# 1R- 445

# REPORTS

# DATE: 1/30/2004



January 30, 2004

Mr. Paul Sheeley New Mexico Oil Conservation Division – District I 1625 North French Drive Hobbs, New Mexico 88240

#### Re: Pipeline Spill Investigation Report, Dynegy Midstream Services. L.P., Unit Letter H (SE/4, NE/4), Section 30, Township 22 South, Range 38 East, Lea County, New Mexico

Dear Mr. Sheeley:

Dynegy Midstream Services, L.P. (Dynegy) has retained Larson and Associates Inc. (LA) to investigate potential impacts to soil from a historic natural gas liquids spill that occurred from a pipeline leak in the southeast quarter (SE/4) of the northeast quarter (NE/4), Section 30, Township 22 South, Range 38 East, Lea County, New Mexico (Site #06). The spill did not involve a reportable quantity of gas or liquid. A Release Notification and Corrective Action form (C-141) was filed only at the request of the New Mexico Oil Conservation Division (NMOCD). The leak was repaired.

On December 12, 2001, LA submitted a Pipeline Spill Investigation Report to the NMOCD, detailing results of an initial investigation at Site #06. The report stated that impacted soil would be excavated to a depth of approximately seven (7) feet below ground surface (bgs), and blended to reduce the total petroleum hydrocarbon (TPH) concentration below the NMOCD Recommended Remediation Action Level (RRAL). The work plan was approved by the NMOCD in a letter dated December 12, 2001. This report details the final investigation and remediation conducted at Site #6. Figure 1 presents a site location and topographic map. Appendix A presents a copy of the form C-141.

#### **Current Investigation**

On August 21, 2003, LA personnel collected a soil sample at Site #6 by hand auger methods. The hand auger soil sample was collected using a stainless steel hand auger, from the surface to a depth of approximately one (1) foot bgs, where caliche was encountered, preventing further advancement of the hand auger.

The soil sample was placed in a clean glass sample jar, labeled, chilled in an ice chest, and delivered under chain-of-custody control to Environmental Lab of Texas I, Ltd. (ELOT), located in Odessa, Texas. A duplicate sample was collected in a clean glass sample jar for headspace analysis. The headspace jar was filled approximately <sup>3</sup>/<sub>4</sub> full, and covered with a layer of aluminum foil before the cap was replaced. The headspace sample was set aside and allowed to warm up to ambient temperature before a RAE Instruments, Model 2000 photoionization detector (PID) was used to measure the concentration of organic vapors in the sample headspace. After calibrating the

Mr. Paul Sheeley January 30, 2004 Page 2

instrument to 99.9 ppm, the PID probe was inserted into the headspace of the sample jars (through the aluminum foil), and the concentration of organic vapors was displayed by the instrument in parts per million (ppm).

The samples were analyzed for TPH by method SW-846-8015, including gasoline range (GRO) and diesel range organics (DRO) and chlorides by EPA method SW-846-9253. The sample was not analyzed for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) since the PID reading was below 100 ppm. The NMOCD allows a PID of less than 100 ppm to substitute for a BTEX laboratory analysis. Table 1, below, presents a summary of the laboratory results and PID reading. Figure 2 shows the hand auger boring location. Appendix B presents the laboratory analyses and chain-of-custody documentation.

#### Table 1: Summary of Headspace and Laboratory Analyses of Soil from Soil Boring Dynegy Midstream Services, L.P., Spill Site #06 SE/4, NE/4, Section 30, Township 22 South, Range 38 East

	Lea County	, New Mexico					
Sample Date	Soil Boring	Sample Depth (feet bgs)	GRO C6-C12 (mg/kg)	DRO >C12- C35 (mg/kg)	TPH C6-C35 (mg/kg)	Chloride (mg/kg)	PID (ppm)
RRAL					1000		
8/21/2003	HB-1	0-1	<10.0	<10.0	<20.0	<20.0	0.1

Based on published literature (1961), groundwater occurs at approximately 145 feet bgs. No domestic wells were observed within 1/2 mile of the site. The NMOCD has established soil remediation action levels (RRALs) for benzene, BTEX and TPH resulting from spills of natural gas liquids ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993").

The following RRAL's have been assigned based on NMOCD criteria:

Benzene	10 mg/kg
Total BTEX	50 mg/kg
ТРН	1000 mg/kg

Referring to Table 1, the TPH and chloride concentrations were below the test method detection limit in the sample from the surface to one (1) foot bgs.

On October 23, 2003, the soil at Site #6 was excavated to a depth of seven (7) feet bgs and a soil sample was collected in a clean glass sample jar and delivered to ELOT for laboratory analysis of TPH and chloride. A duplicate sample was also collected for headspace analysis, as described above. Table 2, below, presents a summary of laboratory analyses of soil from the excavation, and

Mr. Paul Sheeley January 30, 2004 Page 2

PID readings. Figure 2 shows the sample location and TPH concentration. Appendix B presents laboratory data and chain-of-custody documentation.

