# 1R - 430

## REPORTS

## DATE:

## 12/16/2004



December 16, 2004

Mr. Paul Sheeley Environmental Engineer Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department 1625 N. French Drive Hobbs, New Mexico 88240

Re: Groundwater Investigation Report, Dynegy Midstream Services. L.P., Unit Letter J (NW/4, SE/4), Section 31, Township 23 South, Range 37 East, Lea County, New Mexico (Kelly Myers Deep Wells Lease)

Dear Mr. Sheeley:

A Groundwater Investigation Workplan was submitted to the New Mexico Oil Conservation Division (NMOCD) on August 20, 2004, for installation and sampling of one (1) monitoring well at the Dynegy Midstream Services, L.P. (Dynegy) Spill Site #26, located in the northeast quarter (NE/4) of the southwest quarter (SW/4), Section 31, Township 23 South, Range 37 East, Lea County, New Mexico. An Addendum to the Groundwater Investigation Workplan, specifying parameters for laboratory analysis of groundwater samples collected from the proposed monitoring well, was submitted to the NMOCD on September 14, 2004.

The NMOCD granted approval of the Workplan Addendum on October 5, 2004, with the condition that a draft of the clay barrier installed at Site #26, be included with the Groundwater Investigation Report. Figure 1 shows the site location. Figure 2 shows details of the Site #26 excavation and backfill, including the locations of compaction test data of the clay barrier. The compaction tests were performed by Pettigrew and Associates, P.A., of Hobbs, New Mexico. Figure 3 shows the requested draft of the clay barrier, installed as described in the Groundwater Investigation Workplan dated August 20, 2004. Appendix A provides a copy of the Laboratory Test Report of soil density testing.

#### **Current Investigation**

On November 8, 2004, one (1) temporary monitoring well (MW-1) was installed at Site #26, following NMOCD verification of the location. The well was drilled to a depth of approximately 130 feet below ground surface (bgs) by Scarborough Drilling of Lamesa, Texas, using an air rotary drilling rig. Soil samples were collected using a split spoon sampler, at five (5) foot intervals from a depth of approximately five (5) feet bgs to a depth of approximately 70 feet bgs, with the exception of the 50 to 51 foot interval, where no recovery was made. Sample collection was also attempted at depths of approximately 80 feet bgs and 90 feet bgs; however, no recovery was made due to the looseness of the sand at those depths. Because of the large thickness of sand encountered from approximately 47 feet bgs to a total depth of approximately 130 bgs, water was introduced to the drilling process beginning at a depth of approximately 90 feet bgs to facilitate removal of the drill cuttings. The drill cuttings were placed on the ground adjacent to the monitoring well. Figure 2 shows the location of the monitoring well (MW-1).

The soil samples were placed in clean glass sample jars, labeled, chilled in an ice chest and hand delivered to Environmental Lab of Texas (ELOT), in Odessa, Texas, for laboratory analysis. A duplicate of each sample was also placed in a clean glass sample jar for headspace analysis. The headspace jars were filled approximately <sup>3</sup>/<sub>4</sub> full, and a layer of aluminum foil was placed over the opening of the jar before replacing the

Mr. Paul Sheeley December 16, 2004 Page 2

cap. The headspace samples were allowed to reach ambient temperature before a RAE Instruments, Model 2000 photoionization detector (PID) was used to measure the concentration of organic vapors in the headspace (through the aluminum foil), and the concentration of organic vapors was displayed by the instrument in parts per million (ppm). The PID was calibrated to 100.1 ppm isobutylene prior to obtaining sample readings.

The maximum PID measurement of samples from the monitoring well was 0.4 ppm, encountered at a depth of 35 to 36 feet bgs; therefore, no soil samples were analyzed for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX). Soil samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method SW-846-8015M, including gasoline range organics (GRO) and diesel range organics (DRO), and chloride by EPA method SW-846-9253. Table 1 provides a summary of the laboratory analyses. Appendix B provides the well log, with PID readings graphically displayed. Appendix C presents the laboratory data and chain of custody documentation. Appendix D presents the Release Notification and Corrective Action Form C-141.

Referring to Table 1, all samples reported TPH concentrations below the test method detection limit. A maximum chloride concentration of 117.0 milligrams per kilogram (mg/kg) was reported in the sample collected from 35 tp 36 feet bgs.

The temporary monitoring well was constructed with a threaded 2-inch schedule 40 PVC well screen and riser. The well screen, approximately 20 feet in length, was placed above and below the groundwater level observed at the windmill located approximately 1,000 feet east of Site #26. Graded silica sand was placed around the well screen to approximately three feet above the screen. Approximately three feet of bentonite chips was placed above the sand, and hydrated with potable water. The remainder of the annulus remains vacant, pending abandonment of the monitoring well. An electric submersible pump was used to develop the wells until groundwater was visibly clear of sediment.

#### **Groundwater Monitoring**

On November 12, 2004, groundwater sampling was conducted at monitoring well MW-1. Depth to groundwater was measured, and approximately 20 gallons of water was purged from the well prior to obtaining samples for laboratory analysis. Groundwater samples were collected using a dedicated disposable polyethylene bailer, carefully poured into laboratory prepared containers, labeled, chilled in an ice chest, and hand delivered to ELOT for analysis of organics by EPA method 8021B, alkalinity by EPA method 310.2M, chloride by EPA method 325.3M, total dissolved solids (TDS) by EPA method 160.1, sulfate by EPA method 375.4, total dissolved metals by EPA methods 6010B and 7470A, and semi-volatile organics by EPA method 8270C. Table 2 presents a summary of the organics analysis of the groundwater. Table 3 presents a summary of the general chemistry and semi-volatile analysis of the groundwater. Table 4 presents a summary of the metals analysis of the groundwater. The depth to groundwater measurement is presented on the well log in Appendix B. Appendix C presents the laboratory data and chain of custody documentation.

Referring to Table 2, all organic compounds were reported below the test method detection limit. Referring to Table 3, semi-volatile constituents were reported below the test method detection limit, with the exception of Bis(2-ethylhexyl)phthalate (0.0149 ug/L). The New Mexico Water Quality Control Commission (NMWQCC) does not have a human health for Bis(2-ethylhexyl)phthalate, which is likely attributed to the plastic well material or laboratory conditions. Chloride was reported at 2,200 miligrams per liter (mg/L) and TDS was reported at 3,900 mg/L. The chloride and total TDS exceed the NMWQCC domestic water quality standard of

Mr. Paul Sheeley December 16, 2004 Page 3

250 milligrams per liter (mg/L) and 1,000 mg/L, respectively. Soil samples collected from two (2) borings drilled at the leak area and the excavation reported chloride concentrations decreasing near or below the water quality standard. Soil data is included in the Pipeline Spill Remediation Workplan dated April 29, 2004. Referring to Table 4, all metals in groundwater were reported below the NMWQCC standards.

#### **Proposal**

Dynegy proposes that the monitoring well MW-1 be plugged and abandoned according to New Mexico state guidelines, and Site #26 be considered closed. If you should have any questions, please contact Mr. Cal Wrangham with Dynegy at (432) 688-0542 or myself at (432) 687-0901. I can also be reached by e-mail at Cindy@laenvironmental.com.

Sincerely, Larson & Associates, Inc.

sair

Cindy K. Crain, CPG Project Manager

CC: Mr. Cal Wrangham, Dynegy Mr. Dave Harris, Dynegy Mr. Wayne Price, NMOCD **TABLES** 

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Table 1: Summary of Headspace and Laboratory Analysis of Soil Samples Dynegy Midstream Services, L. P., Spill Site No. 26 NW/4, SE/4, Section 31, Township 23 South, Range 37 East Lea County, New Mexico

Well	Sample	Sample	PID	GRO	DRO	TPH	Chloride
Number	Date	Depth	(ppm)	C6-C12	>C12-C35	(C6-C35)	mg/kg
		(feet BGS)		mg/kg	mg/kg	mg/kg	
	RR	AL				100	250
MW-1	11/08/04	5-7	0	<10	<10	<20	<20
	11/08/04	10-12	0	<10	<10	<20	<20
	11/08/04	15-16	0	<10	<10	<20	<20
	11/08/04	20-21	0	<10	<10	<20	63.8
	11/08/04	25-26	0	<10	<10	<20	53.2
	11/08/04	30-31	0.1	<10	<10	<20	74.4
	11/08/04	35-36	0.4	<10	<10	<20	117.0
	11/08/04	40-41	0.3	<10	<10	<20	53.2
	11/08/04	45-46	0.2	<10	<10	<20	42.5
	11/08/04	55-56	0	<10	<10	<20	<20
	11/08/04	60-61	0.1	<10	<10	<20	<20
	11/08/04	65-66	0.1	<10	<10	<20	<20
	11/08/04	70-71	0.2	<10	<10	<20	<20
Notes:	All analyses	performed t	v Environm	ental Lab of	Texas I, Ltd.,	Odessa, Tex	as

nvironmental Lab of Texas I, Ltd., Ode Depth in feet below ground surface

1. BGS:

2. PID: Photoionization detector

Parts per million 3. ppm:

4. GRO: Gasoline-range organics

Diesel-range organics 5. DRO:

Total petroleum hydrocarbons (Sum of GRO + DRO) 6. TPH:

7. mg/kg Milligrams per kilogram

**Below method detection limit** 8. <:

Dynegy Midstream Services, L. P., Spill Site No. 26 NW/4, SE/4, Section 31, Township 23 South, Range 37 East Lea County, New Mexico Summary of Organics Analysis of Groundwater Sample Table 2:

r.			
Total Hydrocarbon C6-C35 mg/L		<0.360	
DRO >C12-C35 mg/L		<0.360	
GRO C6-C12 mg/L		<0.360	
Xylene mg/L	0.62	<0.001	
Ethylbenzene mg/L	0.75	<0.001	
Toluene mg/L	0.75	<0.001	
Benzene mg/L	0.01	<0.001	
Sample Date	<b>NWQCC Standard</b>	11/12/04	
Well Number	NMWQCC	MW-1	

All analyses performed by Environmental Lab of Texas I, Ltd., Odessa, Texas Notes:

New Mexico Water Quality Control Commission Milligrams per liter 1. NMWQCC

- 2. mg/L 3. <: 5. DRO
- Below method detection limit

  - Gasoline Range Organics Diesel Range Organics

Summary of General Chemistry and Semi-volatile Analysis of Groundwater Sample Dynegy Midstream Services, L. P., Spill Site No. 26 NW/4, SE/4, Section 31, Township 23 South, Range 37 East Lea County, New Mexico Table 3:

0.0149	519	3,900	2,200	156	11/12/04	MW-1
	600	1,000	250		<b>MWQCC Standard</b>	NMWQCC
		Solids mg/L		mg/L		
ug/L	mg/L	Dissolved	mg/L	Alkalinity	Date	Number
Bis(2-ethylhexyl)phthalate	Sulfate	Total	Chloride	Total	Sample	Well

All analyses performed by Environmental Lab of Texas I, Ltd., Notes:

New Mexico Water Quality Control Commission Milligrams per liter NMWQCC
mg/L
ug/L:

Micrograms per liter

Summary of Metals Analysis of Groundwater Sample Dynegy Midstream Services, L. P., Spill Site No. 26 NW/4, SE/4, Section 31, Township 23 South, Range 37 East Lea County, New Mexico Table 4:

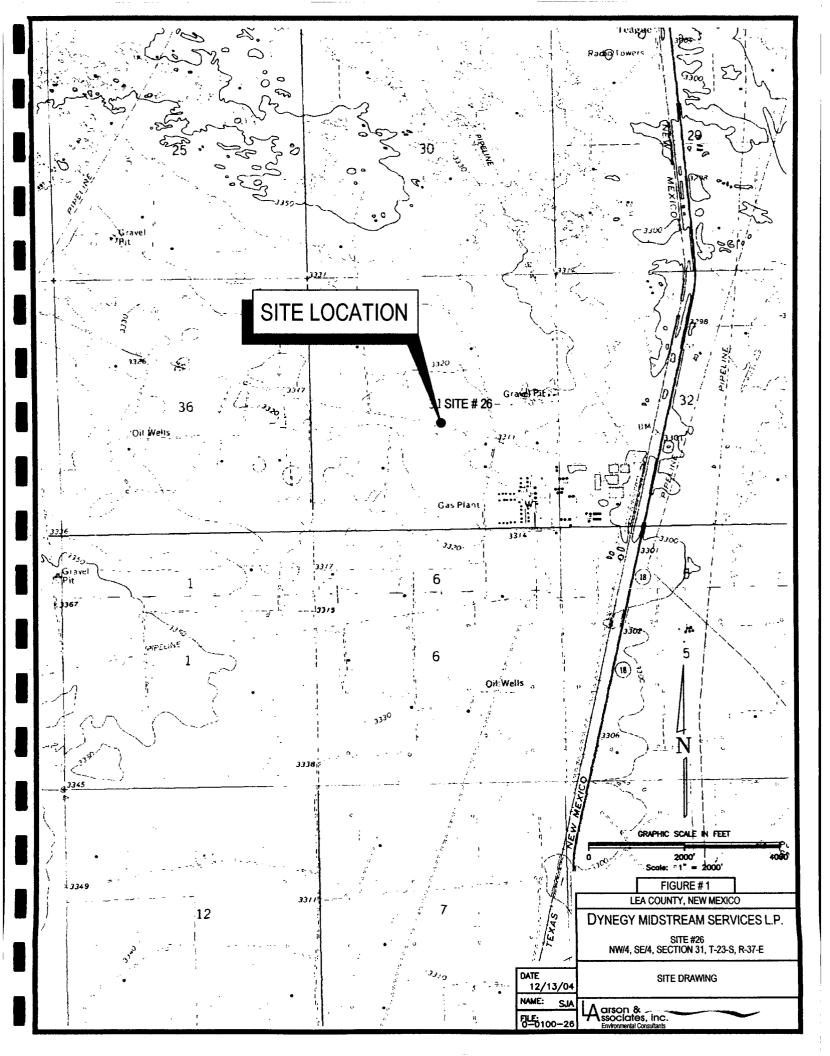
Selenium	mg/L	0.05	0.0093	
	mg/L	0.05	0.0067	
Mercury	mg/L	0.002	<0.0005 0.0067	
Potassium Sodium Cadmium Chromium Mercury Lead	mg/L	0.05	0.0041	
Cadmium	mg/L	0.01	0.0009	
Sodium	mg/L		1,180	
Potassium	mg/L		38.1	
ium Magnesium	mg/L		42.4	
Calcium	mg/L		102	
Barium	mg/L	1	0.206	
Sample   Silver   Arsenic   Barium   Calci	mg/L	0.1	11/12/04 0.0399 0.0135 0.206	
Silver	mg/L	0.05	0.0399	
Sample	Date	andard	11/12/04	
Mell	Number Date	NMWQ Standard	1-WM	

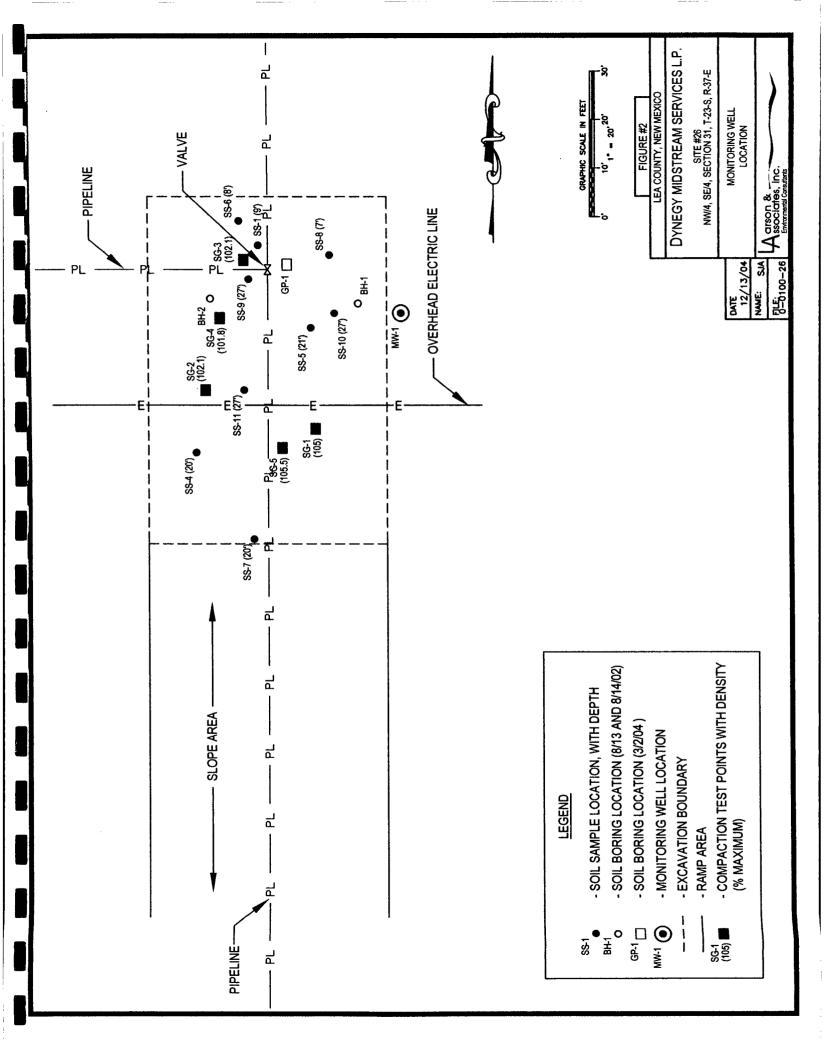
All analyses performed by Environmental Lab of Texas I, Ltd., Odessa, Texas Notes:

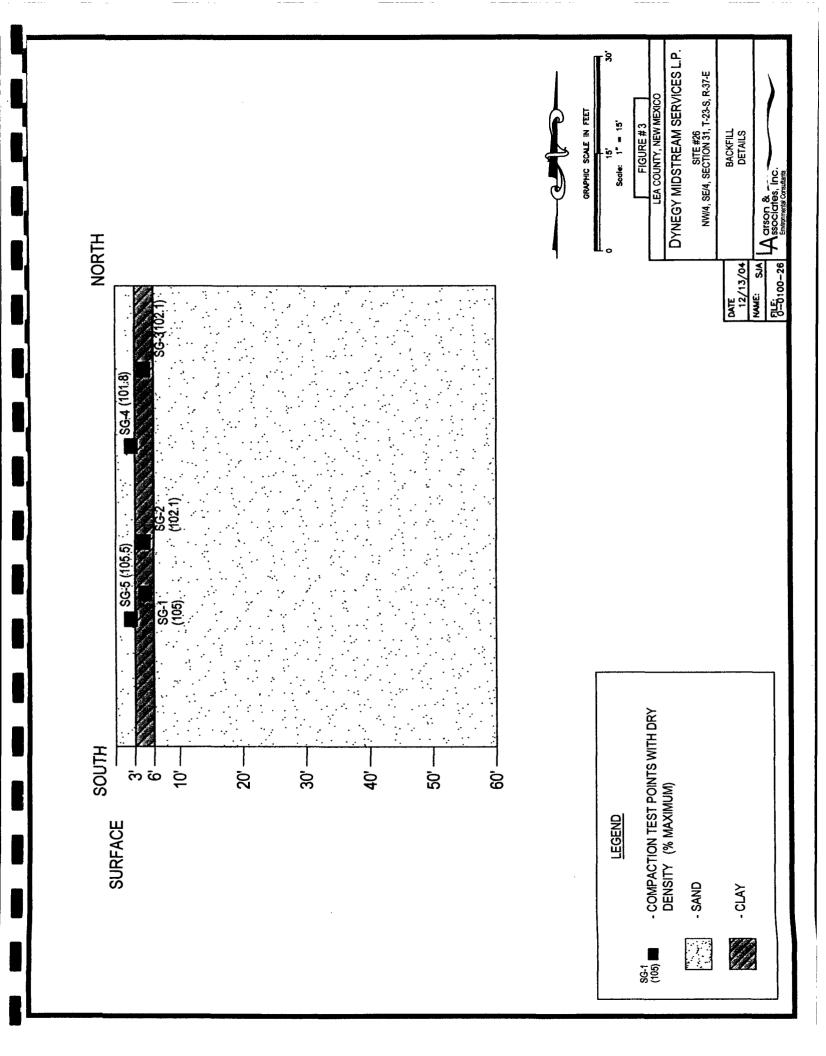
New Mexico Water Quality Control Commission Milligrams per liter Below method detection limit 1. NMWQ 2. mg/L 3. <:

#### **FIGURES**

507 North Marienfeld, Suite 202 Midland, Texas 79701 Ph. (432) 687-0901 Fax (432) 687-0456







#### **APPENDIX A**

#### LABORATORY TEST REPORT

#### **PROCTOR DENSITY**

507 North Marienfeld, Suite 202 ♦ Midland, Texas 79701 ♦ Ph. (432) 687-0901 ♦ Fax (432) 687-0456

ENGLASHING SUP	LABORATORY TE PETTIGREW & AS 1110 N. GRIM HOBBS, NM 8 (505) 393-98	SOCIATES, P.A. IES 8240	DEBRA P. HICKS WILLIAM M. HICK	
То:	Larson & Associates 507 N. Marienseld Suite 202 Midland, TX 79701	Material:	Red Clay	
		Test Method:	ASTM: D 2922	
Project:	Kelly Myers Site Project # 0-0100-26			
Date of Test:	June 17, 2004	Depth:	See Below	
		Dry Density	:	
Test No.	Location	% Maximum	% Moisture	Depth
SG-1	Pit - 25' N. & 15' W. of the SE Corner	105.0	15.2	2' Below Finishe Subgrade

				Subgrade
SG-2	Pit - 30' N. & 50' W. of the SE Corner	102.1	17.4	1' Below Finished Subgrade
SG-3	Pit - 15' S. & 20' E. of the NW Corner	102.1	13.8	1' Below Finished Subgrade
SG-4	Pit - 25' S. & 15' E. of the NW Corner	. 101.8	13.8	Finished Subgrade
SG-5	Pit - 20' N. & 20' E. of the SW Corner	105.5	12.7	Finished Subgrade

Control Density:

**Required Compaction:** 

Lab No.:

Copies To:

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IJ

IJ

109.5 ASTM: D 698

04 7004-7011

Larson

95%

**Optimum Moisture:** 

16.6%

PETTIGREW & ASSOCIATES BY: 2 <del>SET.</del>

#### **APPENDIX B**

#### WELL LOG

Client: Dynegy Midstream Services, L.P.

Project: Site #26

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Project No: 0-0100-26

Location: NW/4, SE/4, Sec. 31, T23S, R37E, Lea Co., NM

### Log: MW-1

Geologist: Cindy K. Crain

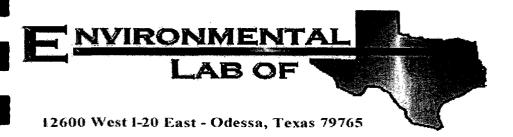
Page: 1 of 1

	SU	BSURFACE PROFILE		SA	MPL	.E	PID Measurement		
Depth	Symbol	Description	Elev.	Number	Type	Recovery	(PPM)	Well Detail	Notes:
5 10 15 20 25 30 35 40 45 50 55 60 65 70 55 60 65 70 55 80 65 70 55 80 65 70 55 100 105 100 105 110 125 130 135		Sand 5 YR 6/6, reddish yellow quartz sand, fine grained, poorly sorted, moderately loose, dry Caliche 5 YR 8/2, pinkish white quartz sand, indurated, dry Sandstone 7.5 YR 7/3, pink quartz sand, very fine grained, poorly sorted, dense, dry Sandstone 5 YR 7/6, reddish yellow quartz sand, very fine grained, poorly sorted, dense, dry Sand 5 YR 7/6, reddish yellow quartz sand, very fine grained, poorly sorted, moderately loose, dry. Damp at 118 feet. TD @ 130'		1 2 3 4 5 6 7 8 9 10 11 12 13			0.1 0.2 0.0 0.1 0.1 0.2		Surface to 105' bgs MW temporarily completed - no packing Surface to109.41' bgs Sch. 40 PVC Riser 105 to 107' bgs Bentonite Pellets 107 - 130' bgs Graded Silica Sand 11/12/04 DTW = 114.12' bgs 109.41 - 129.41' bgs 2'' Sch. 40 PVC Screen, 0.02'' Slots 2'' Sch. 40 PVC Cap
D	_	Method: Air Rotary illed: 11/8/04 ze: 2"		7 Nort	h Ma dlanc	rienfe I, Tex	ociates, Inc. Id St., Ste. 202 as 79701 -0901	Ch	C Elevation: NA ecked by: CKC illed by: Scarborough Drilling

#### **APPENDIX C**

#### LABORATORY ANALYSIS AND CHAIN OF CUSTODY DOCUMENTATION

507 North Marienfeld, Suite 202 Midland, Texas 79701 Ph. (432) 687-0901 Fax (432) 687-0456



### Analytical Report

#### **Prepared for:**

Cindy Crain Larson & Associates, Inc. P.O. Box 50685 Midland, TX 79710

Project: Dynegy Site #26 Project Number: 0-0100-26 Location: None Given

Lab Order Number: 4K10016

Report Date: 11/12/04

Larson & Associates, Inc.	Project: Dynegy Site #26	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 0-0100-26	Reported:
Midland TX, 79710	Project Manager: Cindy Crain	11/12/04 16:03

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1 (5-7')	4K10016-01	Soil	11/08/04 10:00	11/10/04 16:00
MW-1 (10-12')	4K10016-02	Soil	11/08/04 10:17	11/10/04 16:00
MW-1 (15-16')	4K10016-03	Soil	11/08/04 10:25	11/10/04 16:00
MW-1 (20-21')	4K10016-04	Soil	11/08/04 10:34	11/10/04 16:0
MW-1 (25-26')	4K10016-05	Soil	11/08/04 10:44	11/10/04 16:0
MW-1 (30-31')	4K10016-06	Soil	11/08/04 10:49	11/10/04 16:0
MW-1 (35-36')	4K10016-07	Soil	11/08/04 11:00	11/10/04 16:0
MW-1 (40-41')	4K10016-08	Soil	11/08/04 11:08	11/10/04 16:0
MW-1 (45-46')	4K10016-09	Soil	11/08/04 11:16	11/10/04 16:0
MW-1 (55-56')	4K10016-10	Soil	11/08/04 11:35	11/10/04 16:0
MW-1 (60-61')	4K10016-11	Soil	11/08/04 11:46	11/10/04 16:0
MW-1 (65-66')	4K10016-12	Soil	11/08/04 12:35	11/10/04 16:0
MW-1 (70-71')	4K10016-13	Soil	11/08/04 12:46	11/10/04 16:0

Larson & Associates, Inc.			roject: Dyr		¥26		_	Fax: (432) 6	87-0456
P.O. Box 50685		Project Nu						Report	
Midland TX, 79710		Project Ma	nager: Cin	dy Crain	- <u>-</u>	······ <u>-</u> ··		11/12/04	16:03
		Or	ganics b	y GC					
		Environn	1ental L	ab of T	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
MW-1 (10-12') (4K10016-02) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EK41006	11/10/04	11/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	tt.	Ħ	ŧ	"	н	"	
Total Hydrocarbon C6-C35	ND	10.0	11	Ħ		H	11		
Surrogate: 1-Chlorooctane		103 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		117 %	70-1	30	"	"	"	"	
MW-1 (20-21') (4K10016-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	 EK41006	11/10/04	11/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	19	11	"	Ħ	11	n	
Total Hydrocarbon C6-C35	ND	10.0	H.	π	"	"	"	ti	
Surrogate: 1-Chlorooctane		100 %	70-1	30	"	"	"	"	
Surrogate: 1-Chlorooctadecane		117 %	70-1	30	"	"	"	"	
MW-1 (30-31') (4K10016-06) Soil						_		_	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	I	EK41006	11/10/04	11/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	11		11	"	. 4		
Total Hydrocarbon C6-C35	ND	10.0	"	п	н	H	n	n 	
Surrogate: 1-Chlorooctane		103 %	70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		119 %	70-	130	n	"	"	"	
MW-1 (40-41') (4K10016-08) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EK41006	11/10/04	11/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	**	11	"	11	n	
Total Hydrocarbon C6-C35	ND	10.0	11	11	u	η	n	IL	
Surrogate: 1-Chlorooctane		95.0 %	70-	130	"	"	"	н	
Surrogate: 1-Chlorooctadecane		108 %	70-	130	"	"	"	"	
MW-1 (45-46') (4K10016-09) Soil									
Gasoline Range Organics C6-C12	ND	10.0	) mg/kg dry	1	EK41006	11/10/04	11/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	) "	π	Ħ	н	n	"	
Total Hydrocarbon C6-C35	ND	10.0	) "	n	n	n	*	n	
Surrogate: 1-Chlorooctane		91.0 %	5 70-	130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		103 %	5 70-	130	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

#### 11/12/04 16:03

#### Organics by GC

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (60-61') (4K10016-11) Soil							-		
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EK41006	11/10/04	11/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	11	n	"	"	*	
Total Hydrocarbon C6-C35	ND	10.0	H	"	н	"	"	"	
Surrogate: 1-Chlorooctane		91.8 %	70-1	30	"	"	"	**	
Surrogate: 1-Chlorooctadecane		105 %	70-1	30	"	"	"	"	
MW-1 (70-71') (4K10016-13) Soil					_				
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EK41006	11/10/04	11/11/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	H	"	Ħ	n	"	н	
Total Hydrocarbon C6-C35	ND	10.0	n	n	n	n	W	*	
Surrogate: 1-Chlorooctane		87.2 %	70-1	130	"	n	"	"	
Surrogate: 1-Chlorooctadecane		101 %	70-1	130	"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

