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November 14, 2000

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GROUNDWATER MONITORING REPORT
SEPTEMBER 2000 SAMPLING
ASE JOB NO. 3011

at
Zima Center Corporation
2951 High Street
Oakland, California 94619

Prepared by:
AQUA SCIENCE ENGINEERS, INC.
208 W. El Pintado
Danville, CA 94526
(925) 820-9391

1.0 INTRODUCTION

Site Location (Site), See Figure 1
Zima Center Corporation
2951 High Street
Oakland, CA 94619

Property Owner
Zima Center Corporation
1721 Jefferson Street
Oakland, CA 94612
Attn.: Mr. Mohammad Mashhoon
(510) 436-4700

Environmental Consulting Firm
Aqua Science Engineers, Inc. (ASE)
208 W. El Pintado
Danville, CA 94526
Contact: Robert Kitay, Senior Geologist
(925) 820-9391

Agency Review
Alameda County Health Care Services Agency (ACHCSA)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502
Attn.: Mr. Amir Gholami
(510) 567-6700

California Regional Water Quality Control Board (RWQCB),
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
Attn.: Mr. Chuck Headlee
(510) 622-2423

The following is a report detailing the results of the September 2000 groundwater sampling at the Zima Center Corporation site *(Figures 1 and 2)*.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On September 18, 2000, ASE associate geologist Ian Reed measured the depth to water in each site groundwater monitoring well using an electric water level sounder. No free-floating hydrocarbons or sheen were present in any site monitoring well. Groundwater elevations are presented in *Table One*.

Since a sock of Oxygen Releasing Compound (ORC) was present in monitoring wells MW-4 and MW-5, these ORC socks had to be removed before a groundwater level could be recorded in these wells. Upon removing these socks, the water level in these wells dropped as water levels do during a "slug test." For this reason, the measured water levels are not representative of actual waters beneath the site. For this reason, a groundwater potentiometric surface map was not prepared this quarter. However, the groundwater potentiometric surface map for July 23, 1998 is presented as Figure 2. Potentiometric surface maps for this site have generally shown groundwater flow to southeast. However, the distribution of hydrocarbons in groundwater suggests a northward groundwater flow direction.

Since the ORC socks have now been spent, ASE removed them from the wells. Therefore, ASE will be able to measure the water elevations accurately during the next quarter.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSES

As requested by the ACHCSA, ASE has modified the quarterly sampling. Monitoring wells MW-1, MW-3, and MW-6 were not sampled due to their consistently non-detectable concentrations. Monitoring well MW-4 was sampled this quarter.

On September 18, 2000, ASE associate geologist Ian Reed collected groundwater samples from monitoring wells MW-2, MW-4, and MW-5. Prior to sampling, the wells were purged of four well casing volumes of groundwater using dedicated polyethylene bailers. Temperature, pH and conductivity were monitored during purging, and samples were not collected until these values stabilized. Groundwater samples were collected from each well using dedicated polyethylene bailers. The samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials containing hydrochloric acid as a preservative, capped without headspace, labeled, and placed in coolers with wet ice for transport to a California state certified analytical laboratory, Chromalab,

Inc. of Pleasanton, California (ELAP #1094), under appropriate chain-of-custody documentation. Copies of the well sampling field logs are included as *Appendix A.*

The groundwater samples collected from monitoring wells MW-2, MW-4 and MW-5 were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 5030/8015M, benzene, toluene, ethyl benzene, and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020.

The analytical results for this and previous sampling events are presented in *Table Two*, and the certified laboratory report and chain-of-custody documentation are included as *Appendix B.*

4.0 GROUNDWATER REMEDIATION

Between May 28, 1997 and June 24, 1997, 2,550 lbs. of Oxygen Releasing Compound (ORC) were injected into the borings along the northern and eastern sides of the existing underground storage tanks (USTs). This drilling and ORC injection was performed by Fast-Tek Engineering Support Services of San Rafael, California on May 28 and 29, 1997, Soils Exploration Services of Benicia, California on May 30, 1997 and En Prob Environmental Probing of Oroville, California on June 24, 1997.