# Table 2:Summary of Headspace and Laboratory Analyses of Soil SamplesDynegy Midstream Services, L.P., Spill Site #06SE/4, NE/4, Section 30, Township 22 South, Range 38 East

Lea County, New Mexico

Sample Date	Soil Sample	Sample Depth (feet bgs)	GRO C6-C12 (mg/kg)	DRO >C12- C35 (mg/kg)	TPH C6-C35 (mg/kg)	Chloride (mg/kg)	PID (ppm)
RRAL					1000		
10/23/2003	SS-1	7	<10.0	36.4	36.4	70.9	0.7

Referring to Table 2, the TPH concentration was below the RRAL. The NMOCD does not have an RRAL for chloride. The sample was not analyzed for BTEX since the PID reading was below 100 ppm.

All soil removed from the excavation was blended and returned to the hole. As the TPH concentration at a depth of seven (7) feet bgs was below the RRAL, Dynegy requests that Site #6 be closed. Please contact Mr. Cal Wrangham with Dynegy at (432) 688-0555 or myself at (432) 687-0901 if you have questions. We may also be contacted by e-mail at <u>Cal.Wrangham@Dynegy.com</u>, or <u>Cindy@Laenvironmental.com</u>.

Sincerely, Larson & Associates, Inc.

Cirdy K. Crain

Cindy K. Crain, CPG

Encl.

cc: Mr. Dave Harris - Dynegy Mr. Cal Wrangham – Dynegy Mr. Roger Holland- Dynegy **FIGURES** 





#### **APPENDIX A**

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## **Release Notification and Corrective Action Form (C-141)**

District I 1625 N. French Dr., Hobbs, NM 88240	of New Mexico	Form C-141
District II Energy Minera 1301 W. Grand Avenue, Artesia, NM 88210	als and Natural Resources	Revised June 10, 2003
District III Oil Con	servation Division	Submit 2 Copies to appropriate
District IV 1220 So	outh St. Francis Dr.	with Rule 116 on back
1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa	1 Fe, NM 87505	side of form
Release Notificat	ion and Corrective Action	)n
	OPERATOR	I Initial Report 🛛 Final Report
Name of Company Dinegy Midstream Services L.P	Contact Dave Harri	5
Facility Name Fusice Plant Gathering System	Facility Type Case Plant La	N Pressure Cothering Lines
Earlie Chin adheirg Stan		W I Cooke Garange
Surface Owner George P Sim5   Mineral Own	ner	Lease No.
LA Project # 0-0100-06 LOCAT	ION OF RELEASE	
Unit Letter Section Township Range Feet from the N	orth/South Line Feet from the Ea	st/West Line County
H 30 225 38E		Lea
NATU	RE OF RELEASE	
Type of Release Natural Gas Condensate	Volume of Release ? unkno	Volume Recovered None
Source of Release Pipeline Leak	Date and Hour of Occurrence	Date and Hour of Discovery
Yes X No Not Requ	ired If YES, 10 whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the	Watercourse.
Describe Cause of Problem and Remedial Action Taken.* Pipeline leak due to interior and ext Describe Area Affected and Cleanup Action Taken.*	erior corrosion. Will	excavate impacted soil.
Some Staining along sigeling right of	i way Will clean in a	er NMOCD Auidelines
and submit documentation to distric	t office	e weed guadante
regulations all operators are required to report and/or file certain republic health or the environment. The acceptance of a C-141 report should their operations have failed to adequately investigate and report the environment. In addition, NMOCD acceptance of a C-141 refederal, state, or local laws and/or regulations.	te to the best of my knowledge and und ease notifications and perform corrective t by the NMOCD marked as "Final Rep nediate contamination that pose a threat eport does not relieve the operator of res	erstand that pursuant to NMOCD rules and re actions for releases which may endanger ort" does not relieve the operator of liability to ground water, surface water, human health sponsibility for compliance with any other
Signature:	<u>OIL CONSI</u>	ERVATION DIVISION
Printed Name: Cal Wrangham	Approved by District Supervisor	:
Title: ESYH Advisor	Approval Date:	Expiration Date:
E-mail Address: CWWF @ dynegy. Com	Conditions of Approval:	Attached
Date: 8/21/03 Phone: (432) 688.	054R	
* Attach Additional Sheets If Necessary	· · · · · · · · · · · · · · · · · · ·	······································

