UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B205146

Dimock Residential GW Site - 1205056 1205058	Analysis Surfactants (MBAS)	Matrix Aqueous

Method criteria		Analyst Initials	Date
Analysis performed within holding time?	YES *	JH	05/24/2012
Samples for COD and sulfide analysis preserved accordingly? Narrative written if necessary?	NA	JH	05/24/2012

Calibration criteria		Analyst Initials	Date
Initial calibration includes a minimum of 5 standards and a blank?	YES	JH	05/24/2012
Correlation coefficient greater than or equal to 0.995?	YES	JH	05/24/2012

Blank spike QC		Analyst Initials	Date
LCS recovery within acceptance criteria?	YES *	JH	05/24/2012
LCS's analyzed at the required frequency?	YES *	JH	05/24/2012
LCS RPD less than or equal to 20?	YES *	JH	05/24/2012

Matrix spike QC		Analyst Initials	Date
Matrix spikes performed at the required frequency?	YES *	JH	05/24/2012
Matrix spike recovery within acceptance criteria?	YES *	JH	05/24/2012
If no, is analyte concentration > 1.0 X the spike concentration?	NA	JH	05/24/2012

Continuing calibration		Analyst Initials	Date
ICV/CCV and ICB/CCB analyzed every 10 samples and at the end of the run?	YES	JH	05/24/2012
ICV/CCV recoveries within 10% of the true value?	YES	JH	05/24/2012
ICB/CCB result less than the reporting limit?	YES	JH	05/24/2012

Data review	Analyst Initials	Date

* = Automated Response from Promium

 DIM0186943

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B205146

Dimock Residential GW Site - 1205056 1205058	Analysis Surfactants (MBAS)	Matrix Aqueous

Was data peer reviewed? YES * FE 05/24/2012

* = Automated Response from Promium

Initial Calibration Date: 1/26/2012	Batch ID: B2050146
Analyst: Jhale	Analysis Date/Time: 5/24/2012 13:17:00 AM
Units: mg/L	Wavelength: 652
Analyte: Anionic Surfactants	

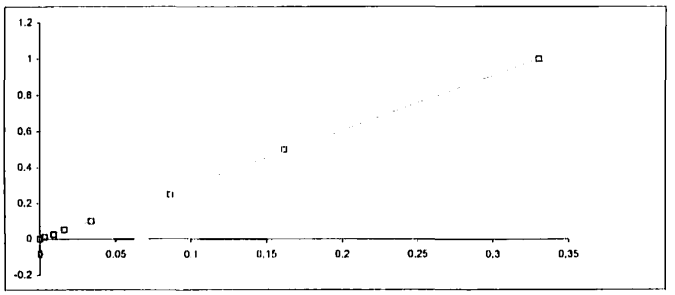
VFE
5/24/12

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
1205058-01	FB23	Sample	-0.004	13:08	100	1	-0.013	-0.013
1205058-02	HW63	Sample	-0.003	13:08	100	1	-0.010	-0.010
1205058-03	HW63r	Sample	-0.003	13:08	100	1	-0.010	-0.010
B205146-BS1	-	LCS	0.220	13:08	100	1	0.667	0.667
B205146-BSD1	-	LCS Dup	0.234	13:08	100	1	0.710	0.710
B205146-MS1	1205058-02	Matrix Spike	0.156	13:08	100	1	0.473	0.473
ICV			0.160	13:08	100	1	0.485	0.485
ICB			0.000	13:08	100	1	-0.001	-0.001
CCV			0.160	13:08	100	1	0.485	0.485
CCB			0.000	13:08	100	1	-0.001	-0.001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

VFE 5/24/12

Analysis: Surfactants (MBAS)

Preparation Method: MBAS Extraction

Batch ID: B205146

Matrix: Aqueous

Prepared by: JH
Prepared on: 05/24/2012

JH 5/24/12
~~Hach Digestor SN 9308000009519, 150 Deg.~~ C.

Standards and Reagents

Standard	Description	Exp Date
D2A1817	Phenolthalein Indicator solution	01/17/2014
D2B0806	Chloroform	06/16/2016
D2C0507	Wash Solution, MBAS	03/05/2014
D2C0508	Methylene Blue Reagent	03/05/2014
D2E2304	MBAS AQC, ERA P174-784 Dil.	05/23/2014
D2E2318	MBAS Intermediate Std., 10.0 mg/L	05/23/2014

Project Name	Sample ID	Chloride value	Initial Wt(g)/ Vol(ml)	Final Vol(ml)	Spike ID	Source ID
Dimock Residential GW Site - 1205056	1205058-01	<300	100	100		
	1205058-02	<300	100	100		
	1205058-03	<300	100	100		
	B205146-BS1		100	100	D2E2304	
	B205146-BSD1		100	100	D2E2304	
	B205146-MS1	<300	100	100	D2E2318	1205058-02