On August 22, September 22, December 6, 1997, and March 3, 1998, ASE measured the dissolved oxygen (DO) in groundwater from each monitoring well. DO substantially increased in all site monitoring wells since the ORC injection was performed. A DO increase in groundwater stimulates aerobic biodegradation of petroleum hydrocarbons. DO concentration data is presented in *Table Three.*

On August 21, 1998, at the request of our client, ASE installed ORC socks in monitoring wells MW-4 and MW-5 to again increase the amount of DO in groundwater beneath the site.

On September 18, 2000, ASE removed the ORC socks since they were spent and were not effective in reducing hydrocarbon concentrations.

5.0 RESPONSE TO AUGUST 1, 2000 LETTER FROM THE ACHCSA

In the August 1, 2000 letter from the ACHCSA, reference was made to a previous letter or report from the ACHCSA. Neither ASE nor Mr. Mohammad Mashhoon of the Zima Center Corporation received this

letter. Please note that the current address for the Zima Center Corporation is as follows:

Mr. Mohammad Mashhoon
Zima Center Corporation
1751 Jefferson Street
Oakland, CA 94612

As you requested, ASE discontinued the sampling of monitoring wells MW-1 and MW-6, and added monitoring well MW-4 to the sampling program.

You requested an explanation on how the Site Specific Threshold Levels (SSTLs) were established. These SSTLs were established using a Risk-Based Corrective Action (RBCA) assessment. The final risk-assessment was prepared by Christopher M. Palmer, Consulting Hydrogeologist and was dated August 2, 1997. This RBCA was approved by Ms. Madhulla Logan of your office in a letter dated October 21, 1997. These documents should be in your files. If you cannot locate these documents in your files, please contact ASE and we will forward you another copy.

It is ASE's understanding that new USTs are to be installed on the western portion of the site, and that the existing USTs will be removed. At the time of the UST removal, ASE will address remediation alternatives with your office.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The groundwater samples collected from monitoring well MW-2 contained 9,400 parts per billion (ppb) TPH-G and 19,000 ppb MTBE. The groundwater samples collected from monitoring well MW-4 contained 10,000 ppb TPH-G, 320 ppb benzene, 150 ppb ethyl benzene, 460 ppb total xylenes, and 13,000 ppb MTBE. The groundwater samples collected from monitoring well MW-5 contained 40,000 ppb TPH-G, 4,900 ppb benzene, 1,700 ppb total xylenes, and 46,000 ppb MTBE.

The analytical results this quarter show hydrocarbon concentrations generally similar to previous results. TPH-G and MTBE concentrations in groundwater samples collected from monitoring well MW-2 rose during the last two quarters but are still lower than the December 1999 results. There was only a slight increase in hydrocarbon concentrations in groundwater samples collected from tank backfill monitoring well MW-4.

There was a slight decrease in hydrocarbon concentrations detected in groundwater samples collected from monitoring well MW-5 this quarter.

7.0 REPORT LIMITATIONS

The results presented in this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the underground storage tanks and associated plumbing at the site, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of independent CAL-EPA certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Ian Reed
Associate Geologist

Robert E. Kitay, R.G., R.E.A.
Senior Geologist

Attachments: Figures 1 and 2
Tables One, Two and Three
Appendices A and B

TABLES

TABLE ONE

Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	02-23-95	97.62	5.89	91.73
	05-26-95		5.20	92.42
	08-23-95		8.67	88.95
	12-13-96		4.61	93.01
	01-16-97		3.79	93.83
	03-27-97		5.87	91.75
	06-27-97		8.33	89.29
	09-22-97		9.62	87.90
	12-06-97		5.35	92.27
	03-23-98		4.02	93.60
	03-05-99		3.16	94.46
	06-17-99		6.69	90.93
	09-15-99		8.90	88.72
	12-09-99		8.22	89.40
	03-06-00		4.12	93.50
MW-2	02-23-95	97.87	6.81	91.06
	05-26-95		4.90	92.97
	08-23-95		8.33	89.54
	12-13-96		6.85	91.02
	01-16-97		1.54	96.33
	03-27-97		5.51	92.36
	06-27-97		8.43	89.44
	09-22-97		9.50	88.37
	12-06-97		6.81	91.06
	03-23-98		2.85	95.02
	07-23-98		6.69	91.18
	11-23-98		8.04	89.83
	03-05-99		1.50	96.37
	06-17-99		6.93	90.94
	09-15-99		9.01	88.86
	12-09-99		8.52	89.35
	03-06-00		2.25	95.62
	06-07-00		6.47	91.40
	09-18-00		**9.14**	**88.73**

