

001 30-045-2875

30-045-28757



Analytical Report

Report Summary

Client: BP America Production Co.

Chain Of Custody Number:

Samples Received: 10/21/2015 2:37:00PM

Job Number: 03143-0424

Work Order: P510048

Project Name/Location: BH Testing GCU 416

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Tim Cain', is written over a horizontal line.

Date: 10/29/15

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

API 30-045-287



BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: BH Testing Project Number: 03143-0424 Project Manager: Sabre Beebe	Reported: 29-Oct-15 13:43
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Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
GCU 416	P510048-01A	Aqueous	10/21/15	10/21/15	Poly 500mL

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CUP 30-045-287



BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: BH Testing
Project Number: 03143-0424
Project Manager: Sabre Beebe

Reported:
29-Oct-15 13:43

GCU 416
P510048-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Cation/Anion Analysis									
pH @16.1°C	8.52		pH Units	1	1543015	10/22/15 09:06	10/22/15 09:06	150.1/4500H	H1
Electrical Conductivity	3370		umhos/cm	1	1543015	10/22/15 09:06	10/22/15 09:06	EPA 120.1	H1
Total Dissolved Solids	3020	10.0	mg/L	1	1543008	10/22/15	10/22/15	160.1/2540C	
Sodium Absorption Ratio	5.08		N/A	1	1543020	10/22/15	10/22/15	[CALC]	
Total Alkalinity as CaCO ₃	45.0	10.0	mg/L	1	1544003	10/26/15	10/26/15	Hach Method 8203	
Total Hardness as CaCO ₃	1130	2.07	mg/L		[CALC]	10/22/15	10/22/15	[CALC]	
Bicarbonate as CaCO ₃	45.0	10.0	mg/L	1	1544003	10/26/15	10/26/15	Hach Method 8203	
Carbonate as CaCO ₃	ND	10.0	mg/L	1	1544003	10/26/15	10/26/15	Hach Method 8203	
Hydroxide as CaCO ₃	ND	10.0	mg/L	1	1544003	10/26/15	10/26/15	Hach Method 8203	
Nitrate-N	ND	2.50	mg/L	10	1544005	10/27/15 08:23	10/27/15 17:38	EPA 300.0	H2
Nitrite-N	ND	2.50	mg/L	10	1544005	10/27/15 08:23	10/27/15 17:38	EPA 300.0	H2
Chloride	ND	20.0	mg/L	10	1544005	10/27/15	10/27/15	EPA 300.0	
Fluoride	ND	2.50	mg/L	10	1544005	10/27/15	10/27/15	EPA 300.0	
o-Phosphate-P	ND	2.50	mg/L	10	1544005	10/27/15 08:23	10/27/15 17:38	EPA 300.0	H2
Sulfate	2060	20.0	mg/L	10	1544005	10/27/15	10/27/15	EPA 300.0	
Iron	ND	0.50	mg/L	1	1543017	10/22/15	10/22/15	EPA 6010C	
Calcium	408	0.50	mg/L	1	1543017	10/22/15	10/22/15	EPA 6010C	
Magnesium	28.1	0.20	mg/L	1	1543017	10/22/15	10/22/15	EPA 6010C	
Potassium	6.89	0.50	mg/L	1	1543017	10/22/15	10/22/15	EPA 6010C	
Sodium	393	0.50	mg/L	1	1543017	10/22/15	10/22/15	EPA 6010C	

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QPI 30-045-287

BP America Production Co.
PO Box 22024
Tulsa OK, 74121-2024

Project Name: BH Testing
Project Number: 03143-0424
Project Manager: Sabre Beebe

Reported:
29-Oct-15 13:43

Cation/Anion Analysis - Quality Control
Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1544005 - Anion Extraction EPA 300.0										
Blank (1544005-BLK1)				Prepared & Analyzed: 27-Oct-15						
Nitrate-N	ND	0.25	mg/L							
Nitrite-N	ND	0.25	"							
Chloride	ND	2.00	"							
Fluoride	ND	0.25	"							
o-Phosphate-P	ND	0.25	"							
Sulfate	ND	2.00	"							
LCS (1544005-BS1)				Prepared & Analyzed: 27-Oct-15						
Nitrate-N	5.55	0.25	mg/L	5.00		111	90-110			SPK1
Nitrite-N	5.35	0.25	"	5.00		107	90-110			
Chloride	49.7	2.00	"	50.0		99.4	90-110			
Fluoride	5.44	0.25	"	5.00		109	90-110			
o-Phosphate-P	26.1	0.25	"	25.0		104	90-110			
Sulfate	49.8	2.00	"	50.0		99.7	90-110			
Matrix Spike (1544005-MS1)				Source: P510053-01		Prepared & Analyzed: 27-Oct-15				
Nitrate-N	5.62	0.25	mg/L	5.00	ND	112	80-120			
Nitrite-N	5.36	0.25	"	5.00	ND	107	80-120			
Chloride	61.8	2.00	"	50.0	13.3	97.1	80-120			
Fluoride	9.08	0.25	"	5.00	4.22	97.3	80-120			
o-Phosphate-P	26.3	0.25	"	25.0	ND	105	80-120			
Sulfate	198	2.00	"	50.0	168	60.3	80-120			SPK1
Matrix Spike Dup (1544005-MSD1)				Source: P510053-01		Prepared & Analyzed: 27-Oct-15				
Nitrate-N	5.60	0.25	mg/L	5.00	ND	112	80-120	0.357	20	
Nitrite-N	5.33	0.25	"	5.00	ND	107	80-120	0.542	20	
Chloride	62.0	2.00	"	50.0	13.3	97.4	80-120	0.205	20	
Fluoride	9.14	0.25	"	5.00	4.22	98.4	80-120	0.571	20	
o-Phosphate-P	26.3	0.25	"	25.0	ND	105	80-120	0.319	20	
Sulfate	200	2.00	"	50.0	168	65.2	80-120	1.24	20	SPK1

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