

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
PETROLEUM STORAGE TANK DIVISION
MONITORING EVENT SUMMARY AND STATUS REPORT

Document
49

me 2
95021
X

Complete All Applicable Blanks.

GENERAL INFORMATION

LPST ID NO.: 95021 Assigned TNRCC Coordinator: Mr. William Koger
Responsible Party: City of Laredo
Facility Name: Laredo International Airport
Facility Address: 518 Flightline
Facility City: Laredo, Texas
Reporting Period: 1/15/94 to 7/15/94
Reporting Frequency: Quarterly ☐ or SemiAnnually ☒ (please check one)

PHASE-SEPARATED HYDROCARBON (PSH) RECOVERY AND FLUID DISPOSITION

Number of monitoring wells impacted with PSH: 3 (sheen)
Product recovery method: weekly gauging/purging with hand bailers
Amount of product recovered during previous quarter: 0 gallons. Total gallons to date: 0
Amount of total fluids recovered during previous quarter: 000 gallons.
Disposition of all fluids recovered during previous quarter, including purged groundwater: stored on site in 55-gal drum

SAMPLING EVENT

Date samples were collected: 7/14/94
List monitoring wells sampled: MW-1, MW-2, MW-3, MW-4, MW-7, and MW-10
Date analyses performed: BTEX on 7-14-94; TPH on 7-22-94
Were any holding times exceeded? YES or NO (circle one)

GAUGING EVENT

Date all monitoring wells were gauged: 7/14/94
Groundwater flow direction: to southwest
Was the static groundwater level above the top of the well screen in any wells? YES or NO (circle one) If yes, indicate which wells:

MONITORING EVENT SUMMARY AND STATUS REPORT

Complete All Applicable Blanks.

STATUS

Number of existing monitoring wells: 9

Was any damage noted on any existing monitoring wells?: **YES** or **NO** (circle one). If yes, explain:
MW-9 was destroyed during PST removal operations on adjacent tankhold by US Corps of Engineers

Has the groundwater contaminant plume been defined?: **YES** or **NO** (circle one)

Any ongoing assessment activities? **YES** or **NO** (circle one). If yes, indicate type of assessment activities:

Any ongoing remediation activities? **YES** or **NO** (circle one). If yes, indicate type of remediation:
Purging wells of LNAPL hydrocarbons by hand bailing once per week; Negotiating with U.S. Corps of Engineers for final site remediation.

Also, discuss the effectiveness of this remedial technology in addressing site remediation:

Any significant changes in the subsurface conditions? **YES** or **NO** (circle one). If yes, please indicate:

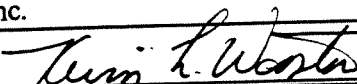
REPORT PREPARATION

Prepared by: Kevin L. Wooster, C.P.G., under Richard N. Berry, P.E. (CAPM 00226)