TABLE ONE

Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-3	02-23-95	97.03	4.21	92.82
	05-26-95		6.44	90.59
	08-23-95		8.69	88.34
	12-13-96		5.60	91.43
	01-16-97		5.28	91.75
	03-27-97		6.64	90.39
	06-27-97		8.35	88.68
	09-22-97		9.42	87.61
	12-06-97		6.38	90.65
	03-23-98		5.42	91.61
	03-05-99		4.81	92.22
	06-17-99		7.60	89.43
	09-15-99		8.94	88.09
	12-09-99		8.62	88.41
	03-06-00		4.78	92.25
MW-4	02-23-95	96.77	6.25	92.07
	05-26-95		6.18	90.59
	08-23-95		8.55	88.22
	12-13-96		5.86	90.91
	01-16-97		5.79	90.98
	03-27-97		7.37	89.40
	06-27-97		8.75	88.02
	09-22-97		9.31	87.46
	12-06-97		6.25	90.52
	03-23-98		6.07	90.70
	03-05-99		12.16	84.61
	06-17-99		Inaccessible	
	09-15-99		16.01	80.76
	09-18-00		**8.67**	**88.10***
MW-5	12-13-96	98.32	6.25	92.07
	01-16-97		6.32	92.00
	03-27-97		7.51	90.81
	06-27-97		8.96	89.36
	09-22-97		9.38	88.94
	12-06-97		6.01	92.31
	03-23-98		6.60	91.72
	07-23-98		7.98	90.34
	11-23-98		11.20	87.12
	03-05-99		10.14	88.18
	06-17-99		11.53	86.79
	09-15-99		12.63	85.69
	03-06-00		6.89	91.43
	06-07-00		11.34	86.98
	09-18-00		**12.34**	**85.98**

TABLE ONE

Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-6	01-16-97	98.16	5.12	93.04
	03-27-97		6.55	91.61
	06-27-97		8.39	89.77
	09-22-97		9.14	88.99
	12-06-97		5.41	92.75
	03-23-98		5.40	92.76
	07-23-98		7.10	91.06
	11-23-98		7.80	90.07
	03-05-99		4.82	93.34
	06-17-99		7.70	90.46
	09-15-99		8.58	89.58
	12-09-99		8.70	89.46
	03-06-00		3.10	95.06
	06-07-00		7.10	91.06

TABLE TWO

Certified Analytical Results of **GROUNDWATER** Samples
All Results are in **parts per billion (ppb)**

Sample I.D.	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
MW-1						
02-23-95	<50	<0.5	<0.5	<0.5	<0.5	---
05-26-95	<50	<0.5	<0.5	<0.5	<0.5	---
08-23-95	<50	<0.5	<0.5	<0.5	<0.5	---
MW-2						
02-23-95	3,300	9.6	13	8	28	---
05-26-95	4,600	39	18	21	39	---
08-23-95	<50	15	6	10	15	---
12-13-96	1,900	110	110	120	330	65
03-27-97	3,900	34	20	86	140	200
06-27-97	2,400	18	<5	6	8.8	2,000
09-22-97	< 5,000	8.4	20	33	100	3,900
12-06-97	3,000	33	40	40	140	2,300
03-23-98	220	3.0	2.8	5.8	13	18
06-10-98	3,400	120	64	160	200	1,900
07-23-98	6,000	340	54	280	390	3,300
09-16-98	3,700	77	<25	80	69	5,500
11-23-98	< 10,000	< 100	150	< 100	180	9,100
03-05-99	1,000	20	31	38	100	510
06-17-99	<10,000	110	38	79	140	4,200
09-15-99	20,000	< 100	< 100	< 100	< 100	20,000
12-09-99	25,000	< 130	< 130	< 130	< 130	28,000
03-06-00	<50	<0.5	<0.5	<0.5	<0.5	85
06-07-00	<10,000	74	37	98	220	9,200
09-18-00	**9,400**	**< 50**	**< 50**	**< 50**	**< 50**	**19,000**
MW-3						
02-23-95	<50	<0.5	<0.5	<0.5	<0.5	---
05-26-95	<50	<0.5	<0.5	<0.5	<0.5	---
08-23-95	<50	<0.5	<0.5	<0.5	<0.5	---
MW-4						
06-26-96	2,500	230	64	99	110	5,700
03-27-97	6,200	300	150	160	310	7,100
09-18-00	**10,000**	**320**	**< 50**	**150**	**460**	**13,000**