Fax: (432) 687-0456 **Reported:** 11/12/04 16:03

Gen		stry Parameters h Environmental L	-		ard Meth	ıods		
		Reporting						
Analyte	Result	Limit Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (5-7') (4K10016-01) Soil								
Chloride	ND	20.0 mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
MW-1 (10-12') (4K10016-02) Soil		_						
Chloride	ND	20.0 mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
% Moisture	8.0	%	1	EK41101	11/10/04	11/11/04	% calculation	
MW-1 (15-16') (4K10016-03) Soil								
Chloride	ND	20.0 mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
MW-1 (20-21') (4K10016-04) Soil								
Chloride	63.8	20.0 mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
% Moisture	4.0	%	1	EK41101	11/10/04	11/11/04	% calculation	
MW-1 (25-26') (4K10016-05) Soil								
Chloride	53.2	20.0 mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
MW-1 (30-31') (4K10016-06) Soil								
Chloride	74.4	20.0 mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
% Moisture	4.0	%	1	EK41101	11/10/04	11/11/04	% calculation	
MW-1 (35-36') (4K10016-07) Soil								
Chloride	117	20.0 mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
MW-1 (40-41') (4K10016-08) Soil								
Chloride	53.2	20.0 mg/kg We	2	EK41210	11/10/04	11/11/04	SW 846 9253	
% Moisture	3.0	%	1	EK41101	11/10/04	11/11/04	% calculation	
MW-1 (45-46') (4K10016-09) Soil								
Chloride	42.5	20.0 mg/kg We	t 2	EK41210	11/10/04	11/11/04	SW 846 9253	
% Moisture	1.0	· %	1	EK41101	11/10/04	11/11/04	% calculation	

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Page 4 of 8

Larson & Associates, Inc.	Project: Dyn	egy Site #26	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 0-01	00-26	Reported:
Midland TX, 79710	Project Manager: Cine	dy Crain	11/12/04 16:03

#### General Chemistry Parameters by EPA / Standard Methods

		Environm	ental L	ab of T	exas				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (55-56') (4K10016-10) Soil									
Chloride	ND	20.0 m	ng/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
MW-1 (60-61') (4K10016-11) Soil									
Chloride	ND	20.0 r	ng/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
% Moisture	4.0		%	1	EK41101	11/10/04	11/11/04	% calculation	
MW-1 (65-66') (4K10016-12) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
MW-1 (70-71') (4K10016-13) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EK41210	11/10/04	11/11/04	SW 846 9253	
% Moisture	3.0		%	1	EK41101	11/10/04	11/11/04	% calculation	

Environmental Lab of Texas

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#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

11/12/04 16:03

,

#### **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK41006 - Solvent Extraction (	(GC)									
				Prepared:	11/10/04	Analyzed	1: 11/11/04			
Jasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	*							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	38.3		mg/kg	50.0		76.6	70-130			
Surrogate: 1-Chlorooctadecane	44.6		"	50.0		89.2	70-130			
LCS (EK41006-BS1)				Prepared:	11/10/04	Analyzed	1: 11/11/04			
Gasoline Range Organics C6-C12	422	10.0	mg/kg wet	500		84.4	75-125			
Diesel Range Organics >C12-C35	471	10.0	n	500		94.2	75-125			
Total Hydrocarbon C6-C35	893	10.0	n	1000		89.3	75-125			
Surrogate: 1-Chlorooctane	46.3		mg/kg	50.0		92.6	70-130			
Surrogate: 1-Chlorooctadecane	45.6		"	50.0		91.2	70-130			
Calibration Check (EK41006-CCV1)				Prepared:	11/10/04	Analyzed	1: 11/11/04			
Gasoline Range Organics C6-C12	503		mg/kg	500		101	80-120			
Diesel Range Organics >C12-C35	564		π	500		113	80-120			
Total Hydrocarbon C6-C35	1070		#	1000		107	80-120			
Surrogate: 1-Chlorooctane	51.2	····	"	50.0		102	70-130			
Surrogate: 1-Chlorooctadecane	54.2		"	50.0		108	70-130			
Matrix Spike (EK41006-MS1)	So	urce: 4K10(	009-02	Prepared	: 11/10/04	Analyze	d: 11/11/04			
Gasoline Range Organics C6-C12	522	10.0	mg/kg dry	521	ND	100	75-125			
Diesel Range Organics >C12-C35	586	10.0	n	521	ND	112	75-125			
Total Hydrocarbon C6-C35	1110	10.0	n	1040	ND	107	75-125			
Surrogate: 1-Chlorooctane	55.6		mg/kg	50.0		111	70-130			
Surrogate: 1-Chlorooctadecane	51.8		"	50.0		104	70-130			
Matrix Spike Dup (EK41006-MSD1)	So	urce: 4K10	009-02	Prepared	: 11/10/04	Analyze	d: 11/11/04			
Gasoline Range Organics C6-C12	538	10.0	mg/kg dry		ND	103	75-125	3.02	20	
Diesel Range Organics >C12-C35	595	10.0	11	521	ND	114	75-125	1.52	20	
Total Hydrocarbon C6-C35	1130	10.0		1040	ND	109	75-125	1.79	20	
Surrogate: 1-Chlorooctane	58.2		mg/kg	50.0		116	70-130			
Surrogate: 1-Chlorooctadecane	59.9		"	50.0		120	70-130			

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Larson & Associates, Inc.		Pro	oject: Dyn	egy Site #	26				Fax: (432)	687-0456		
P.O. Box 50685		Project Nun	÷ ·						Repor	Reported:		
Midland TX, 79710		Project Man	ager: Cino	dy Crain					11/12/04	16:03		
General Chemist	-	neters by Environm				ods - Qı	uality C	ontro	ol			
		Reporting		Spike	Source		%REC		RPD			
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes		
Blank (EK41101-BLK1) % Moisture Duplicate (EK41101-DUP1)	0.0 So	ource: 4K1000	% 04-01			Analyzed: Analyzed:						
		urce: 4K1000		Prepared:		Analyzed:	11/11/04					
% Moisture	7.0		%		7.0			0.00	20			
Batch EK41210 - Water Extraction												
Blank (EK41210-BLK1)				Prepared:	11/10/04	Analyzed:	11/11/04					
Chloride	ND	20.0	mg/kg Wet									
Matrix Spike (EK41210-MS1)	So	ource: 4K100	10-01	Prepared:	11/10/04	Analyzed:	11/11/04					
Chloride	1060	20.0	mg/kg Wet	500	510	110	80-120					
Matrix Spike Dup (EK41210-MSD1)	Se	ource: 4K100	10-01	Prepared:	11/10/04	Analyzed:	11/11/04					
Chloride	1040	20.0	mg/kg Wet	500	510	106	80-120	1.90	20			
Reference (EK41210-SRM1)				Prepared	& Analyz	ed: 11/11/0	4					
Chloride	5050	10.0	mg/kg Wet	5000		101	80-120		·······			

Environmental Lab of Texas

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Larson &	& Associates, Inc.	Project: Dynegy Site #26	Fax: (432) 687-0456
P.O. Bo		Project Number: 0-0100-26 Project Manager: Cindy Crain	<b>Reported:</b> 11/12/04 16:03
Midiano	I TX, 79710	Project Manager: Cindy Crain	11/12/04 16:03
		Notes and Definitions	
DET	Analyte DETECTED		
ND	Analyte NOT DETECTED at or ab	pove the reporting limit	
NR	Not Reported		
dry	Sample results reported on a dry w	eight basis	
RPD	Relative Percent Difference		
LCS	Laboratory Control Spike		
MS	Matrix Spike		
Dup	Duplicate		

alandk toul Report Approved By: Date: 11-15-04

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

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#### Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client:	Larson + Associates
---------	---------------------

Date/Time: 11-10-04@1630

JMM

Order #: <u>4K|0016</u>

Initials:

#### Sample Receipt Checklist

Temperature of container/cooler?	Ves	No	2.5 C
Shipping container/cooler in good condition?	Yes	No	NIA
Custody Seals intact on shipping container/cooler?	Yes	No	Not present N/A
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	(tes)	No	
Sample Instructions complete on Chain of Custody?	res	No	
Chain of Custody signed when relinquished and received?	(res)	No	
Chain of custody agrees with sample label(s)	Yes	No	No Label - writtenon lid
Container labels legible and intact?	Yes	No	No Label - written on lid No Label - written on lid
Sample Matrix and properties same as on chain of custody?	Tes	No	/
Samples in proper container/bottle?	(Hes)	No	
Samples properly preserved?	res	No	
Sample bottles intact?	Tes	No	
Preservations documented on Chain of Custody?	Fes	No	
Containers documented on Chain of Custody?	Tes	No	
Sufficient sample amount for indicated test?	res	No	
All samples received within sufficient hold time?	(Tes)	No	
VOC samples have zero headspace?	Xes	No	Not Applicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	
		·
······································		

CLIENT NAME:	lame:			lis	SITE MANAGER:			PAR	AMETERS//	PARAMETERS/METHOD NUMBER	žER	CHAIN-OF-	-OF-CUSTODY RECORD	CORD
4	Dynegy				Cindy Cra	rain	<b>L</b>							
PROJECT NO.:	CT NO.: D- DIDD - 27	1		<u>8</u>	PROJECT NAME:		zajniat						arson & Ssociates, Inc. Fax: 432-687-0456 Environmental Consultants	, <u>9</u> 6
PAGE	~ or	- 18		LAB. PO #			E CON	7 p.1. 198	201		/		432-687-0901 507 N. Marienfeld, Ste. 202 • Midland, TX 79701	10267
3140	JUNI	MATER	105	25 Olther	SAMPLE IDENTIFICATION		NUMBER O	HdL			01 H	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE	
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:	1246		7	-	" / 70 · 71')		•	7				1 -13		
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SAMPLE CI	SAMPLE CONDITION WHEN RECEIVED:	IEN RECE		2,5,0			A CON	LA CONTACT PERSON	RSON:		SA	SAMPLE TYPE:		
402	402 glass	on ice						し、)	rain			З С	110	



### Analytical Report

#### **Prepared for:**

Cindy Crain Larson & Associates, Inc. P.O. Box 50685 Midland, TX 79710

Project: Dynegy Site #26 Project Number: 0-0100-26 Location: None Given

Lab Order Number: 4K15004

Report Date: 12/02/04

Larson & Associates, Inc. P.O. Box 50685 Midland TX, 79710	Project: Dynegy Site Project Number: 0-0100-26 Project Manager: Cindy Crain			x: (432) 687-0456 Reported: 12/02/04 16:07
	ANALYTICAL REPORT FOR SAM	MPLES	-	
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4K15004-01	Water	11/12/04 10:30	11/12/04 17:1

Larson & Associates, Inc.	Project: Dynegy Site #26	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 0-0100-26	Reported:
Midland TX, 79710	Project Manager: Cindy Crain	12/02/04 16:07