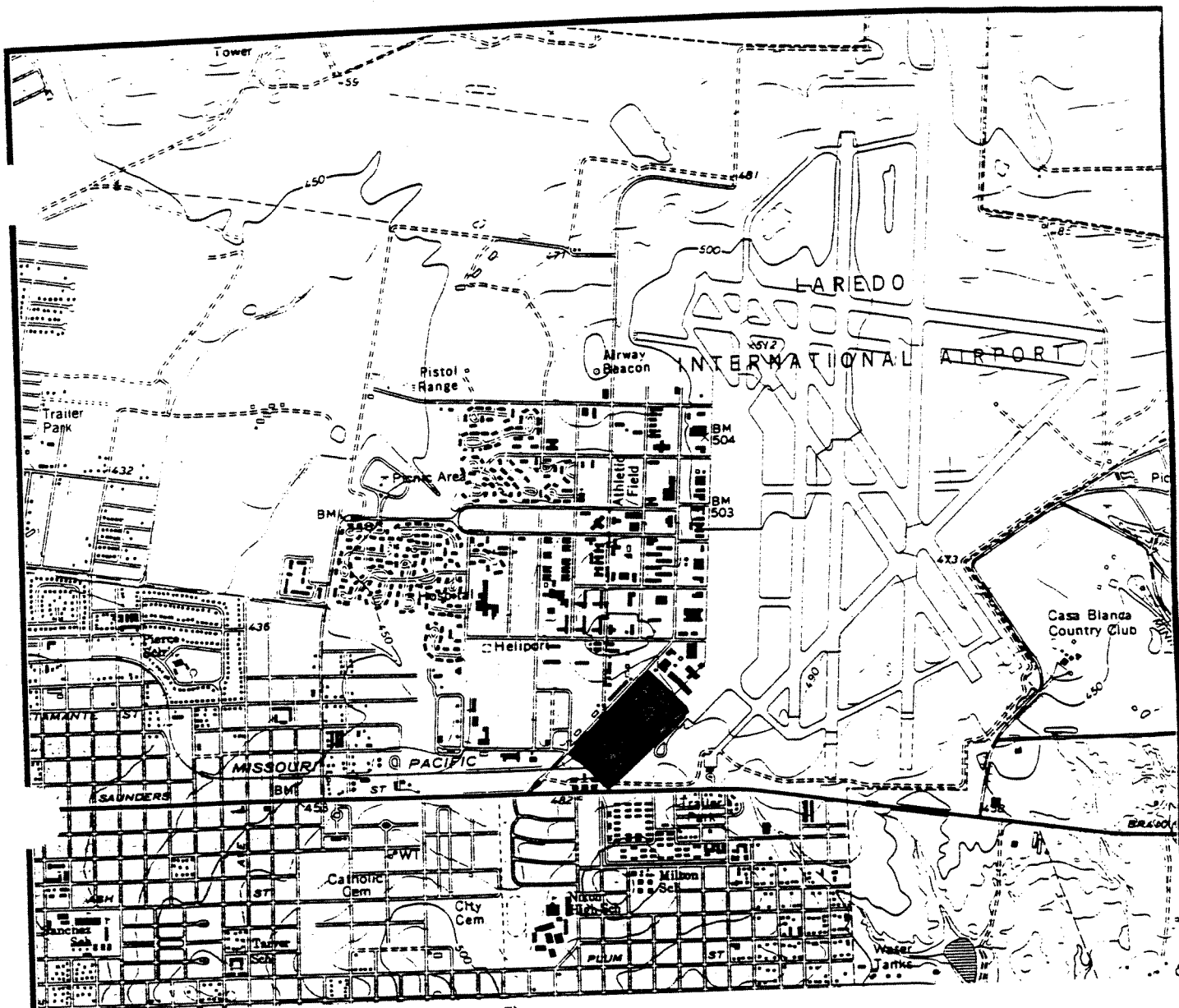
Company: Raba-Kistner Consultants, Inc.

Date prepared: 8/25/94

Signature:



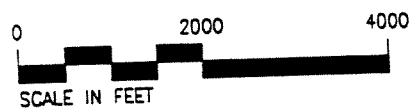
ATTACHMENTS: Cumulative list of analytical results
Copy of most recently drafted groundwater gradient map
Cumulative list of groundwater-levels **only** if PSH is present



(BASE MAP FROM USGS, 1980; LAREDO EAST QUADRANGLE)