TABLE TWO

Certified Analytical Results of **GROUNDWATER** Samples
All Results are in **parts per billion (ppb)**

Sample I.D.	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
MW-5						
12-13-96	3,600	180	350	81	510	430
03-27-97	120,000	28,000	16,000	2,600	10,000	64,000
06-27-97	6,300	10,000	2,400	290	4,500	43,000
09-22-97	< 50,000	7.9	3.3	0.63	3.3	30,000
12-06-97	< 5,000*	33	12	< 5.0	7.3	33,000
03-23-98	29,000	150	160	130	320	34,000
06-10-98	53,000	7,000	2,400	540	3,400	67,000
07-23-98	36,000	1,000	270	< 120	740	51,000
09-16-98	56,000	3,400	1,300	430	1,800	84,000
11-23-98	63,000	5,700	2,900	500	2,200	87,000
03-05-99	42,000	< 250	< 250	< 250	< 250	38,000
06-17-99	37,000	510	85	5.6	89	61,000
09-15-99	54,000	8,500	1,800	420	2,400	55,000
12-09-99	34,000	1,600	230	130	570	33,000
03-06-00	21,000	7,800	870	440	2,100	30,000
06-07-00	<50,000	11,000	890	570	3,000	68,000
09-18-00	**40,000**	**4,900**	**< 250**	**< 250**	**1,700**	**46,000**
MW-6						
01-13-97	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
03-27-97	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
06-27-97	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
09-22-97	< 50	< 0.5	< 0.5	< 0.5	< 0.5	24
12-06-97	94	< 0.5	< 0.5	< 0.5	< 0.5	< 5
03-23-98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
06-10-98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
07-23-98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
09-16-98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
11-23-98	Inaccessible due to rainwater runoff					
03-05-99	55	< 0.5	0.92	0.5	1.3	< 5.0
06-17-99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	8.0
09-15-99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12-09-99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03-06-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06-07-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
RBCA Values: Onsite Commercial 1 in 100,000 Cancer Risk	1,100		12,000	>SOL	>SOL	68,000

Notes:

RBCA = Risk Based Corrective Action Levels

* = Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 24,000 ppb.

--- = Not Analyzed

TABLE THREE

Summary of **Dissolved Oxygen Results** in Groundwater
All Results in **parts per million (ppm)**

Sample I.D.	Before Purging	After Purging
MW-1		
06-27-97	0.99	---
08-20-97	0.64	0.96
09-22-97	1.60	---
12-06-97	1.30	---
03-03-98	0.86	---
06-10-98	0.90	---
MW-2		
06-27-97	0.86	0.94
08-20-97	0.43	0.81
09-22-97	1.15	3.40
12-06-97	1.52	4.88
03-03-98	5.12	4.64
06-10-98	0.93	0.97
MW-3		
06-27-97	1.26	---
08-20-97	1.13	1.29
09-22-97	2.75	---
12-06-97	3.15	---
03-03-98	0.70	---
06-10-98	0.78	---
MW-4		
06-27-97	0.97	---
08-20-97	5.50	6.18
09-22-97	11.80	---
12-06-97	5.15	---
03-03-98	1.08	---
06-10-98	1.21	---
MW-5		
06-27-97	0.71	8.70
08-20-97	>20.00	>20.00
09-22-97	>20.00	>20.00
12-06-97	19.20	19.17
03-03-98	18.19	17.14
06-10-98	1.92	1.87