#### Organics by GC **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (4K15004-01) Water									
Benzene	ND	0.00100	mg/L	1	EK42001	11/15/04	11/15/04	EPA 8021B	
Toluene	ND	0.00100	"	*	π	57	"	n	
Ethylbenzene	ND	0.00100	Ħ	*		۳	*	Ħ	
Xylene (p/m)	ND	0.00100	n	11		n	*	e	
Xylene (o)	ND	0.00100	Ħ	11	Ħ	"	۳	"	
Surrogate: a,a,a-Trifluorotoluene		120 %	80-	120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.5 %	80-	120	"	"	"	11	
Gasoline Range Organics C6-C12	ND	0.360	Ħ	0.12	EK42403	11/24/04	11/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	0.360		"	"		۳		
Total Hydrocarbon C6-C35	ND	0.360	Ħ	Ħ	n		•	n	
Surrogate: 1-Chlorooctane		87.2 %	70-	-130	"	"	"	"	
Surrogate: 1-Chlorooctadecane		96.0 %	70-	-130	"	"	n	"	

Environmental Lab of Texas

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#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

#### General Chemistry Parameters by EPA / Standard Methods

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K15004-01) Water									·····
Total Alkalinity	156	2.00	mg/L	1	EK41816	11/16/04	11/16/04	EPA 310.2M	
Chloride	2200	5.00		"	EK41810	11/17/04	11/17/04	EPA 325.3M	
Total Dissolved Solids	3900	5.00	н	"	EK41703	11/16/04	11/17/04	EPA 160.1	
Sulfate	519	6.25	"	12.5	EK41811	11/18/04	11/18/04	EPA 375.4	

Environmental Lab of Texas

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#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

Fax: (432) 687-0456 Reported: 12/02/04 16:07

#### Total Metals by EPA / Standard Methods

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K15004-01) Water							· · · · · · · · · · · · · · · · · · ·		
Silver	0.0399	0.00500	mg/L	1	EK42304	11/19/04	11/22/04	EPA 6010B	
Arsenic	0.0135	0.00800	"	۳	EK42301	11/16/04	11/18/04	м	
Barium	0.206	0.00100		n	n	π	"	6010B	
Calcium	102	1.00	"	100	EK42201	11/15/04	11/19/04	EPA 6010B	
Magnesium	42.4	0.0100	Ħ	10		n	π	n	
Potassium	38.1	0.500		"	"	n		n	
Sodium	1180	10.0		1000	*	n	n	u	
Cadmium	J [0.000900]	0.00100	n	1	EK42301	11/16/04	11/18/04		J
Chromium	J [0.00410]	0.00500	Ħ	11	"	n	Π	N	J
Mercury	ND	0.000500	*1	H	EK42406	11/23/04	11/23/04	EPA 7470A	
Lead	J [0.00670]	0.0110	"	**	EK42301	11/16/04	11/18/04	EPA 6010B	J
Selenium	0.00930	0.00400	"	n	n	n	۳		

Environmental Lab of Texas

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#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

#### 12/02/04 16:07

#### Semivolatile Organic Compounds by EPA Method 8270C **Environmental Lab of Texas** Reporting Result Limit Analyte Units Dilution Prepared Analyzed Method Notes Batch MW-1 (4K15004-01) Water EPA 8270C Pyridine ND 5.90 ug/l 1.18 EL40202 11/19/04 12/01/04 н N-Nitrosodimethylamine ND 5.90 Aniline 5.90 R. ND Phenol 5.90 ND Bis(2-chloroethyl)ether 5.90 ND 2-Chlorophenol ND 5.90 1,3-Dichlorobenzene ND 5.90 1,4-Dichlorobenzene 5.90 ND 1,2-Dichlorobenzene ND 5.90 Benzyl alcohol ND 5.90 Bis(2-chloroisopropyl)ether 5.90 ND 2-Methylphenol ND 5.90 N-Nitrosodi-n-propylamine ND 5.90 4-Methylphenol 5.90 ND Hexachloroethane ND 5.90 Nitrobenzene 5.90 ND Isophorone ND 5.90 2-Nitrophenol ND 5.90 2,4-Dimethylphenol 5.90 ND Bis(2-chloroethoxy)methane ND 5.90 2,4-Dichlorophenol ND 5.90 Benzoic acid ND 5.90 1,2,4-Trichlorobenzene ND 5.90 Naphthalene ND 5.90 4-Chloroaniline 5.90 ND Hexachlorobutadiene ND 5.90 4-Chloro-3-methylphenol 5.90 ND 2-Methylnaphthalene ND 5.90 Hexachlorocyclopentadiene ND 5.90 2,4,6-Trichlorophenol 5.90 ND 2,4,5-Trichlorophenol ND 5.90 2-Chloronaphthalene ND 5.90 2-Nitroaniline 5.90 ND Dimethyl phthalate ND 5.90 2,6-Dinitrotoluene 5.90 ND Acenaphthylene 5.90 ND 3-Nitroaniline ND 5.90 Acenaphthene ND 5.90

Environmental Lab of Texas

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#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

#### 12/02/04 16:07

#### Semivolatile Organic Compounds by EPA Method 8270C

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (4K15004-01) Water									
2,4-Dinitrophenol	ND	5.90	ug/l	1.18	EL40202	11/19/04	12/01/04	EPA 8270C	
4-Nitrophenol	ND	5.90	"	н	11		N	*	
Dibenzofuran	ND	5.90	11	н		"	11	"	
2,4-Dinitrotoluene	ND	5.90	Ħ	11	11	n		"	
2,3,4,6-Tetrachlorophenol	ND	5.90	Ħ	Ħ	**	n	n	"	
Diethyl phthalate	ND	5.90	н	*		"	"	n	
Fluorene	ND	5.90	#	Ħ	#	'n	"	n	
4-Chlorophenyl phenyl ether	ND	5.90	Ħ	*	n		n	"	
4-Nitroaniline	ND	5.90	N	Ħ	"	n	n	н	
Azobenzene	ND	5.90	Ħ	n	n	ų	**	n	
4,6-Dinitro-2-methylphenol	ND	5.90		Π	n		"	۳	
N-Nitrosodiphenylamine	ND	5.90	"	н	и	*	н	۳	
4-Bromophenyl phenyl ether	ND	5.90	4		"	*	11	H	
Hexachlorobenzene	ND	5.90	11	Ħ	н	"	H	"	
Pentachlorophenol	ND	5.90	"	, н	19	n		11	
Phenanthrene	ND	5.90	n	Ħ	n.	н	"	11	
Anthracene	ND	5.90	Ħ	*		*	n	14	
Carbazole	ND	5.90	H	n	19	۳	"	61	
Di-n-butyl phthalate	ND	5.90		n	π	"	"	"	
Fluoranthene	ND	5.90	#	11	n	. #	H	*	
Benzidine	ND	23.6	۳	*	n	Ħ	Ħ	n	
Pyrene	ND	5.90	11	"	"		n	17	
Butyl benzyl phthalate	ND	5.90	M	n	n	n	n	"	
Benzo (a) anthracene	ND	5.90	н	"	"	n	n	et	
3,3'-Dichlorobenzidine	ND	5.90			"	n	n	n	
Chrysene	ND	5.90			n	π	"	11	
Bis(2-ethylhexyl)phthalate	14.9	5.90	"	"	n	n	n	n	
Di-n-octyl phthalate	ND	5.90	п		"	Ħ	н	*	
Indeno (1,2,3-cd) pyrene	ND	5.90	Ħ	n	"	n		"	
Benzo (b) fluoranthene	ND	5.90	"		*	H	"	n	
Benzo (k) fluoranthene	ND	5.90	"	n	n	H	۳	π	
Benzo (a) pyrene	ND	5.90	#	n	н	"	н	#	
Dibenzo (a,h) anthracene	ND	5.90	n	tt	u	n	**	н	
Benzo (g,h,i) perylene	ND	5.90	11	n	'n	n	Ħ	n	
Surrogate: 2-Fluorophenol		45.5 %	2	1-110	"	11	"		
Surrogate: Phenol-d5		44.1 %		0-110	"	"	"	"	
Surrogate: Nitrobenzene-d5		64.2 %		5-114	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		58.4 %		3-116	"	"	"	"	

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Page 6 of 20

Larson & Associates, Inc.	Project: Dynegy Site #26	Fax: (432) 687-0456
P.O. Box 50685	Project Number: 0-0100-26	Reported:
Midland TX, 79710	Project Manager: Cindy Crain	12/02/04 16:07

# Semivolatile Organic Compounds by EPA Method 8270C

		Environm	ental I	Lab of I	<b>Texas</b>				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K15004-01) Water									
Surrogate: 2,4,6-Tribromophenol		64.6 %	10-	123	EL40202	11/19/04	12/01/04	EPA 8270C	
Surrogate: p-Terphenyl-d14		87.4 %	33-	141	"	"	"	**	

Environmental Lab of Texas

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#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

## **Organics by GC - Quality Control**

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42001 - EPA 5030C (GC)	<u> </u>									
				Prepared a	& Analyze	ed: 11/15/(	)4			
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	a							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	Ħ							
Xylene (o)	ND	0.00100	n							
Surrogate: a,a,a-Trifluorotoluene	0.0230		"	0.0200	- · · · · · · ·	115	80-120			
Surrogate: 4-Bromofluorobenzene	0.0192		"	0.0200		96.0	80-120			
LCS (EK42001-BS1)				Prepared	& Analyz	ed: 11/15/	04			
Benzene	82.7		ug/l	100		82.7	80-120			
Toluene	92.7			100		92.7	80-120			
Ethylbenzene	88.3			100		88.3	80-120			
Xylene (p/m)	194		м	200		97.0	80-120			
Xylene (o)	85.3		*	100		85.3	80-120			
Surrogate: a,a,a-Trifluorotoluene	0.0191		mg/L	0.0200		95.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.0170		"	0.0200		85.0	80-120			
LCS Dup (EK42001-BSD1)				Prepared	& Analyz	ed: 11/15/	04			
Benzene	94.5		ug/l	100		94.5	80-120	13.3	20	
Toluene	101		ч	100		101	80-120	8.57	20	
Ethylbenzene	96.7			100		96.7	80-120	9.08	20	
Xylene (p/m)	213			200		106	80-120	8.87	20	
Xylene (o)	92.3			100		92.3	80-120	7.88	20	
Surrogate: a,a,a-Trifluorotoluene	0.0232		mg/L	0.0200		116	80-120			
Surrogate: 4-Bromofluorobenzene	0.0202		H	0.0200		101	80-120			
Calibration Check (EK42001-CCV1)				Prepared	& Analyz	ed: 11/15/	'04			
Benzene	100		ug/l	100		100	80-120			
Toluene	110		n	100		110	80-120			
Ethylbenzene	107		**	100		107	80-120			
Xylene (p/m)	237			200		118	80-120			
Xylene (o)	109		"	100		109	80-120			
Surrogate: a,a,a-Trifluorotoluene	0.0237		mg/L	0.0200		118	80-120			
Surrogate: 4-Bromofluorobenzene	0.0198		"	0.0200		99.0	80-120			

