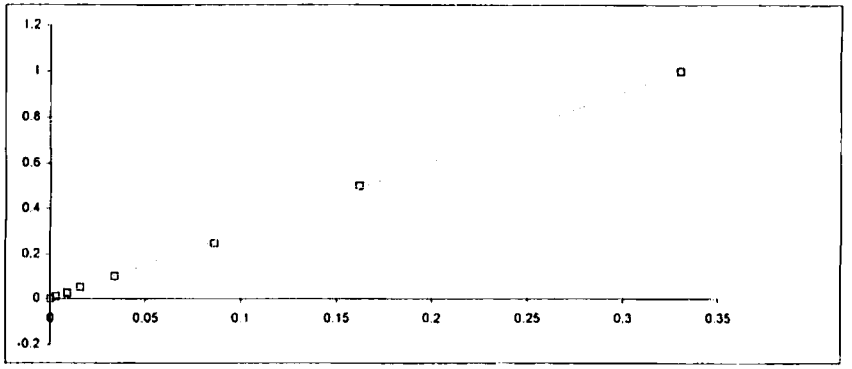
Initial Calibration Date: 1/26/2012	Batch ID: B203040
Analyst: Dkay	Analysis Date/Time: 3/6/12 13:18
Units: mg/L	Wavelength: 652
Analyte: Anionic Surfactants	

Measured Response	Standards I.D.	Actual Concentration	Calculated Value (linear)
0		0	-0.001
0.003	D2A2528	0.01	0.008
0.009	D2A2529	0.025	0.026
0.016	D2A2530	0.05	0.047
0.034	D2A2531	0.1	0.102
0.086	D2A2532	0.25	0.260
0.162	D2A2533	0.5	0.491
0.33	D2A2534	1.0	1.002

LINEAR EQUATION

y=a+bx

a=	0.0004308
b=	0.3289682
r=	0.9998816



Calculation: mg/L = (Raw value from curve) * DF

Calculation: mg/kg = (Raw value from curve) * (Extract Vol./Sample Wt.) * DF

B	C	D	E	F	H	J	M	N
Sample ID	Client ID	SampType	Sample Absorbance	Analytical Time	Sample Vol (mls)	Dilution Factor	RawVal	Final Conc. mg/L
ICV			0.152	1:18:00 PM	100	1	0.461	0.461
ICB			0	1:18:00 PM	100	1	-0.001	-0.001
1203006-01	FB19	Sample	-0.001	1:18:00 PM	100	1	-0.004	-0.004
1203006-02	HW56	Sample	0.003	1:18:00 PM	100	1	0.008	0.008
1203006-03	HW60	Sample	0.000	1:18:00 PM	100	1	-0.001	-0.001
B203040-BS1	-	LCS	0.173	1:18:00 PM	100	1	0.525	0.525
B203040-BSD1	-	LCS Dup	0.173	1:18:00 PM	100	1	0.525	0.525
B203040-MS1	1203006-02	Matrix Spike	0.159	1:18:00 PM	100	1	0.482	0.482
CCV			0.151	1:18:00 PM	100	1	0.458	0.458
CCB			0.000	1:18:00 PM	100	1	-0.001	-0.001

DIM0073851

DIM0073832

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Analysis: Surfactants (MBAS)
Preparation Method: MBAS Extraction
Batch ID: B203040
Matrix: Aqueous

Prepared by: DK
Prepared on: 03/06/2012

Standards and Reagents

Standard	Description	Exp Date
D2A1817	Phenolthalein Indicator solution	01/17/2014
D2B0806	Chloroform	02/07/2017
D2C0507	Wash Solution, MBAS	03/05/2014
D2C0508	Methylene Blue Reagent	03/05/2014
D2C0603	MBAS Intermediate Std., 10.0 mg/L	03/06/2014
D2C0605	MBAS AQC, ERA P180-776 Dil.	03/06/2014

Project Name	Sample ID	Chloride value	Spike ID	Source ID
Dimock Residential GW Site- 1203006	1203006-01	<300		
	1203006-02	<300		
	1203006-03	<300		
	B203040-BS1	<300	D2C0605	
	B203040-BSD1	<300	D2C0605	
	B203040-MS1	<300	D2C0603	1203006-02