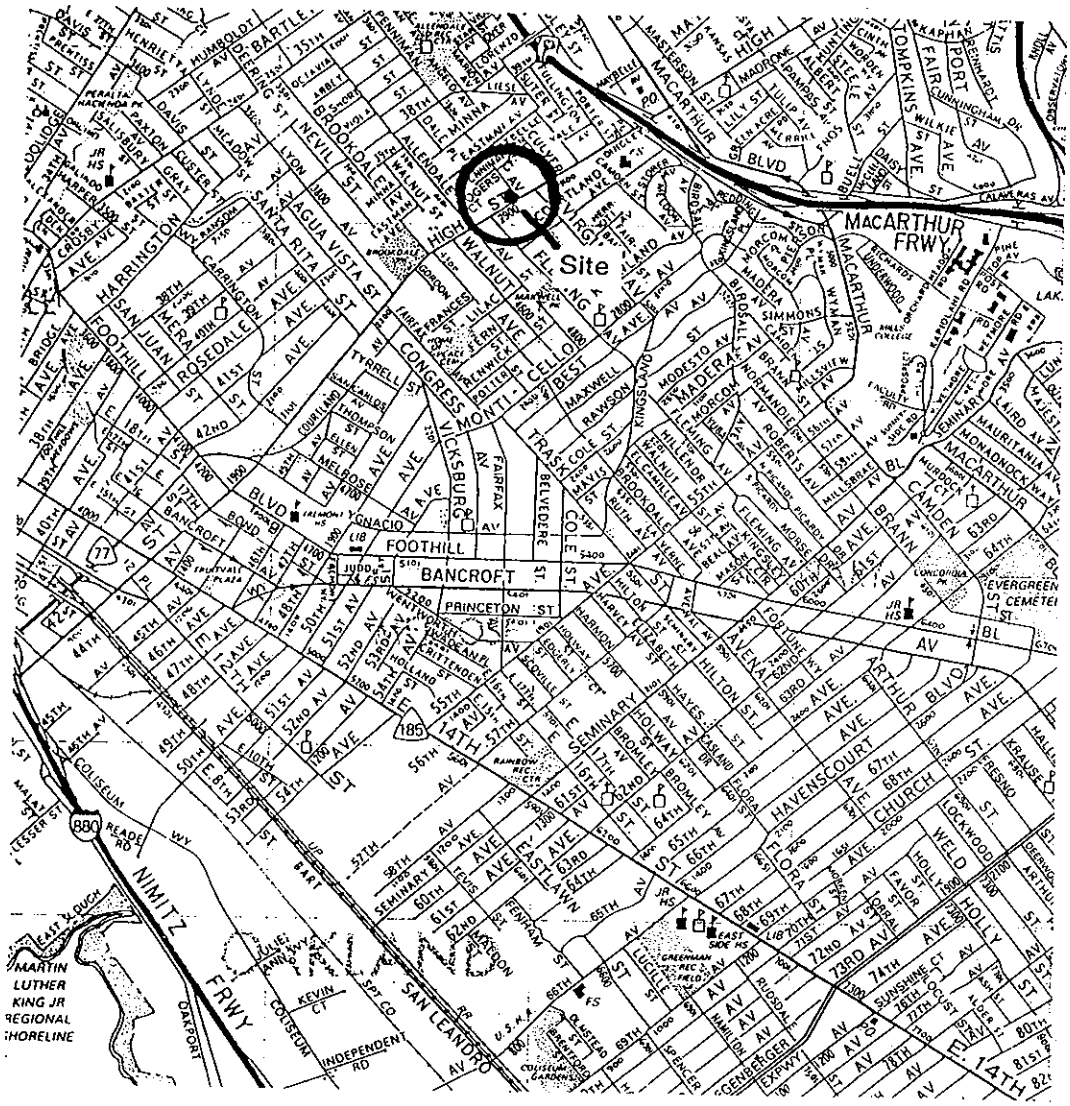
TABLE THREE

Summary of **Dissolved Oxygen Results** in Groundwater
All Results in **parts per million (ppm)**

Sample I.D.	Before Purging	After Purging
MW-6		
06-27-97	0.61	0.89
08-20-97	0.69	1.02
09-22-97	1.10	2.90
12-06-97	2.11	2.50
03-03-98	1.03	1.42
06-10-98	1.10	1.06