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#### **APPENDIX B**

### Laboratory Reports

1.1

# ANALYTICAL REPORT

#### Prepared for:

JOHN STEWART LARSON AND ASSOCIATES, INC. P.O. BOX 50685 MIDLAND, TX 79710

 Project:
 Dynegy

 PO#:
 G0307284

 Report Date:
 08/25/2003

**Certificates** 

US EPA Laboratory Code TX00158

#### ENVIRONMENTAL LAB OF TEXAS SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.	Order#:	G0307284
P.O. BOX 50685	Project:	0-0100-06
MIDLAND, TX 79710	Project Name:	Dynegy
915-687-0456	Location:	None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

			Date / Time	Date / Time		
Lab ID:	Sample :	Matrix:	Collected	Received	Container	Preservative
0307284-01	0-0100-06 0-1	SOIL	8/21/03	8/21/03	4 oz glass	ice
			9:55	17:30		
La	<u>b Testing:</u>	Rejected: No	Ten	np: 1.0 C		
	8015M					
_	Chloride					

#### ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

# JOHN STEWARTOrder#:G0307284LARSON AND ASSOCIATES, INC.Project:0-0100-06P.O. BOX 50685Project Name:DynegyMIDLAND, TX 79710Location:None Given

Lab ID: Sample ID: 0307284-01 0-0100-06 0-1

	8015M								
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 8/23/03	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> CK	<u>Method</u> 8015M			

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Li	mits (%)
1-Chlorooctane	125%	70	130
1-Chlorooctadecane	123%	70	130

Approval: KLA Date

Raland K. Tuttle, Lab Dijector, QA Officer Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

#### ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

JOHN STEWART LARSON AND ASSOCIATES, INC. P.O. BOX 50685 MIDLAND, TX 79710		Order#: Project: Project Name: Location:		G0307284 0-0100-06 Dynegy None Given			
Lab ID: 0307284-01 Sample ID: 0-0100-06 0-1							
Test Parameters Parameter	<u>Result</u>	Units	Dilution <u>Factor</u>	<u>RL</u>	Method	Date <u>Analyzed</u>	<u>Analyst</u>
Chloride	< 20.0	mg/kg	1	20.0	9253	8/25/03	SB
			Approval: Raland K. Celey D. K	Tuttle, Lab I Leene, Org. T	Director, QA Off ech. Director	icer I	15/03 Date
			Jeanne Mc Sandra Bie	Murrey, Inor zugbe, Lab 7	g. Tech. Directo Fech.	r	

Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

Page 1 of 1

## ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

#### 8015M

Order#: G0307284

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006605-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006605-03	······································	952	964	101.3%	
CONTROL DUP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006605-04		952	979	102.8%	1.5%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006605-05		1000	942	94.2%	

### ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

#### **Test Parameters**

Order#: G0307284

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006608-01			< 20		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	- <u>.</u>	0307280-01	0	500	478	95.6%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307280-01	0	500	496	99.2%	3.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006608-04		5000	4960	99.2%	

CLIENT NAME:	SITE MANAGER:		DARAMETERS/N	NETHOD NUMBER	CHAIN-	-OF-CUSTODY RECORD
Dynam	J Sterent	S				à
	PROJECT NAME:	:93NIATI				ates, Inc. Fax: 915-687-0456
PAGE CL OF LAE	3. PO #		وربلا		507 N. Mari	enfeld, Ste. 202 • Midland, TX 79701
1111 110 110 110 110 110	Sample IDENTIFICATION	Н ↓ ∩wbek с	1/10		LAB. I.D. NUMBER	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED,
2 1 2 2 C	D-01-2 ) 0-1				0327284	GRAB COMPOSITE)
1 CCID Let	- 0100 010 - 1	•			3422000-01	
SAMPLED BY: (Signature)	DATE: 3/2/67 RELINQUISHE	ED BY: (Sign	ature)	DATE	RECEIVED BY: (Sign	ature) DATE:
RETHIQUIS HED BY (Signature)	DATE: 24/12 RECEIVED BY	: (Signature	(	DATE:	SAMPLE SHIPPED B	Y: (Circle)
L'AND	TIME:			TIME:	FEDEX	BUS AIRBILL #:
comments				Jund Time Needed	Hand Delivered White - Receivi	VPS OTHER: VG LAB
RECEIVING LABORATORY:	×	RECEIVED BY	(Signatyre)		YELLOW - RECEIVII LA AFTE	vg lab (to be returned to r receipt)
ADDRESS:	STATE: ZIP: K	Print CI	N. W.C.L.L.Y.	1730	PINK - PROJEC	T MANAGER
CONTACT:	PHONE			201		
SAMPLE CONDITION WHEN RECEIVED:		LA CONTA	ACT PERSON:		SAMPLE TYPE: 4	ozgluss 1.0°2
		)				