Environmental Lab of Texas

#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

12/02/04 16:07

## **Organics by GC - Quality Control**

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42403 - Solvent Extraction (	GC)									
Blank (EK42403-BLK1)				Prepared	& Analyze	ed: 11/24/	04			
Gasoline Range Organics C6-C12	ND	0.300	mg/L							
Diesel Range Organics >C12-C35	ND	0.300	"							
Total Hydrocarbon C6-C35	ND	0.300	"							
Surrogate: 1-Chlorooctane	46.7		"	50.0		93.4	70-130			
Surrogate: 1-Chlorooctadecane	49.8		n	50.0		99.6	70-130			
LCS (EK42403-BS1)				Prepared	& Analyz	ed: 11/24/	04			
Gasoline Range Organics C6-C12	43.1	0.300	mg/L	50.0		86.2	75-125			
Diesel Range Organics >C12-C35	50.5	0.300	n	50.0		101	75-125			
Total Hydrocarbon C6-C35	93.6	0.300	п	100		93.6	75-125			
Surrogate: 1-Chlorooctane	57.7		"	50.0		115	70-130			
Surrogate: 1-Chlorooctadecane	54.2		11	50.0		108	70-130			
Calibration Check (EK42403-CCV1)				Prepared	& Analyz	ed: 11/24/	04			
Gasoline Range Organics C6-C12	47.5		mg/L	50.0		95.0	80-120			
Diesel Range Organics >C12-C35	49.9		н	50.0		99.8	80-120			
Total Hydrocarbon C6-C35	97.4		u	100		97.4	80-120			
Surrogate: 1-Chlorooctane	58.4		"	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	55.1		"	50.0		110	70-130			
Matrix Spike (EK42403-MS1)	So	urce: 4K220	02-01	Prepared	& Analyz	zed: 11/24/	/04			
Gasoline Range Organics C6-C12	53.0	0.390	mg/L	50.0	ND	106	75-125			
Diesel Range Organics >C12-C35	56.5	0.390		50.0	ND	113	75-125			
Total Hydrocarbon C6-C35	110	0.390	11	100	ND	110	75-125			
Surrogate: 1-Chlorooctane	56.6		п	50.0		113	70-130			
Surrogate: 1-Chlorooctadecane	53.5		"	50.0		107	70-130			
Matrix Spike Dup (EK42403-MSD1)	Sc	ource: 4K220	02-01	Prepared	& Analyz	zed: 11/24	/04			
Gasoline Range Organics C6-C12	55.1	0.390	mg/L	50.0	ND	110	75-125	3.89	20	
Diesel Range Organics >C12-C35	55.8	0.390	n	50.0	ND	112	75-125	1.25	20	
Total Hydrocarbon C6-C35	111	0.390	"	100	ND	111	75-125	0.905	20	
Surrogate: 1-Chlorooctane	56.5		"	50.0		113	70-130			
Surrogate: 1-Chlorooctadecane	53.0		"	50.0		106	70-130			

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Larson & Associates, Inc.		Pro	ject: Dy	negy Site #	26				Fax: (432)	687-0456
P.O. Box 50685		Project Nun	•		-				Repor	ted:
Midland TX, 79710		Project Man							12/02/04	16:07
General Chemis	•	eters by a				ods - Q	uality C	Contro	1	
	<u></u>	Reporting	. <u> </u>	Spike	Source		%REC		RPD	- 10- 0
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EK41703 - General Preparation	n (WetChem)	)								
Blank (EK41703-BLK1)				Prepared:	11/16/04	Analyzed	: 11/17/04			
Fotal Dissolved Solids	ND	5.00	mg/L			· · · · · · · · · · · · · · · · · · ·				
Duplicate (EK41703-DUP1)	Sou	ce: 4K1101	13-02	Prepared:	11/16/04	Analyzed	: 11/17/04			
Fotal Dissolved Solids	1900	5.00	mg/L		1960			3.11	20	
Batch EK41810 - General Preparation Blank (EK41810-BLK1)	n (WetChem)	)	<u></u>	Prepared	& Apolyz	ed: 11/17/				
Chloride	ND	5.00	mg/L	Перагец	& Allalyz	u. 11/1//	04			
Matrix Spike (EK41810-MS1)	Sou	rce: 4K110	•	Prepared	& Analyz	ed: 11/17/	04			
Chloride	262	5.00	mg/L	200	63.8	99.1	80-120			
Matrix Spike Dup (EK41810-MSD1)	Sou	rce: 4K110	13-01	Prepared	& Analyz	ed: 11/17/	04			
Chloride	266	5.00	mg/L	200	63.8	101	80-120	1.52	20	
Reference (EK41810-SRM1)				Prepared	& Analyz	ed: 11/17/	04			
Chloride	5490		mg/L	5000		110	80-120			
Batch EK41811 - General Preparatio	n (WetChem	)								
Blank (EK41811-BLK1)				Prepared	& Analyz	ed: 11/18/	04			
Sulfate	ND	0.500	mg/L							
Calibration Check (EK41811-CCV1)				Prepared	& Analyz	ed: 11/18/	/04			
Sulfate	48.3		mg/L	50.0		96.6	80-120			

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Larson & Associates, Inc.		Pro	oject: Dy	negy Site #	26				Fax: (432)	687-0456	
P.O. Box 50685		Project Nur							Repor	rted:	
Midland TX, 79710		Project Man	ager: Ci	ndy Crain					12/02/04 16:07		
General Cho	emistry Paran	neters by	EPA /	Standar	d Meth	ods - Q	uality (	Contro	]		
	I	Environm	ental I	ab of T	exas						
<u></u>		Reporting		Spike	Source		%REC		RPD	· · ·	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch EK41811 - General Prepa	ration (WetChen	n)									
Duplicate (EK41811-DUP1)	So	urce: 4K110	13-01	Prepared	& Analyzo	ed: 11/18/0	)4				
Sulfate	106	1.25	mg/L		105	·		0.948	20		
Batch EK41816 - General Prepa	ration (WetCher	n)									
Blank (EK41816-BLK1)				Prepared	& Analyz	ed: 11/16/0	04				
Total Alkalinity	ND	2.00	mg/L				<u> </u>				
Duplicate (EK41816-DUP1)	So	Source: 4K15004-01 Prepared & Analyzed: 11/16/04									
Total Alkalinity	155	2.00	mg/L		156			0.643	20		
Reference (EK41816-SRM1)				Prepared	& Analyz	ed: 11/16/	04				
Carbonate Alkalinity	0.0500		mg/L	0.0500							

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#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

# Total Metals by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42201 - 6010B/No Digestion	<u></u>	<u> </u>	·							
Blank (EK42201-BLK1)				Prepared:	11/15/04	Analyzed	: 11/19/04			
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	n							
Potassium	ND	0.0500	Ħ							
Sodium	ND	0.0100	*							
Blank (EK42201-BLK2)				Prepared:	11/15/04	Analyzed	: 11/19/04			
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	'n							
Potassium	ND	0.0500								
Sodium	ND	0.0100	Π		•					
Calibration Check (EK42201-CCV1)				Prepared	11/15/04	Analyzed	: 11/19/04			
Calcium	2.15		mg/L	2.00		108	85-115			
Magnesium	2.10			2.00		105	85-115			
Potassium	2.08		"	2.00		104	85-115			
Sođium	1.88		н	2.00		94.0	85-115			
Calibration Check (EK42201-CCV2)				Prepared	: 11/15/04	Analyzed	l: 11/22/04			
Calcium	1.83		mg/L	2.00		91.5	85-115			
Magnesium	1.96		"	2.00		98.0	85-115			
Potassium	1.78		Π	2.00		89.0	85-115			
Sodium	1.72		n	2.00		86.0	85-115			
Duplicate (EK42201-DUP1)	So	ource: 4K110	13-01RE	1 Prepared	: 11/15/04	Analyzed	1: 11/19/04			
Calcium	34.6	0.100	mg/L		ND				20	
Magnesium	25.6	0.0100	н		ND				20	
Potassium	4.08	0.500			ND				20	
Sodium	77.4	1.00	"		ND				20	

Environmental Lab of Texas

### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

12/02/04 16:07

# Total Metals by EPA / Standard Methods - Quality Control

**Environmental Lab of Texas** 

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42201 - 6010B/No Digestion										
Duplicate (EK42201-DUP2)	So	urce: 4K110(	04-01	Prepared:	11/15/04	Analyzed	: 11/19/04			
Calcium	180	1.00	mg/L		179			0.557	20	
Magnesium	48.9	0.0100	Ħ		47.2			3.54	20	
Potassium	11.7	0.500	n		9.88			16.9	20	
Sodium	283	1.00	n		268			5.44	20	
Batch EK42301 - EPA 3005A				••••••••••••••••••••••••••••••••••••••			····			
Blank (EK42301-BLK1)				Prepared:	11/16/04	Analyzed	1: 11/18/04			
Chromium	ND	0.00500	mg/L							
Arsenic	ND	0.00800								
Barium	ND	0.00100								
Cadmium	ND	0.00100								
Selenium	ND	0.00400	11							
Lead	ND	0.0110	Ħ							
LCS (EK42301-BS1)				Prepared	: 11/16/04	Analyzed	1: 11/18/04	Ļ		
Arsenic	0.864	0.00800	mg/L	0.800		108	85-115			
Chromium	0.219	0.00500	n	0.200		110	85-115			
Lead	1.13	0.0110	n	1.10		103	85-115			
Selenium	0.426	0.00400	п	0.400		106	85-115			
Barium	0.215	0.00100	N	0.200		108	85-115			
Cadmium	0.212	0.00100	Ħ	0.200		106	85-115			
LCS Dup (EK42301-BSD1)				Prepared	: 11/16/04	Analyzed	d: 11/18/04	l		
Arsenic	0.856	0.00800	mg/L	0.800		107	85-115	0.930	20	
Barium	0.218	0.00100	n	0.200		109	85-115	1.39	20	
Cadmium	0.211	0.00100		0.200		106	85-115	0.473	20	
Chromium	0.220	0.00500		0.200		110	85-115	0.456	20	
Lead	1.12	0.0110	**	1.10		102	85-115	0.889	20	
Selenium	0.415	0.00400	ti	0.400		104	85-115	2.62	20	

