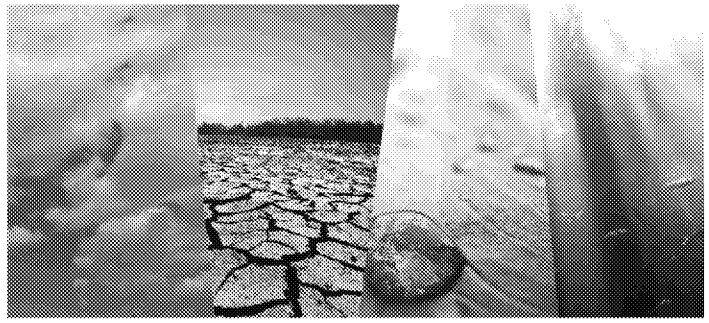
Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-09-1282

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: NRC Environmental Services

Client Project Name: Dynegy / 64733

Attention: Kelly Brandenburg
2950 Kurtz Street
San Diego, CA 92110-2005

Approved for release on 09/27/2012 by:
Don Burley
Project Manager

ResultLink ▸

Email your PM ▸

nelac

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NELAP ID: 03228CA | DoD-ELAP ID: L10-41 | DSDLAC ID: 15109 | SCAQMD ID: 93LA0830

Calscience Environmental Laboratories, Inc.

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Work Order Number: 12-09-1282

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

NRC Environmental Services		Date Received:	09/20/12
2950 Kurtz Street		Work Order No:	12-09-1282
San Diego, CA 92110-2005		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Dynegy / 64733			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Gray Paint	**12-09-1282-1-A**	**09/20/12 00:00**	**Solid**	**GC 31**	**09/21/12**	**09/27/12 15:16**	**120921L09**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	150	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	101	50-130			2,4,5,6-Tetrachloro-m-Xylene	78	50-130		

Beige Paint	**12-09-1282-2-A**	**09/20/12 00:00**	**Solid**	**GC 31**	**09/21/12**	**09/27/12 15:35**	**120921L09**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	77	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	99	50-130			2,4,5,6-Tetrachloro-m-Xylene	80	50-130		

Red Top Paint	**12-09-1282-3-A**	**09/20/12 00:00**	**Solid**	**GC 31**	**09/21/12**	**09/27/12 16:02**	**120921L09**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	54	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	90	50-130			2,4,5,6-Tetrachloro-m-Xylene	73	50-130		

Red Bottom Paint	**12-09-1282-4-A**	**09/20/12 00:00**	**Solid**	**GC 31**	**09/21/12**	**09/26/12 19:10**	**120921L09**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	730	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	95	50-130			2,4,5,6-Tetrachloro-m-Xylene	88	50-130		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

NRC Environmental Services		Date Received:	09/20/12
2950 Kurtz Street		Work Order No:	12-09-1282
San Diego, CA 92110-2005		Preparation:	EPA 3545
		Method:	EPA 8082
		Units:	ug/kg
Project: Dynegy / 64733			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-535-1,644**	**N/A**	**Solid**	**GC 31**	**09/21/12**	**09/22/12 11:25**	**120921L09**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aroclor-1016	ND	50	1		Aroclor-1248	ND	50	1	
Aroclor-1221	ND	50	1		Aroclor-1254	ND	50	1	
Aroclor-1232	ND	50	1		Aroclor-1260	ND	50	1	
Aroclor-1242	ND	50	1		Aroclor-1262	ND	50	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	108	50-130		2,4,5,6-Tetrachloro-m-Xylene	88	50-130	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

NRC Environmental Services		Date Received:	09/20/12
2950 Kurtz Street		Work Order No:	12-09-1282
San Diego, CA 92110-2005		Preparation:	EPA 3050B
		Method:	EPA 6010B

Project: Dynegy / 64733

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Gray Paint	**12-09-1282-1-A**	**09/20/12 00:00**	**Solid**	**ICP 7300**	**09/21/12**	**09/21/12 22:19**	**120921L05**

Parameter	Result	RL	DF	Qual	Units
Lead	798	0.500	1		mg/kg

Beige Paint	**12-09-1282-2-A**	**09/20/12 00:00**	**Solid**	**ICP 7300**	**09/21/12**	**09/21/12 22:20**	**120921L05**

