



Report Summary

Client: ConocoPhillips
Chain of Custody Number: 14316
Samples Received: 08-22-12
Job Number: 96052-1706
Sample Number(s): 63057
Project Name/Location: Bud-dos-Pah #1

OIL CONS. DIV DIST. 3

SEP 14 2015

API - 30-045-05726

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to be 'J. B.', is written over a horizontal line.

Date:

8/28/12

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Client:	ConocoPhillips	Project #:	96052-1706
Sample ID:	Bud-dos-Pah #1	Date Reported:	08-27-12
Laboratory Number:	63057	Date Sampled:	08-22-12
Chain of Custody:	14316	Date Received:	08-22-12
Sample Matrix:	Aqueous	Date Analyzed:	08-23-12
Preservative:	Cool		
Condition:	Intact		

Parameter	Analytical Result	Units		
pH @ 25°	10.4	s.u.		
Conductivity @ 25° C	1,120	umhos/cm	OIL CONS. DIV DIST. 3	
Total Dissolved Solids @ 180C	666	mg/L	SEP 14 2015	
SAR	55.4	ratio		
Total Alkalinity as CaCO3	403	mg/L		
Total Hardness as CaCO3	7.57	mg/L		
Bicarbonate as CaCO3	133	mg/L	2.2	meq/L
Carbonate as CaCO3	270	mg/L	8.999	meq/L
Hydroxide as CaCO3	< 0.01	mg/L	0.001	meq/L
Nitrate Nitrogen	< 0.01	mg/L	0.000	meq/L
Nitrite Nitrogen	< 0.01	mg/L	0.000	meq/L
Chloride	4.60	mg/L	0	meq/L
Fluoride	1.90	mg/L	0.100	meq/L
Phosphate	1.50	mg/L	0.047	meq/L
Sulfate	125	mg/L	2.60	meq/L
Iron	5.15	mg/L	0.184	meq/L
Calcium	2.37	mg/L	0	meq/L
Magnesium	0.401	mg/L	0	meq/L
Potassium	20.9	mg/L	0.5	meq/L
Sodium	350	mg/L	15	meq/L

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments **Bud-dos-Pah #1**

CHAIN OF CUSTODY RECORD

14316

Client: <i>Concepcion Phillips</i>			Project Name / Location: <i>Bud-dos-Pah #1</i>			ANALYSIS / PARAMETERS																
Email results to: <i>Cary Green</i>			Sampler Name: <i>Eric Bunnell</i>																			
Client Phone No.: <i>505-320-2656</i>			Client No.: <i>AMO 234575 96052-1706</i>																			
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
					HgCl ₂	HCl																
<i>Bud-dos-Pah #1</i>	<i>8/22/12</i>	<i>900 AM</i>	<i>03057</i>																		<i>Y</i>	<i>Y</i>
Relinquished by: (Signature) <i>Eric Bunnell</i>				Date <i>8/22</i>	Time <i>3:52</i>	Received by: (Signature) <i>Dane Z...</i>				Date <i>8/22/12</i>	Time <i>3:52p</i>											
Relinquished by: (Signature)						Received by: (Signature)																
Sample Matrix Soil <input type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input checked="" type="checkbox"/> Other <input type="checkbox"/>																						
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area. <i>AMO 234575</i>																						





75 Suttle Street
Durango, CO 81303
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11 September 2015

Kevin Fredrickson
Conoco Phillips-Farmington
3401 30th Street
Farmington, NM 87401

RE: Braden Head API - 30-045-05726

Enclosed are the results of analyses for samples received by the laboratory on 08/21/15 14:20.
If you need any further assistance, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads 'Debbie Zufelt'.