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B205144

Dimock Residential GW Site - 1205056 1205056	Analysis Surfactants (MBAS)	Matrix Aqueous

Method criteria			Analyst Initials	Date
Analysis performed within holding time?	YES	*	DK	05/23/2012
Samples for COD and sulfide analysis preserved accordingly? Narrative written if necessary?	NA		DK	05/23/2012

Calibration criteria		Analyst Initials	Date
Initial calibration includes a minimum of 5 standards and a blank?	YES	DK	05/23/2012
Correlation coefficient greater than or equal to 0.995?	YES	DK	05/23/2012

Blank spike QC			Analyst Initials	Date
LCS recovery within acceptance criteria?	YES	*	DK	05/23/2012
LCS's analyzed at the required frequency?	YES	*	DK	05/23/2012
LCS RPD less than or equal to 20?	YES	*	DK	05/23/2012

Matrix spike QC			Analyst Initials	Date
Matrix spikes performed at the required frequency?	YES	*	DK	05/23/2012
Matrix spike recovery within acceptance criteria?	YES	*	DK	05/23/2012
If no, is analyte concentration > 1.0 X the spike concentration?	NA		DK	05/23/2012

Continuing calibration		Analyst Initials	Date
ICV/CCV and ICB/CCB analyzed every 10 samples and at the end of the run?	YES	DK	05/23/2012
ICV/CCV recoveries within 10% of the true value?	YES	DK	05/23/2012
ICB/CCB result less than the reporting limit?	YES	DK	05/23/2012

Data review	Analyst Initials	Date

* = Automated Response from Promium

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Spectrophotometer Checklist for BATCH B205144

Dimock Residential GW Site - 1205056 1205056	Analysis Surfactants (MBAS)	Matrix Aqueous

Was data peer reviewed? YES * JH 05/24/2012

* = Automated Response from Promium

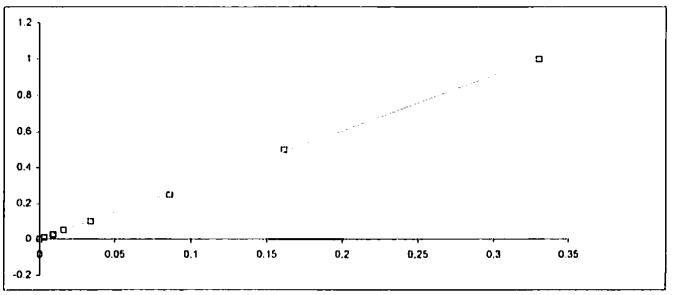
Initial Calibration Date: 1/26/2012	Batch ID: B203062
Analyst: Dkay	Analysis Date/Time: 5/23/2012 13:08:00 AM
Units: mg/L	Wavelength: 652
Analyte: Anionic Surfactants	

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
1205056-01	FB22	Sample	-0.001	13:08	100	1	-0.004	-0.004
1205056-02	HW62	Sample	0.003	13:08	100	1	0.008	0.008
1205056-03	HW64	Sample	-0.002	13:08	100	1	-0.007	-0.007
1205056-04	HW64-P	Sample	-0.003	13:08	100	1	-0.010	-0.010
B205144-BS1	-	LCS	0.223	13:08	100	1	0.676	0.676
B205144-BSD1	-	LCS Dup	0.239	13:08	100	1	0.725	0.725
B205144-MS1	1205056-02	Matrix Spike	0.151	13:08	100	1	0.458	0.458
ICV			0.177	13:08	100	1	0.537	0.537
ICB			0.000	13:08	100	1	-0.001	-0.001
CCV			0.177	13:08	100	1	0.537	0.537
CCB			0.000	13:08	100	1	-0.001	-0.001

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2 Laboratory

Analysis: Surfactants (MBAS)
Preparation Method: MBAS Extraction
Batch ID: B205144
Matrix: Aqueous

Prepared by: DK
Prepared on: 05/23/2012

Standards and Reagents

Standard	Description	Exp Date
D2A1817	Phenolthalein Indicator solution	01/17/2014
D2B0806	Chloroform	06/16/2016
D2C0507	Wash Solution, MBAS	03/05/2014
D2C0508	Methylene Blue Reagent	03/05/2014
D2E2304	MBAS AQC, ERA P174-784 Dil.	05/23/2014
D2E2318	MBAS Intermediate Std., 10.0 mg/L	05/23/2014

Project Name	Sample ID	Chloride value	Spike ID	Source ID
Dimock Residential GW Site - 1205056	1205056-01	<300		
	1205056-02	<300		
	1205056-03	<300		
	1205056-04	<300		
	B205144-BS1	<300	D2E2304	
	B205144-BSD1	<300	D2E2304	
	B205144-MS1	<300	D2E2318	1205056-02