LEGEND

 SITE LOCATION

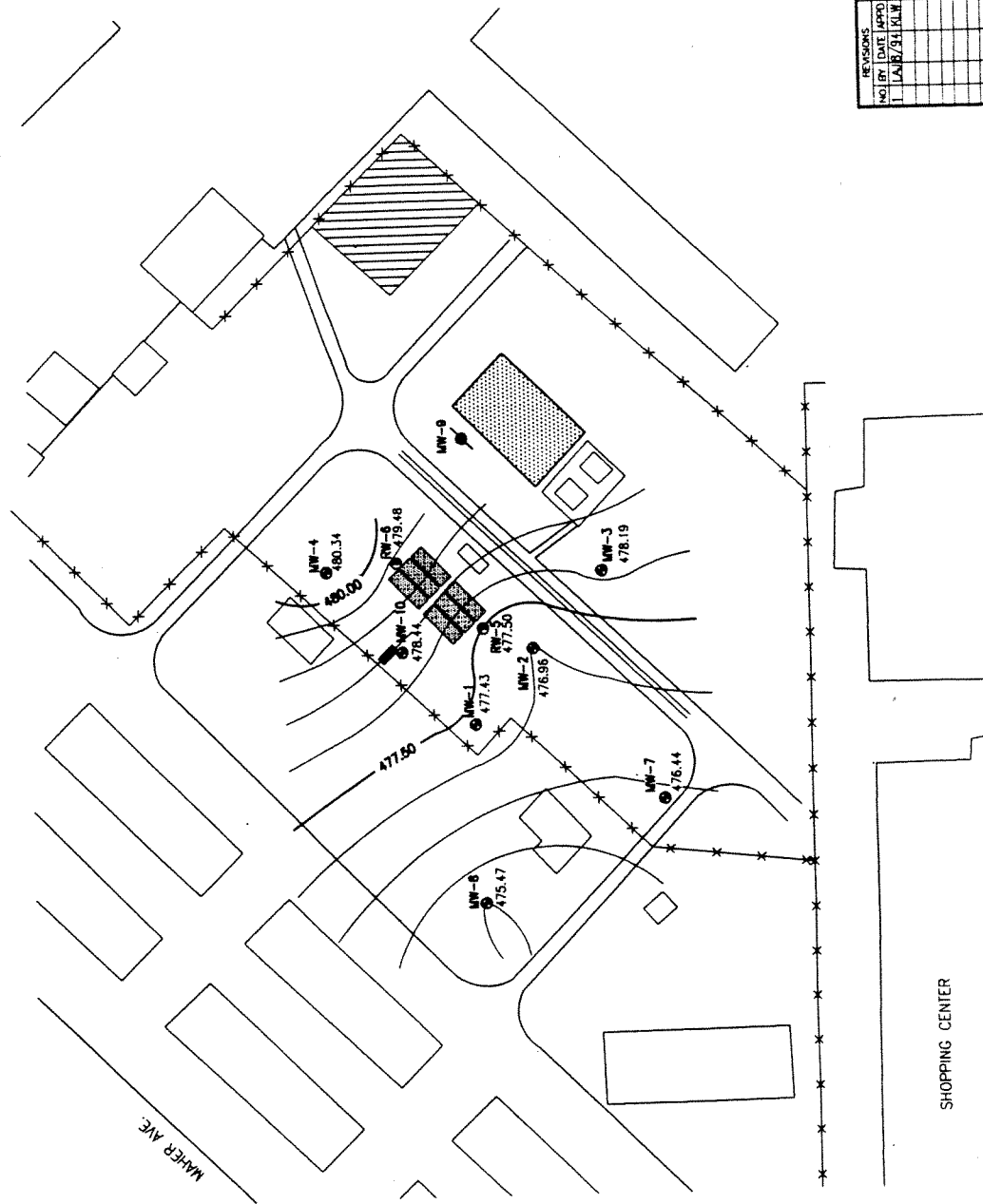


SITE LOCATION MAP
LAREDO AIRPORT
LAREDO, TEXAS

PROJECT No. ASB92-034-03

Raba-Kistner Consultants Inc.

- LEGEND**
- MONITORING WELL, ABANDONED
 - MONITORING WELL
 - RECOVERY WELL
 - BENEFICIAL USE PST
 - OIL/WATER SEPARATOR
 - BUILDING
 - FENCE
 - NON-BENEFICIAL USE FUEL PST TANKHOLD
 - BARBER AVIATION BENEFICIAL USE PST TANK AREA
 - CONTOUR OF WATER TABLE ELEVATION, IN FEET ABOVE SEA LEVEL. CONTOUR INTERVAL = 0.5 FT. VALUES ARE POSTED AT SAMPLING STATIONS.



REVISIONS	NO.	BY	DATE	APPD.
1	LA	B	9/1	KJW

Raba-Kistner Consultants, Inc.

Engineers Geologists Scientists Chemists
WATER TABLE ELEVATION MAP 07/14/94
LAREDO AIRPORT
LAREDO, TEXAS

SCALE: AS SHOWN PROJECT NO.: 4589-031-03
DRAWN BY: JY DATE: 8/75/92

SUMMARY OF ANALYTICAL RESULTS

PROJECT NAME: LAREDO AIRPORT
 PROJECT LOCATION: LAREDO, TEXAS
 SAMPLE LOCATION: MONITORING WELLS
 SAMPLE TYPE: GROUND WATER