Notes:
--- = Well not purged

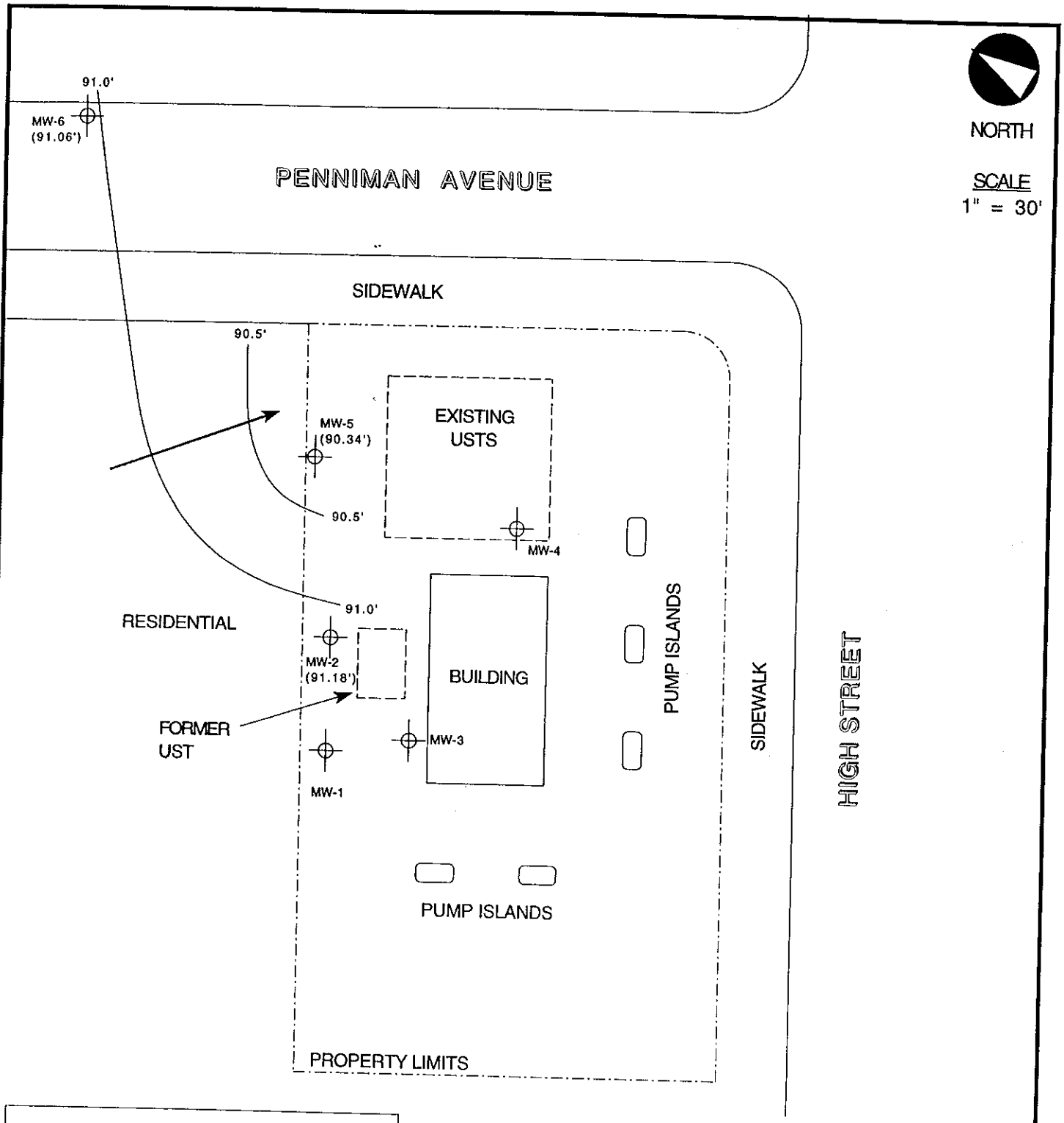
FIGURES



SITE LOCATION MAP

ZIMA CENTER CORPORATION
2951 HIGH STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | FIGURE 1



LEGEND

MW-6 (91.06') — Monitoring well with groundwater elevation

91.0' — Groundwater elevation contour

Approximate groundwater flow direction

GROUNDWATER ELEVATION CONTOUR MAP - 07/23/98

ZIMA CENTER CORPORATION
2951 HIGH STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | FIGURE 2

APPENDIX A

Well Sampling Field Logs

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WELL SAMPLING FIELD LOG

Project Name and Address: Zima - High Street
Job #: 3011 Date of sampling: 9/18/00
Well Name: MW-2 Sampled by: ITC
Total depth of well (feet): 19.90' Well diameter (inches): 2"
Depth to water before sampling (feet): 9.14
Thickness of floating product if any: —
Depth of well casing in water (feet): 10.76
Number of gallons per well casing volume (gallons): 1.8
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 7.3
Equipment used to purge the well: dedicated bailer
Time Evacuation Began: 1405 Time Evacuation Finished: 1415
Approximate volume of groundwater purged: 7.5
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1420
Depth to water at time of sampling: 16.01
Percent recovery at time of sampling: 91 %
Samples collected with: dedicated bailer
Sample color: clear/gray Odor: slight HC odors
Description of sediment in sample: f. silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	71.4	5.62	320
2	72.3	5.61	330
3	72.2	5.61	340
4	72.1	5.61	330