<del>S</del>

# ANALYTICAL REPORT

#### **Prepared for:**

JOHN STEWART LARSON AND ASSOCIATES, INC. P.O. BOX 50685 MIDLAND, TX 79710

Project:Dynergy Site #06PO#:G0307767

**Report Date:** 10/27/2003

<u>Certificates</u> US EPA Laboratory Code TX00158

#### ENVIRONMENTAL LAB OF TEXAS SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.	Order#:	G0307767
P.O. BOX 50685	Project:	0-0100-06
MIDLAND, TX 79710	Project Name:	Dynergy Site #06
915-687-0456	Location:	Lea County

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

			Date / Time	Date / Time		
Lab ID:	Sample :	<u>Matrix:</u>	Collected	Received	Container	Preservative
0307767-01	Soil SS-1	SOIL	10/23/03	10/23/03 15:15	4 oz glass	Ice
La	<u>b Testing:</u>	Rejected: No	Ter	np: 4.5 C		
	8015M					
	Chloride			·····		

#### ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

JOHN STEWAF LARSON AND A P.O. BOX 50685 MIDLAND, TX	RT ASSOCIATES, INC. 79710			Order#: Project: Project Nam Location:	G0307' 0-0100 e: Dynerg Lea Co	767 -06 gy Site #06 ounty		
Lab ID: Sample ID:	0307767-01 Soil SS-1							
				8015M				
	Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 10/23/03	Sample <u>Amount</u> 1	Dilution <u>Factor</u> 1	<u>Analyst</u> JLH	Method 8015M	
		Parameter		Resu mg/kg	lt g	RL		
		GRO, C6-C12		<10.0	)	10.0		
		DRO, >C12-C35		36.4	, ,	10.0		
		TOTAL, C6-C35		36.4	,	10.0		

Surrogates	% Recovered	QC Li	mits (%)
1-Chlorooctane	95%	70	130
1-Chlorooctadecane	103%	70	130

une 10/27/03 Approval: (LUL) / (LUL) Raland K. Tuttle, Lab Director, QA Officer Celey D. Keene, Org. Tech. Director

Raland K. Tuttle, Lab Director, QA Officer Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

#### ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

JOHN STEWA LARSON AND P.O. BOX 5068 MIDLAND, T	ART ) ASSOCIATES, INC. 35 X 79710		Order# Project Project Locatio	: : Name: on:	G0307767 0-0100-06 Dynergy Site Lea County	: #06		
Lab ID: Sample ID:	0307767-01 Soil SS-1							
Test Paran Parameter	meters	<u>Result</u>	<u>Units</u>	Dilution <u>Factor</u>	n <u>RL</u> 20	Method	Date Analyzed	Analyst SB
Chloride		70.9	mg/kg	1	20	9253	10/25/03	SB

Approval: Like Lab Dijector, QA Officer Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS I, LTD.

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#### ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

#### 8015M

Order#: G0307767

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0007225-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0007225-03		952	877	92.1%	
CONTROL DUP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0007225-04		952	840	88.2%	4.3%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0007225-05		1000	997	99.7%	

### ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

#### **Test Parameters**

Order#: G0307767

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007243-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307768-01	0	500	496	99.2%	<u> </u>
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	<u> </u>	0307768-01	0	500	496	99.2%	0.%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007243-04		5000	4960	99.2%	

DDY RECORD AND ANALYSIS REQUEST DYMMA Ime: SYPHOR st#: 0-0100-06 -oc: La lount	0#:		Analyze For:	TCLP:		Anions (Cl, SO4, CO3, HCO3) SAR / ESP / CEC Vietals: As Ag Ba Cd Cr Pb Hg S Semivolatiles BTEX 80218/5030 or BTEX 826C 3CI A.O.R.M. Ch lori, d P S Cl A.O.R.M. Standard TAT (Pre-Schedule Standard TAT (Pre-Schedule Standard TAT (Pre-Schedule						Sample Containers Intact? Y N Temperature Upon Receipt: Laboratory Comments:		4°S 5'		
N OF CUSTC Project Na Projec	đ		L		2	Cations (Ca, Mg, Na, K)			 				Time	i		1515
CHAI					Matri	20il 2Indge Mater Outret (26culy)							Date		Uate	10-23-03
× ×		Fax No:		2	CC. Drosenative	Time Sampled No. of Containers 402,0 Hoo, HaoH										memme
Purchange			Henry K			Date Sampled	10123			-			Received by:	<u> </u>	Received by ELO	Jam
tal Lab of Texas Phone: 432-563-1800 Fax: 432-563-1713 БИЛ 5Те ДА Б		687-0901	AM J. ~		•			101 101					Date Time	× 10123 5:13	Date Time	
Environment 12600 West I-20 East Odessa, Texas 79765 Project Manager: _ Company Name _ Company Address: _	_ City/State/Zip: _	Telephone No: _	Sampler Signature:			Larroco	LAB # (lab use only)	12/200				Special Instructions:	Relinquisted by:	all the	Relinquished by:	

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