Pg 1 of 3

FILE NAME: WATER.WQ1

8/01/94

Sample Designation	Sample Date	Sample * Analyzed By	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)	Total Detectable BTEX (mg/L)	MTBE (mg/L)	TPH (mg/L)	TDS (mg/L)
MW-1	07/25/90	PAL	4.0	0.730	0.200	0.530	5.46	<0.01	13	
	12/11/91	PAL	3.056	0.531	0.143	0.446	4.176	<0.01	13.8	
	05/27/92	PAL	4.853	0.687	0.277	0.703	6.52	1.494	1.98	
	08/11/92	R-KCI	12	1.5	0.38	0.89	14.77		44	
	10/13/92	R-KCI	11	1.3	<0.5***	<0.5***	12.3		6	
	01/13/93	R-KCI	2.7	0.33	<0.12***	<0.12***	3.03		4	
	04/15/93	R-KCI	1.2	0.1	0.07	0.05	1.42		1	
	07/14/94	CHEM	7.5	0.65	<0.25***	<0.75***	8.15		3	
MW-2	12/11/91	PAL	0.329	0.271	0.205	0.516	1.321	<0.01	214	
	05/27/92	PAL	0.698	0.361	0.281	0.662	2.002	0.890	29.6	
	08/11/92	R-KCI	0.33	0.26	0.16	0.39	1.14		53	
	10/13/92		****	****	****	****	****	****	****	****
	04/15/93		****	****	****	****	****	****	****	****
	07/14/94		****	****	****	****	****	****	****	****
MW-3	07/25/90	PAL	0.860	0.082	0.190	0.280	1.412	<0.01	<10	
	12/11/91	PAL	0.010	0.018	<0.01	0.013	0.041	0.049	3.3	
	05/27/92	PAL	0.480	<0.01	0.028	<0.01	0.508	0.026	1.38	
	08/11/92	R-KCI	0.38	0.31	0.20	0.51	1.4		6	
	10/13/92	R-KCI	0.085	<0.005	0.048	<0.005	0.133		6	
	01/13/93	R-KCI	0.020	<0.005	<0.005	<0.005	0.020		2	
	04/15/93	R-KCI	0.02	<0.005	<0.005	<0.005	0.02		<1	
	07/14/94	CHEM	<0.005	<0.005	<0.005	<0.015	—		3.4	

* R-KCI = RABA-KISTNER CONSULTANTS, INC.

PAL = PAN AMERICAN LABORATORIES, INC.

CHEM = CHEMSOLVE

** THE PRACTICAL QUANTITATION LIMIT WAS ELEVATED DUE TO DILUTION / MATRIX INTERFERENCES. MTBE WAS NOT DETECTED VIA GC/MS CONFIRMATION ANALYSIS.

*** THE PRACTICAL QUANTITATION LIMIT WAS ELEVATED DUE TO DILUTION / MATRIX INTERFERENCES.

**** NOT SAMPLED - CONTAINED FREE PRODUCT

01106

SUMMARY OF ANALYTICAL RESULTS (CONTINUED)

PROJECT NAME: LAREDO AIRPORT
 PROJECT LOCATION: LAREDO, TEXAS
 SAMPLE LOCATION: MONITORING WELLS
 SAMPLE TYPE: GROUND WATER

Pg 2 of 3

8/01/94

FILE NAME: WATER.WQ1

Sample Designation	Sample Date	Sample * Analyzed By	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)	Total Detectable BTEX (mg/L)	MTBE (mg/L)	TPH (mg/L)	TDS (mg/L)
MW-4	07/25/90	PAL	<0.01	<0.01	<0.01	<0.01	—	<0.01	<10	3.510
	12/11/91	PAL								
	05/27/92	PAL	<0.01	<0.01	<0.01	<0.01	—	0.803	<10	
	08/11/92	R-KCI	<0.005	<0.005	<0.005	<0.005	—		<1	
	10/13/92	R-KCI	0.006	0.015	0.006	0.020	0.047		<1	
	01/13/93	R-KCI	<0.005	<0.005	<0.005	<0.005	—		<1	
	04/15/93	R-KCI	0.029	0.01	<0.005	<0.005	0.039		<1	
	07/14/94	CHEM	<0.005	<0.005	<0.005	<0.015	—		0.36	
MW-7	08/19/92	R-KCI	<0.005	<0.005	<0.005	<0.005	—	<0.005	<1	
	10/13/92	R-KCI	0.12	0.054	0.011	0.036	0.221		<1	
	01/13/93	R-KCI	0.032	0.006	0.008	<0.005	0.046		<1	
	04/15/93	R-KCI	<0.005	<0.005	<0.005	<0.005	—		<1	
	07/14/94	CHEM	<0.005	<0.005	<0.005	<0.015	—		0.72	
MW-8	08/19/92	R-KCI	<0.005	<0.005	<0.005	<0.005	—	<0.005	<1	
	10/13/92	R-KCI	<0.005	<0.005	<0.005	<0.005	—		<1	
	01/13/93	R-KCI	<0.005	<0.005	<0.005	<0.005	—		<1	
	04/15/93	R-KCI	<0.005	<0.005	<0.005	<0.005	—		<1	
MW-9	08/19/92	R-KCI	5.4	2.5	0.73	1.8	10.43	<0.13**	12	
	10/13/92	R-KCI	4.8	1.8	0.36	0.9	7.86		6	
	01/13/93	R-KCI	3.0	<0.25***	0.30	<0.25***	3.30		6	