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	3	40ml VOA	✓	✓	

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WELL SAMPLING FIELD LOG

Project Name and Address: Zinno - High Street
Job #: 341 Date of sampling: 9/18/00
Well Name: MW-4 Sampled by: JTR
Total depth of well (feet): 26.0' Well diameter (inches): 2"
Depth to water before sampling (feet): 10.67'#
Thickness of floating product if any: —
Depth of well casing in water (feet): 11.33
Number of gallons per well casing volume (gallons): 1.9
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 8
Equipment used to purge the well: ded. bailer
Time Evacuation Began: 1500 Time Evacuation Finished: 1540
Approximate volume of groundwater purged: 8
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1550
Depth to water at time of sampling: 8.94
Percent recovery at time of sampling: 97%
Samples collected with: ded. bailer
Sample color: clear/gray Odor: HC odor
Description of sediment in sample: f. silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	71.9	6.37	710
2	71.8	6.30	700
3	71.7	6.35	710
4	71.8	6.34	700

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	3	40ml VOA	✓	✓	

ORC sock present - removed.

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WELL SAMPLING FIELD LOG

Project Name and Address: Zima - High Street
Job #: 3011 Date of sampling: 9/18/00
Well Name: MW-5 Sampled by: MW
Total depth of well (feet): 27.19 Well diameter (inches): 2"
Depth to water before sampling (feet): 12.34*
Thickness of floating product if any: —
Depth of well casing in water (feet): 14.85
Number of gallons per well casing volume (gallons): 2.5
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 10
Equipment used to purge the well: ded. bailer
Time Evacuation Began: 1430 Time Evacuation Finished: 1445
Approximate volume of groundwater purged: 10
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1450
Depth to water at time of sampling: 12.69
Percent recovery at time of sampling: 93%
Samples collected with: ded. bailer
Sample color: clear/gray Odor: HC odor
Description of sediment in sample: F. silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	71.0	5.61	520
2	71.0	5.60	500
3	71.1	5.60	510
4	71.1	5.60	510

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-5	3	40ml VOA	✓	✓	

* - had ORC sock in well

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 2000-09-0357
Date: September 26, 2000

Aqua Science Engineers, Inc.
208 West El Pintado Road
Danville, CA 94526

Attn.: Mr. Ian T. Reed

Project: 3011
Zima

Dear Mr. Reed,

Attached is our report for your samples received on Tuesday September 19, 2000
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after November 3, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,