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### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

## Total Metals by EPA / Standard Methods - Quality Control

## **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42301 - EPA 3005A										
Calibration Check (EK42301-CCV1)				Prepared:	11/16/04	Analyzed	: 11/18/04			
Arsenic	1.02		mg/L	1.00		102	90-110			
Selenium	0.996		11	1.00		99.6	90-110			
Lead	0.970		67	1.00		97.0	90-110			
Chromium	0.990		n	1.00		99.0	90-110			
Cadmium	1.00		"	1.00		100	90-110			
Barium	0.990		"	1.00		99.0	90-110			
Matrix Spike (EK42301-MS1)	So	urce: 4K150(	)4-01	Prepared:	11/16/04	Analyzed	: 11/18/04			
Selenium	0.379	0.00400	mg/L	0.400	0.00930	92.4	75-125			
Lead	1.04	0.0110	Ħ	1.10	0.00670	93.9	75-125			
Chromium	0.190	0.00500	n	0.200	0.00410	93.0	75-125			
Cadmium	0.188	0.00100	H	0.200	0.000900	93.6	75-125			
Barium	0.414	0.00100	Ħ	0.200	0.206	104	75-125			
Arsenic	0.794	0.00800	۳	0.800	0.0135	97.6	75-125			
Matrix Spike Dup (EK42301-MSD1)	So	urce: 4K150	04-01	Prepared	: 11/16/04	Analyzeo	1: 11/18/04			
Cadmium	0.176	0.00100	mg/L	0.200	0.000900	87.6	75-125	6.59	20	
Chromium	0.192	0.00500		0.200	0.00410	<del>9</del> 4.0	75-125	1.05	20	
Lead	0.976	0.0110	"	1.10	0.00670	88.1	75-125	6.35	20	
Arsenic	0.762	0.00800	*	0.800	0.0135	93.6	75-125	4.11	20	
Selenium	0.371	0.00400	н	0.400	0.00930	90.4	75-125	2.13	20	
Barium	0.400	0.00100	n	0.200	0.206	97.0	75-125	3.44	20	
Batch EK42304 - EPA 3005A										
Blank (EK42304-BLK1)				Prepared	: 11/19/04	Analyze	d: 11/22/04			
Silver	ND	0.00500	mg/L	<u> </u>						

Environmental Lab of Texas

Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

#### 12/02/04 16:07

## Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42304 - EPA 3005A										<u></u>
LCS (EK42304-BS1)				Prepared:	11/19/04	Analyzed	: 11/22/04			
Silver	0.0979	0.00500	mg/L	0.100		97.9	85-115			
LCS Dup (EK42304-BSD1)				Prepared:	11/19/04	Analyzed	: 11/22/04			
Silver	0.114	0.00500	mg/L	0.100		114	85-115	15.2	20	
Matrix Spike (EK42304-MS1)	Soi	urce: 4K1500	<b>)4-01RE</b> ]	Prepared:	11/19/04	Analyzed	: 11/22/04			
Silver	0.0907	0.00500	mg/L	0.100	ND	90.7	75-125			
Matrix Spike Dup (EK42304-MSD1)	So	urce: 4K150(	<b>)4-01RE</b> )	Prepared:	11/19/04	Analyzed	: 11/22/04			
Silver	0.0854	0.00500	mg/L	0.100	ND	85.4	75-125	6.02	20	
Batch EK42406 - EPA 7470A Blank (EK42406-BLK1)				Prenared	& Analyz	ed: 11/23/			<u></u>	
Mercury	ND	0.000500		rioparou	~ 1 11 11 / 2	04. 11.25				
	1.12	0.000500	mg/L							
LCS (EK42406-BS1)		0.000500	mg/L	Prepared	& Analyz	ed: 11/23/	04			
	0.00151	0.000500	mg/L mg/L	Prepared 0.00149	& Analyz	ed: 11/23/ 101	04 85-115			
LCS (EK42406-BS1) Mercury Calibration Check (EK42406-CCV1)				0.00149			85-115			
Mercury Calibration Check (EK42406-CCV1)				0.00149		101	85-115			
Mercury	0.00151		mg/L mg/L	0.00149 Prepared 0.00100	& Analyz	101 ed: 11/23/	85-115 04 90-110			
Mercury Calibration Check (EK42406-CCV1) Mercury	0.00151	0.000500	mg/L mg/L	0.00149 Prepared 0.00100	& Analyz	101 ed: 11/23/ 95.0	85-115 04 90-110			
Mercury Calibration Check (EK42406-CCV1) Mercury Matrix Spike (EK42406-MS1)	0.00151 0.000950 <b>So</b> 0.00150	0.000500 urce: 4K150	mg/L mg/L 04-01 mg/L	0.00149 Prepared 0.00100 Prepared 0.00149	& Analyz & Analyz ND	101 ed: 11/23/ 95.0 ed: 11/23/	85-115 04 90-110 04 75-125			

Environmental Lab of Texas

### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL40202 - EPA 3510C										
Blank (EL40202-BLK1)	······································			Dreparad	11/10/04	Analyzad	: 11/23/04			
Pyridine	ND	5.00	ug/l	Flepaleu.	11/17/04	Analyzeu	. 11/23/04			
N-Nitrosodimethylamine	ND	5.00	" "							
Aniline	ND	5.00	11							
Phenol	ND	5.00	н							
Bis(2-chloroethyl)ether	ND	5.00	11							
2-Chiorophenol	ND	5.00	н							
1,3-Dichlorobenzene	ND	5.00								
1,4-Dichlorobenzene	ND	5.00								
1,2-Dichlorobenzene	ND	5.00								
Benzyl alcohol	ND	5.00	11							
Bis(2-chloroisopropyl)ether	ND	5.00	ŧŧ							
2-Methylphenol	ND	5.00								
N-Nitrosodi-n-propylamine	ND	5.00								
4-Methylphenol	ND	5.00								
Hexachloroethane	ND	5.00	n							
Nitrobenzene	ND	5.00	"							
Isophorone	ND	- 5.00	n							
2-Nitrophenol	ND	5.00								
2,4-Dimethylphenol	ND	5.00								
	ND	5.00								
Bis(2-chloroethoxy)methane	ND									
2,4-Dichlorophenol Benzoic acid		5.00	11							
	ND	5.00								
1,2,4-Trichlorobenzene	ND	5.00								
Naphthalene 4-Chloroaniline	ND ND	5.00 5.00								
Hexachlorobutadiene	ND	5.00								
4-Chloro-3-methylphenol	ND	5.00	11							
2-Methylnaphthalene	ND	5.00								
Hexachlorocyclopentadiene	ND	5.00								
2,4,6-Trichlorophenol	ND	5.00	н							
2,4,5-Trichlorophenol	ND	5.00	n							
2-Chloronaphthalene 2-Nitroaniline	ND ND	5.00 5.00								
Dimethyl phthalate	ND	5.00								
2,6-Dinitrotoluene	ND	5.00								
Acenaphthylene	ND	5.00								
3-Nitroaniline	ND	5.00								
Acenaphthene	ND	5.00								
2,4-Dinitrophenol	ND	5.00								
4-Nitrophenol	ND	5.00								
Dibenzofuran	ND	5.00								
2,4-Dinitrotoluene	ND	5.00								

Environmental Lab of Texas

### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL40202 - EPA 3510C		<del></del>								
Blank (EL40202-BLK1)		······		Prenared:	11/19/04	Analyzed	: 11/23/04			
2,3,4,6-Tetrachlorophenol	ND	5.00	ug/l					<u></u>		
Diethyl phthalate	ND	5.00	n							
Fluorene	ND	5.00	н							
4-Chlorophenyl phenyl ether	ND	5.00	۳							
4-Nitroaniline	ND	5.00	*							
Azobenzene	ND	5.00	n							
4,6-Dinitro-2-methylphenol	ND	5.00	"							
N-Nitrosodiphenylamine	ND	5.00								
4-Bromophenyl phenyl ether	ND	5.00								
Hexachlorobenzene	ND	5.00	"							
Pentachlorophenol	ND	5.00	11							
Phenanthrene	ND	5.00	Ħ							
Anthracene	ND	5.00	"							
Carbazole	ND	5.00	n							
Di-n-butyl phthalate	ND	5.00								
Fluoranthene	ND	5.00								
Benzidine	ND	20.0								
Pyrene	ND	5.00								
Butyl benzyl phthalate	ND	5.00	"							
Benzo (a) anthracene	ND	5.00	Ħ							
3,3'-Dichlorobenzidine	ND	5.00	*							
Chrysene	ND	5.00	"							
Bis(2-ethylhexyl)phthalate	ND	5.00	n							
Di-n-octyl phthalate	ND	5.00	Ħ							
Indeno (1,2,3-cd) pyrene	ND	5.00								
Benzo (b) fluoranthene	ND	5.00	14							
Benzo (k) fluoranthene	ND	5.00	Ħ							
Benzo (a) pyrene	ND	5.00	н							
Dibenzo (a,h) anthracene	ND	5.00	n							
Benzo (g,h,i) perylene	ND	5.00	n							
Surrogate: 2-Fluorophenol	26.3		"	80.0		32.9	21-110			
Surrogate: Phenol-d5	22.3		"	80.0		27.9	10-110			
Surrogate: Nitrobenzene-d5	55.6		"	80.0		69.5	35-114			
Surrogate: 2-Fluorobiphenyl	54.7		"	80.0		68.4	43-116			
Surrogate: 2,4,6-Tribromophenol	72.9		"	80.0		<i>91.1</i>	10-123			
Surrogate: p-Terphenyl-d14	103		"	80.0		129	33-141			