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01107

SUMMARY OF ANALYTICAL RESULTS (CONCLUDED)

PROJECT NAME: LAREDO AIRPORT
 PROJECT LOCATION: LAREDO, TEXAS
 SAMPLE LOCATION: MONITORING WELLS
 SAMPLE TYPE: GROUND WATER

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8/01/94

FILE NAME: WATER.WQ1

Sample Designation	Sample Date	Sample * Analyzed By	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)	Total Detectable BTEX (mg/L)	MTBE (mg/L)	TPH (mg/L)	TDS (mg/L)
MW-10	08/19/92	R-KCI	3.4	0.78	0.24	0.26	4.68	<0.05**	4	
	10/13/92	R-KCI	6.2	1.7	0.31	0.98	9.19		14	
	01/13/93	R-KCI	6.6	2.0	<0.5***	1.1	9.70		31	
	04/15/93	R-KCI	8.6	1.8	<2.0***	<2.0***	10.4		7	
	07/14/94	CHEM	<0.005	<0.005	<0.005	<0.015	—		4.6	
TRIP BLANK (MW-40)	07/14/94	CHEM	<0.005	<0.005	<0.005	<0.015	—		2.2	

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NOTES:

(1) MONITORING WELL MW-9 WAS REMOVED DURING PST EXCAVATION OPERATIONS IN JANUARY 1993.

(2) A TRIP BLANK WAS SUBMITTED AS A BLIND SAMPLE. THE SAMPLE DESIGNATION GIVEN IN PARENTHESES IS THE DESIGNATION USED ON THE LABORATORY REPORTS OF ANALYSIS.

01108

WATER LEVEL MEASUREMENTS

PROJECT NAME: LAREDO AIRPORT
PROJECT LOCATION: LAREDO, TEXAS

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FILE NAME: -3WTLVLWQ1

8/01/94

Well Designation	Date	TOC Elevation (ft)	Depth to Water (ft)	Water Table Elevation (ft)
MW-1	12/07/91	485.43	8.32	477.11
	06/13/92		7.27	478.16
	08/11/92		7.88	477.55
	08/19/92		7.80	477.63
	10/13/92		8.27	477.16
	01/13/93		8.50	476.93
	04/15/93		8.16	477.27
	07/14/94		8.00	477.43
MW-2	12/07/91	487.26	10.11	477.15
	06/13/92		8.91	478.35
	08/11/92		9.52	477.74
	08/19/92		9.51	477.75
	10/13/92		10.10	477.16
	01/13/93		10.97	476.29
	04/15/93		10.68	476.58
	07/14/94		10.30	476.96
MW-3	12/07/91	487.19	10.18	477.01
	06/13/92		8.93	478.26
	08/11/92		9.52	477.67
	08/19/92		9.52	477.67
	10/13/92		10.20	476.99
	01/13/93		11.45	475.74
	04/15/93		11.05	476.14
	07/14/94		9.00	478.19
MW-4	12/07/91	487.84	7.66	480.18
	06/13/92		7.77	480.07
	08/11/92		7.58	480.26
	08/19/92		7.56	480.28
	10/13/92		7.78	480.06
	01/13/93		7.85	479.99
	04/15/93		7.90	479.94
	07/14/94		7.50	480.34

01109

WATER LEVEL MEASUREMENTS (CONTINUED)

PROJECT NAME: LAREDO AIRPORT
PROJECT LOCATION: LAREDO, TEXAS

Pg 2 of 3

FILE NAME: -3WTLVLWQ1

8/01/94

Well Designation	Date	TOC Elevation (ft)	Depth to Water (ft)	Water Table Elevation (ft)
RW-5	12/07/91	488.60	11.60	477.00
	06/13/92		8.39	480.21
	08/11/92		10.20	478.40
	08/19/92		10.14	478.46
	10/13/92		10.52	478.08
	01/13/93		11.96	476.64
	04/15/93		11.68	476.92
	07/14/94		11.10	477.50
RW-6	12/07/91	488.78	9.96	478.82
	06/13/92		8.70	480.08
	08/11/92		8.63	480.15
	08/19/92		8.88	479.90
	10/13/92		9.03	479.75
	01/13/93		8.95	479.83
	04/15/93		10.18	478.60
	07/14/94		9.30	479.48
MW-7	12/07/91	485.24		
	06/13/92			
	08/11/92			
	08/19/92		9.80	475.44
	10/13/92		10.25	474.99
	01/13/93		9.62	475.62
	04/15/93		9.07	476.17
	07/14/94		8.80	476.44
MW-8	12/07/91	484.27		
	06/13/92			
	08/11/92			
	08/19/92		8.16	476.11
	10/13/92		10.19	474.08
	01/13/93		7.60	476.67
	04/15/93		7.76	476.51
	07/14/94		8.80	475.47