Debbie Zufelt
Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water



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Conoco Phillips-Farmington
3401 30th Street
Farmington NM, 87401

Project: Braden Head
Project Name / Number: [none]
Project Manager: Kevin Fredrickson

Reported:
09/11/15 16:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Williams 1 (Bradenhead) Area 21	1508313-01	Water	08/20/15 13:30	08/21/15 14:20
Bud-Dos-Pah 1 (Bradenhead) Area 21	1508313-02	Water	08/20/15 15:00	08/21/15 14:20

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Conoco Phillips-Farmington
3401 30th Street
Farmington NM, 87401

Project: Braden Head
Project Name / Number: [none]
Project Manager: Kevin Fredrickson

Reported:
09/11/15 16:10

OIL CONS. DIV DIST. 3

Williams 1 (Bradenhead) Area 21
1508313-01 (Water)

SEP 14 2015

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

Chloride*	<10.0	10.0	5.00	mg/L	1	09/11/15	4500-Cl- C		LLG
pH*	9.61			pH Units	1	08/25/15	EPA150.1	H4	MAJ
Sulfate	124	20.0	3.36	mg/L	2	09/05/15	4500-SO42- E		ABP
TDS*	560	10.0		mg/L	1	08/27/15	EPA160.1		ABP

Bud-Dos-Pah 1 (Bradenhead) Area 21

1508313-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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General Chemistry

Chloride*	<10.0	10.0	5.00	mg/L	1	09/11/15	4500-Cl- C		LLG
pH*	10.1			pH Units	1	08/25/15	EPA150.1	H4	MAJ
Sulfate	114	20.0	3.36	mg/L	2	09/05/15	4500-SO42- E		ABP
TDS*	540	10.0		mg/L	1	08/27/15	EPA160.1		ABP

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

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Conoco Phillips-Farmington
3401 30th Street
Farmington NM, 87401

Project: Braden Head
Project Name / Number: [none]
Project Manager: Kevin Fredrickson

Reported:
09/11/15 16:10

Notes and Definitions

Q1 Sample received outside of acceptable temperature range for analyses requiring cold storage.

H4 pH analysis performed more than 48 hours after sampling.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis
*Results reported on as received basis unless designated as dry.

RPD Relative Percent Difference

LCS Laboratory Control Sample (Blank Spike)

RL Report Limit

MDL Method Detection Limit

Green Analytical Laboratories

Debbie Zufelt, Reports Manager

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Client: COP

Phone#

505-320-4738

Contact:

Kevin Fredrickson

Address:

E-Mail Address:

Kevin.G.Fredrickson@conocophillips.com



75 Suttle Street
Durango, CO 81303
Phone: 970-247-4220
FAX: 970-247-4227

CHAIN OF CUSTODY RECORD

GAL Work Order # 1508-313

PO#

Project Name:

Sample Location: (1)BumperSpring, (2)CompressorDischarge, (3)Flowline, (4)Meter, (5)Oil Tank
(6)PigLauncher, (7)PigReceiver, (8)Pipeline, (9)Pit Tank, (10)PostFilter, (11)PreFilter
(12)SeparatorInlet, (13)SeparatorOutlet, (14)SeparatorDump, (15)SWDInlet
(16)SWDOutlet, (17)TransferPump, (18)ValveCan, (19)WaterTank, (20)Wellhead
(21)Other

Sample Type: (1)Casing, (2)CO2GasTube, (3)Coupon, (4)Water, (5)H2SGasTube, (6)Metals
(7)O2GasTube, (8)PipeSection, (9)Residual, (10)Sludge, (11)Solid, (12)Tubing, (13)Other

Collection							Preservative		Analyses Required					
Well Name (Sample Name)	Date	Time	Collected By: (Init.)	Sample Location	Sample Type	No. of Containers	Filtered: Y / N	Unpreserved	H2SO4	Other:	Iron and Manganese	Phosphate	Full Water API	Brotherhead Tests
1. Williams 1 (Brotherhead)	8-20	13:30	VP	20	4	1	N	✓						✓
2. Bud-Doe-Pah 1 (Brotherhead)	8-20	15:00	VP	20	4	1	N	✓						✓
3.														
4.														
5.														
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19.														
20.														

Relinquished by:

Date:

Time:

Received By:

Date:

Time:

David Bayne

8-21-15

14:20

Christin Clark

8/21/15

14:20

Christin Clark

8/24/15

16:55

Kangaroo Express

8/21/15

16:55

Kangaroo 8-25-15 9:30 Michael Valen

[illegible]