Parameter	Result	RL	DF	Qual	Units
Lead	269	0.500	1		mg/kg

Red Top Paint	**12-09-1282-3-A**	**09/20/12 00:00**	**Solid**	**ICP 7300**	**09/21/12**	**09/21/12 22:22**	**120921L05**

Parameter	Result	RL	DF	Qual	Units
Lead	1550	0.500	1		mg/kg

Red Bottom Paint	**12-09-1282-4-A**	**09/20/12 00:00**	**Solid**	**ICP 7300**	**09/21/12**	**09/24/12 11:35**	**120921L05**

Parameter	Result	RL	DF	Qual	Units
Lead	6550	5.00	10		mg/kg

Method Blank	**097-01-002-16,210**	**N/A**	**Solid**	**ICP 7300**	**09/21/12**	**09/21/12 21:45**	**120921L05**

Parameter	Result	RL	DF	Qual	Units
Lead	ND	0.500	1		mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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NRC Environmental Services		Date Received:	09/20/12
2950 Kurtz Street		Work Order No:	12-09-1282
San Diego, CA 92110-2005		Preparation:	EPA 3050B
		Method:	EPA 6010B

Project Dynegy / 64733

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1224-3	**Sediment**	**ICP 7300**	**09/21/12**	**09/21/12**	**120921S05**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	8.517	25.00	33.08	98	31.29	91	75-125	6	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

NRC Environmental Services		Date Received:	09/20/12
2950 Kurtz Street		Work Order No:	12-09-1282
San Diego, CA 92110-2005		Preparation:	EPA 3545
		Method:	EPA 8082

Project Dynegy / 64733

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1317-2	**Solid**	**GC 31**	**09/21/12**	**09/22/12**	**120921S09**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	ND	100.0	55.50	56	50.00	50	50-135	10	0-20	
Aroclor-1260	ND	100.0	86.00	86	86.50	86	50-135	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

NRC Environmental Services		Date Received:	N/A
2950 Kurtz Street		Work Order No:	12-09-1282
San Diego, CA 92110-2005		Preparation:	EPA 3050B
		Method:	EPA 6010B

Project: Dynegy / 64733

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-16,210	**Solid**	**ICP 7300**	**09/21/12**	**09/21/12**	**120921L05**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	25.00	26.77	107	26.69	107	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

NRC Environmental Services		Date Received:	N/A
2950 Kurtz Street		Work Order No:	12-09-1282
San Diego, CA 92110-2005		Preparation:	EPA 3545
		Method:	EPA 8082

Project: Dynegy / 64733

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-535-1,644	**Solid**	**GC 31**	**09/21/12**	**09/22/12**	**120921L09**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1016	100.0	94.00	94	94.00	94	50-135	0	0-20	
Aroclor-1260	100.0	112.5	112	113.5	114	50-135	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 12-09-1282

Qualifier	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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
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.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
MPN - Most Probable Number

Calscience Environmental Laboratories, Inc.

☑ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: 12-09-1282

Date: 9/20/12

Page 1 of 1

LABORATORY CLIENT: NRC Environmental Services

ADDRESS: 2950 Kurtz St

CITY: San Diego STATE: CA ZIP: 92110

TEL: 619 235 3322 E-MAIL: kbrandenburg@nrces.com

CLIENT PROJECT NAME / NUMBER: Dynegy / 64733

P.O. NO.: 483124

PROJECT CONTACT: Kelly Brandenburg

SAMPLER(S): (PRINT) Hector Tejeda

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ STANDARD

☐ COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Lead EPA 6010B		
1	~~Unit 1~~ Gray Paint	9-20-12		S	1	X												X						X		
2	Beige Paint	9-20-12		S	1	X												X						X		
3	Red Top Paint	9-20-12		S	1	X												X						X		
4	Red Bottom Paint	9-20-12		S	1	X												X						X		

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
KEN CLARK	CEL	09/20/12	14:20
	Dannyle CEL	09/20/12	17:33

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

06/01/10 Revision

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ED_002285_00003676-00011

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-09-1282

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: NRC

DATE: 09/20/12

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

Temperature 1.8 °C - 0.3 °C (CF) = 1.5 °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 Initial: VO

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: VO

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: [illegible]

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	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
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® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** [illegible]

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

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:** [illegible]

* 10:00 per label