011110

WATER LEVEL MEASUREMENTS (CONCLUDED)

PROJECT NAME: LAREDO AIRPORT
PROJECT LOCATION: LAREDO, TEXAS

Pg 3 of 3

FILE NAME: -3WTLVLWQ1

8/01/94

Well Designation	Date	TOC Elevation (ft)	Depth to Water (ft)	Water Table Elevation (ft)
MW-9	12/07/91	487.17		
	06/13/92			
	08/11/92			
	08/19/92		7.16	480.01
	10/13/92		7.90	479.27
	01/13/93		8.25	478.92
MW-10	12/07/91	487.34		
	06/13/92			
	08/11/92			
	08/19/92		8.25	479.09
	10/13/92		8.85	478.49
	01/13/93		9.84	477.50
	04/15/93		9.43	477.91
	07/14/94		8.90	478.44

NOTE: MONITORING WELL MW-9 WAS REMOVED DURING PST EXCAVATION OPERATIONS IN JANUARY 1993.

011111

Report of Analysis

Consulting Geotechnical, Materials and Environmental Engineers
Geologists, Scientists and Chemists

R
Raba-Kistner
Consultants, Inc.

P.O. Box 690287, San Antonio, TX 78269-0287
12821 W. Golden Lane, San Antonio, TX 78249
(210) 699-9090

To: Laredo Airport
c/o R-KCI

Attn: Kevin Wooster

Project No: ASB92-034-03
Task No: 2000
Assignment No: 7063
Contract/P.O. No:
Date Received: 07-14-94
Page 1 of 3 Date: 07-25-94

Sample Type/Sample Loc: Water / Laredo Airport
Date Collected: 07-13-94
Date Completed: 07-25-94
Collected By: R-KCI

TEST METHODS:

TEST	PREPARATION / DATE	ANALYSIS / DATE
BTEX	5030 / 07-14-94	8020 / 07-14-94
TPH	418.1 / 07-14-94	418.1 / 07-22-94

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By


Gang Sun, Ph.D.
QA/QC Officer

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Project No: ASB92-034-03
 Assignment No: 7063
 Page 2 of 3

Analyte	Detection Limit	7063-1 (MW-3)	7063-2 (MW-4)	7063-3 (MW-40 Trip Blank)
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Benzene	0.005	<0.005	<0.005	<0.005
Toluene	0.005	<0.005	<0.005	<0.005
Ethylbenzene	0.005	<0.005	<0.005	<0.005
Total Xylenes	0.015	<0.015	<0.015	<0.015

Analyte	Detection Limit	7063-5 (MW-7)	7063-6 (MW-10)
	(mg/L)	(mg/L)	(mg/L)
Benzene	0.005	<0.005	<0.005
Toluene	0.005	<0.005	<0.005
Ethylbenzene	0.005	<0.005	<0.005
Total Xylenes	0.015	<0.015	<0.015

Analyte	Detection Limit	7063-4* (MW-1)
	(mg/L)	(mg/L)
Benzene	0.25	7.5
Toluene	0.25	0.65
Ethylbenzene	0.25	<0.25
Total Xylenes	0.75	<0.75

* Elevated detection limits on sample 7063-4 were due to dilution factor.

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Project No: ASB92-034-03
Assignment No: 7063
Page 3 of 3

Analyte	Detection Limit	7063-1 (MW-3)	7063-2 (MW-4)	7063-3 (MW-40 Trip Blank)
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
TPH	0.2	3.4	0.36	2.2

Analyte	Detection Limit	7063-4 (MW-1)	7063-5 (MW-7)	7063-6 (MW-10)
	(mg/L)	(mg/L)	(mg/L)	(mg/L)
TPH	0.2	3	0.72	4.6

Note: All analyses were performed by a R-KCI approved subcontract laboratory.

01114

BABA!

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NOTE: PROJECT APPROVAL AND PROJECT SETUP MUST BE COMPLETE PRIOR TO INITIATION OF ANALYSIS.

8907

[illegible]