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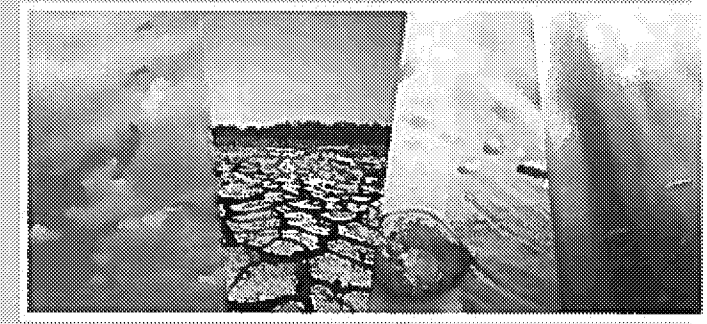
WORK ORDER NUMBER: 14-11-0764

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Beta Offshore

Client Project Name: Weekly NPDES Produced Water Monitoring

Attention: Marina Robertson
111 W. Ocean Blvd., Suite 1240
Long Beach, CA 90802-4633

Amanda Porter

Approved for release on 11/12/2014 by:
Amanda Porter
Project Manager

ResultLink ›

Email your PM ›

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NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1884 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 03LA0830

Nov 8 overboard 1100 bbls

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Work Order Narrative

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 11/10/14. They were assigned to Work Order 14-11-0764.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Analytical Report

Beta Offshore		Date Received:	11/10/14
111 W. Ocean Blvd., Suite 1240		Work Order:	14-11-0764
Long Beach, CA 90802-4633		Preparation:	N/A
		Method:	EPA 1664A
		Units:	mg/L

Project: Weekly NPDES Produced Water Monitoring

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
NPDES Prod. Water	**14-11-0764-1-A**	**11/08/14 12:36**	**Aqueous**	**N/A**	**11/10/14**	**11/10/14 18:00**	**E1110HEML5**

Parameter	Result	RL	DF	Qualifiers
HEM: Oil and Grease	25.3	1.00	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-05-119-3732**	**N/A**	**Aqueous**	**N/A**	**11/10/14**	**11/10/14 18:00**	**E1110HEML5**

Parameter	Result	RL	DF	Qualifiers
HEM: Oil and Grease	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - LCS/LCSD

Beta Offshore		Date Received:	11/10/14
111 W. Ocean Blvd., Suite 1240		Work Order:	14-11-0764
Long Beach, CA 90802-4633		Preparation:	N/A
		Method:	EPA 1664A
Project: Weekly NPDES Produced Water Monitoring			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-119-3732	LCS	Aqueous	N/A	11/10/14	11/10/14 18:00	E1110HEML5
099-05-119-3732	LCSD	Aqueous	N/A	11/10/14	11/10/14 18:00	E1110HEML5

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
HEM: Oil and Grease	40.00	39.20	98	39.00	98	78-114	1	0-18	

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 14-11-0764

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 1664A	N/A	29	N/A	1

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Glossary of Terms and Qualifiers

Work Order: 14-11-0764

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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LTS Environmental Inc. 704 Adirondack Avenue Ventura, CA 93003 805-644-4560	**Report to:** Marina Robertson 111 W. Ocean Blvd. Suite 1240 Long Beach, CA. 90802	**Bill to:** Marina Robertson 111 W. Ocean Blvd. Suite 1240 Long Beach, CA 90802

FACILITY: *Platform Elly*
SAMPLER NAME:
PROJECT/CHARGE # *Weekly NPDES Produced Water Monitoring*
RESULTS REQUIRED: **48 hr RUSH**
RESULTS BY: PHONE: _____ E-MAIL X mrobertson@betaoffshore.com

SUBMITTED TO: *Calscience* PHONE: *714-895-5494*
REPORT TO: *Marina Robertson* PHONE: *562-683-3497*
COPIES TO: *Platform Supervisor* PHONE: *562-606-5705*
lawrylts@sbcglobal.net PHONE: *805-644-4560*
704 Adirondack, Ventura, CA 93003

SAMPLE NO.	SAMPLE ID	GRAB/ COMP.	VOLUME	DATE/TIME COLLECTED	PRESERV.	ANALYSES REQUESTED (METHOD)
1	NPDES Prod.Water	grab	1 L amber	11/8/14 @ 12:36	H2SO4	Oil & Grease (EPA 1664)
2	NPDES Prod.Water	grab	1 L amber		H2SO4	Oil & Grease (EPA 1664) Hold
3	NPDES Prod.Water	grab	1 L amber		H2SO4	Oil & Grease (EPA 1664) Hold
4	NPDES Prod.Water	grab	1 L amber		H2SO4	Oil & Grease (EPA 1664) Hold
	Caution to Sample Collector: all sample bottles contain a concentrated acid preservative. Follow all procedures outlined in your NPDES manual and use proper PPE when collecting the samples.					

Comments: ***For Samples 1-4: Analyze Sample #1 only - hold other samples until further notice.***

Relinquished by:	Date:	Relinquished by: [signature]	Date: 11-8-14 11/10/14 17:00
Received by:	Time:	Received by: [signature] ECI	Time: 11/10/14 @ 17.00
Relinquished by:	Date:	Relinquished by: [signature] ECI	Date: 11/10/14 @ 18.00
Received by:	Time:	Received by: [signature] ECI	Time: 11/10/14 1800

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No 22174

0764

Marine Shipping Manifest

Shipping Date: 11-10-14	Carrier:
From Platform: ☐Ellen ☒Elly ☐Eureka	To: ☒Dock/Ship Services ☐Ellen ☐Elly ☐Eureka

QTY	DESCRIPTION	VENDOR	WO#	EQUIPMENT NAME	REASON RPR-Repair RTN-Return EXC-Exchange Fresh	RENTAL Check Box for Yes	CONDITION 1-NEW 2-DIRTY 3-REUSABLE
1	COOLER W/ OVERBOARD WATER					☐	
	SAMPLE					☐	
						☐	
	ATTN: MARINA ROBERTSON					☐	
						☐	
						☐	
						☐	
						☐	
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						☐	
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						☐	
						☐	

Shipped by: Bob Perkins	Received at Terminal by:	Recieved Date:

1) White: Terminal 2) Yellow: Platform 3) Pink: Platform

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WORK ORDER #: 14-11-0764

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: LTS ENVIRONMENTAL, INC

DATE: 11/10/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 4.0 °C - 0.2 °C (CF) = 3.8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Checked by: 804

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Checked by: 804

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 806

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☐	☑	☐
Sample container label(s) consistent with COC	☑	☑ 806 11/10/14	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOAh ☐VOAna$_2$ ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna$_2$ ☑1AGBs

☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB

☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: 806

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 862

Preservative: h: HCL n: HNO_3 na$_2$:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered Scanned by: 862