Environmental Lab of Texas

#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
			Units		Result	70REC		RPD		Notes
Batch EL40202 - EPA 3510C										
LCS (EL40202-BS1)				Prepared:	11/19/04	Analyzed	: 11/23/04			
Phenol	33.1		ug/l	200		16.6	12-110			
2-Chlorophenol	75.5		*	200		37.8	27-123			
1,4-Dichlorobenzene	36.0		n	100		36.0	36-97			
N-Nitrosodi-n-propylamine	64.1		n	100		64.1	41-116			
1,2,4-Trichlorobenzene	51.3		n	100		51.3	39-98			
4-Chloro-3-methylphenol	103		"	200		51.5	23-97			
Acenaphthene	49.7		н	100		49.7	46-118			
4-Nitrophenol	25.5		н	200		12.8	10-80			
2,4-Dinitrotoluene	52.8		H	100		52.8	24-96			
Pentachiorophenol	104		n	200		52.0	9-103			
Pyrene	90.8			100		90.8	26-127			
Surrogate: 2-Fluorophenol	18.3		"	80.0		22.9	21-110			
Surrogate: Phenol-d5	14.5		"	80.0		18.1	10-110			
Surrogate: Nitrobenzene-d5	46.5		"	80.0		58.1	35-114			
Surrogate: 2-Fluorobiphenyl	43.5		"	80.0		54.4	43-116			
Surrogate: 2,4,6-Tribromophenol	56.1		"	80.0		70. <i>1</i>	10-123			
Surrogate: p-Terphenyl-d14	83.0		"	80.0		104	33-141			
LCS Dup (EL40202-BSD1)				Prepared	: 11/19/04	Analyzed	1: 11/23/04			
Phenol	39.1		ug/l	200		19.6	12-110	16.6	42	
2-Chlorophenol	83.4		11	200		41.7	27-123	9.94	40	
1,4-Dichlorobenzene	39.0		17	100		39.0	36-97	8.00	28	
N-Nitrosodi-n-propylamine	70.8		11	100		70.8	41-116	9.93	38	
1,2,4-Trichlorobenzene	55.3		*	100		55.3	39-98	7.50	28	
4-Chloro-3-methyiphenol	116			200		58.0	23-97	11.9	42	
Acenaphthene	55.7		n	100		55.7	46-118	11.4	31	
4-Nitrophenol	29.8		Ħ	200		14.9	10-80	15.6	50	
2,4-Dinitrotoluene	61.9		"	100		61.9	24-96	15.9	38	
Pentachlorophenol	124		n	200		62.0	9-103	17.5	50	
Pyrene	104		"	100		104	26-127	13.6	31	
Surrogate: 2-Fluorophenol	22.3		"	80.0		27.9	21-110			
Surrogate: Phenol-d5	17.7		"	80.0		22.1	10-110			
Surrogate: Nitrobenzene-d5	51.8		"	80.0		64.8	35-114			
Surrogate: 2-Fluorobiphenyl	49.2		"	80.0		61.5	43-116			
Surrogate: 2,4,6-Tribromophenol	67.2		"	80.0		84.0	10-123			
Surrogate: p-Terphenyl-d14	<i>98.2</i>		"	80.0		123	33-141			

Environmental Lab of Texas

#### Project: Dynegy Site #26 Project Number: 0-0100-26 Project Manager: Cindy Crain

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## **Environmental Lab of Texas**

Analyte Result Limit Units Level Result %REC Limits RPD Li		RPD
	Analyte	Limit Notes

#### Batch EL40202 - EPA 3510C

Calibration Check (EL40202-CCV1)			Prepared: 11/1	9/04 Analyzed	: 11/23/04
Phenol	44.8	ug/l	50.0	89.6	70-130
2-Nitrophenol	54.1		50.0	108	70-130
2,4-Dichlorophenol	57.7	н	50.0	115	70-130
4-Chloro-3-methylphenol	57.3		50.0	115	70-130
2,4,6-Trichlorophenol	47.6	**	50.0	95.2	70-130
Pentachlorophenol	36.3	Ħ	50.0	72.6	70-130
Calibration Check (EL40202-CCV2)			Prepared: 11/	19/04 Analyzed	1: 11/23/04
1,4-Dichlorobenzene	47.6	ug/l	50.0	95.2	70-130
Hexachlorobutadiene	56.0	"	50.0	112	70-130
Acenaphthene	48.5		50.0	97.0	70-130
N-Nitrosodiphenylamine	58.4	n	50.0	117	70-130
Fluoranthene	47.4		50.0	94.8	70-130
Di-n-octyl phthalate	64.9	۳	50.0	130	70-130
Benzo (a) pyrene	52.6	π	50.0	105	70-130

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 19 of 20

Larson & Associates, Inc.	Project: Dynegy Site #26	Fax: (432) 687-045
P.O. Box 50685	Project Number: 0-0100-26	Reported:
Midland TX, 79710	Project Manager: Cindy Crain	12/02/04 16:07
	Notes and Definitions	
J Detected but below th	e Reporting Limit; therefore, result is an estimated concentration (CLP J-Fl	ag).
DET Analyte DETECTED		
ND Analyte NOT DETECT	ED at or above the reporting limit	
NR Not Reported		
dry Sample results reported	on a dry weight basis	
RPD Relative Percent Differe	ence	
LCS Laboratory Control Spik	ce	
MS Matrix Spike		
Dup Duplicate		

Kalande Jup Date: 12-02-04 Report Approved By:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

# Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client:	Larson : Associates
Date/Tir	ne: 11-15.04 0.0915
Order #	4K1500 4

Initials: JMM

.

# Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	0.5 C
Shipping container/cooler in good condition?	(Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Ves	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Tes	No	
Chain of custody agrees with sample label(s)	Yes	No	NoLabels
Container labels legible and intact?	Yes	No	Nolabels
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Xes,	No	
Samples properly preserved?	Tes	No	
Sample bottles intact?	Tes	No	
Preservations documented on Chain of Custody?	(res)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(es)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	Contacted by:
Corrective Action Taken:		
· · · · · · · · · · · · · · · · · · ·		

CHAIN-OF-CUSTODY RECORD A grson & 232-687-0456 Environmental Consultants 432-687-0001	arienfeld, Ste. 202 •	ILE, FILTRED, UNFILTRED, NUMBER (LAB USE ONLY) PRESERVED, UNPRESERVED, GRAB COMPOSITE)	HKISOCH-01 1- Lamberglass W/Na S, O3	2-40 mL 41655 ~/ HVC1	2						RECEIVED BY: (Signature) DATE: TIME:	SAMPLE SHIPPED BY: (Circle)	A	WHITE - RECEIVING LAB	l S	PINK - PROJECT MANAGER GOLD - QA/QC COORDINATOR	SAMPLE TYPE:	
PARAMETERS/METHOD NUMBER	500 500 797- 797- 78	(]_ 12) 14) 14) 14) 14) 14) 14) 14) 14) 14) 14									ED.BY: (Signature) DATE: 11 12/44	Signature) DATE:	/ TIME		(Signature)	TIME: 17 15	LACONTACT PERSON:	C
SITE MANAGER: LINIY CAIN PROJECT NAME:	LAB. PO #	Sample Identification	Mul-I								DATE 11 12/07 REMNAUIS	DATE: RECEIVED B	TIME		ENV. Las of thas	STATE: ZIP: PHONE:	fue o.s.	
clent name: Dy <i>negy</i> Project no <i>::</i> D · D/D - 26	PAGE / OF /	JULI DALE	"/12/04 10.30 V							-	SAMPLED BY: (Signature)	RELINGUISHED &Y: (Signature)	3	COMMENTS:	RECEIVING LABORATORY:	CITY: CONTACT	SAMPLE CONDITION WHEN RECEIVED:	

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# **APPENDIX D**

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# FORM C-141

507 North Marienfeld, Suite 202 Midland, Texas 79701 Ph. (432) 687-0901 Fax (432) 687-0456

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505

Form C-141 Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

			Relea	se Notifica	tion a	nd Cor	rective Act	tion						
				C	OPERA	TOR		🗖 Init	ial Rep	ort	Final F	Report		
Name: D	ynegy Mid	Istream Ser	vices, L.	Р.		Contact:	Dave Harris		<u>-</u>					
		909 Eunice				Telephone No (505) 631-7069								
Facility Nan	ne: Eunio	ce Plant Gat	ype: Gas Plan	t Low Pre	ssure (	Gathe	ring Lines	0						
Surface Ow Ranch	ner: Kelly	Meyer Deep	p Wells	Minera				Lease No. 🛛						
				EASE										
Unit Letter NW Q of the SE Q	Section 31	Township 23S	Range 37E	Feet from the		South Line		East/Wes	est Line County Lea					
				<u> </u>	JRE O	FRELE								
		ral gas conde	nsate				Release ??				overed none			
Source of Re	elease Pipel	ine leak					Hour of Occurren	œ		nd Hou	ir of Discove	ry		
Was Immedi	ate Notice (	Given?				6/7/03 4:3		I	same	<u></u>		{		
			es X	No D <sub>Not Ro</sub>	avired									
By Whom?					1	Date and I	Jour							
Was a Water	course Rea	ched?		······			olume Impacting	the Watero	ourse					
Was a Walch				× No										
			Yes	No No										
10" Pipelin to leak. Du	e leak due g up appro	ximately 600	d exterior feet of lin	r corrosion. Whi le exposing some	historic	contaminau	ion.				, <u> </u>	ljacent		
Describe ( Mid 90 dep	General Co gree daytin	onditions Pre ne temperatu	vailing ( res with d	Temperature, Pr Iry conditions.	recipitati	011, CIC.) <b>*</b>								
I hereby ce the best of Signature:	my knowle	e information dge and belief	given abo	we is true and cor	OIL CONSERVATION DIVISION									
Printed Na Cal Wran	une:	- IJ					ed by⊡District St	ipervisor:						
Title:						Approva	al Date:		Expus	ation D	Jate:			
ES&H A Date:	dvisor	<u> </u>	Pho	one: 915 688-054	2	Conditio	ons of Approval:				Attached			
6/23/03														

\* Attach Additional Sheets If Necessary