Vincent Vancil

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

Gas/BTEX and MTBE

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn: Ian T. Reed

Phone: (925) 820-9391 Fax: (925) 837-4853

Project #: 3011

Project: Zima

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-2	Water	09/18/2000 14:20	1
MW-5	Water	09/18/2000 14:50	2
MW-4	Water	09/18/2000 15:50	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-2**	Lab Sample ID:	**2000-09-0357-001**
Project:	3011 Zima	Received:	09/19/2000 18:45
		Extracted:	09/21/2000 09:49
Sampled:	09/18/2000 14:20	QC-Batch:	2000/09/21-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	9400	5000	ug/L	100.00	09/21/2000 09:49	g
Benzene	ND	50	ug/L	100.00	09/21/2000 09:49	
Toluene	ND	50	ug/L	100.00	09/21/2000 09:49	
Ethyl benzene	ND	50	ug/L	100.00	09/21/2000 09:49	
Xylene(s)	ND	50	ug/L	100.00	09/21/2000 09:49	
MTBE	19000	500	ug/L	100.00	09/21/2000 09:49	
Surrogate(s)						
Trifluorotoluene	101.6	58-124	%	1.00	09/21/2000 09:49	
4-Bromofluorobenzene-FID	84.0	50-150	%	1.00	09/21/2000 09:49	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-4**	Lab Sample ID:	**2000-09-0357-003**
Project:	3011 Zima	Received:	09/19/2000 18:45
		Extracted:	09/22/2000 11:39
Sampled:	09/18/2000 15:50	QC-Batch:	2000/09/22-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	10000	5000	ug/L	100.00	09/22/2000 11:39	g
Benzene	320	50	ug/L	100.00	09/22/2000 11:39	
Toluene	ND	50	ug/L	100.00	09/22/2000 11:39	
Ethyl benzene	150	50	ug/L	100.00	09/22/2000 11:39	
Xylene(s)	460	50	ug/L	100.00	09/22/2000 11:39	
MTBE	13000	500	ug/L	100.00	09/22/2000 11:39	
Surrogate(s)						
Trifluorotoluene	87.8	58-124	%	1.00	09/22/2000 11:39	
4-Bromofluorobenzene-FID	68.9	50-150	%	1.00	09/22/2000 11:39	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-5**	Lab Sample ID:	**2000-09-0357-002**
Project:	3011 Zima	Received:	09/19/2000 18:45
		Extracted:	09/22/2000 00:18
Sampled:	09/18/2000 14:50	QC-Batch:	2000/09/21-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	40000	25000	ug/L	500.00	09/22/2000 00:18	g
Benzene	4900	250	ug/L	500.00	09/22/2000 00:18	
Toluene	ND	250	ug/L	500.00	09/22/2000 00:18	
Ethyl benzene	ND	250	ug/L	500.00	09/22/2000 00:18	
Xylene(s)	1700	250	ug/L	500.00	09/22/2000 00:18	
MTBE	46000	2500	ug/L	500.00	09/22/2000 00:18	
Surrogate(s)						
Trifluorotoluene	85.9	58-124	%	1.00	09/22/2000 00:18	
4-Bromofluorobenzene-FID	79.7	50-150	%	1.00	09/22/2000 00:18	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/09/21-01.02**

MB: 2000/09/21-01.02-001

Date Extracted: 09/21/2000 06:21

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	09/21/2000 06:21	
Benzene	ND	0.5	ug/L	09/21/2000 06:21	
Toluene	ND	0.5	ug/L	09/21/2000 06:21	
Ethyl benzene	ND	0.5	ug/L	09/21/2000 06:21	
Xylene(s)	ND	0.5	ug/L	09/21/2000 06:21	
MTBE	ND	5.0	ug/L	09/21/2000 06:21	
Surrogate(s)					
Trifluorotoluene	89.4	58-124	%	09/21/2000 06:21	
4-Bromofluorobenzene-FID	79.2	50-150	%	09/21/2000 06:21	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/09/22-01.01**

MB: 2000/09/22-01.01-003

Date Extracted: 09/22/2000 10:04

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	09/22/2000 10:04	
Benzene	ND	0.5	ug/L	09/22/2000 10:04	
Toluene	ND	0.5	ug/L	09/22/2000 10:04	
Ethyl benzene	ND	0.5	ug/L	09/22/2000 10:04	
Xylene(s)	ND	0.5	ug/L	09/22/2000 10:04	
MTBE	ND	5.0	ug/L	09/22/2000 10:04	
Surrogate(s)					
Trifluorotoluene	95.2	58-124	%	09/22/2000 10:04	
4-Bromofluorobenzene-FID	70.8	50-150	%	09/22/2000 10:04	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

To: **Aqua Science Engineers, Inc.**

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/09/21-01.02**

LCS: 2000/09/21-01.02-002 Extracted: 09/21/2000 06:52 Analyzed 09/21/2000 06:52

LCSD: 2000/09/21-01.02-003 Extracted: 09/21/2000 07:23 Analyzed 09/21/2000 07:23

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	446	423	500	500	89.2	84.6	5.3	75-125	20		
Benzene	106	92.7	100.0	100.0	106.0	92.7	13.4	77-123	20		
Toluene	103	90.1	100.0	100.0	103.0	90.1	13.4	78-122	20		
Ethyl benzene	98.7	87.6	100.0	100.0	98.7	87.6	11.9	70-130	20		
Xylene(s)	280	252	300	300	93.3	84.0	10.5	75-125	20		
Surrogate(s)											
Trifluorotoluene	494	404	500	500	98.8	80.8		58-124			
4-Bromofluorobenzene-FI	423	420	500	500	84.6	84.0		50-150			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0357

To: **Aqua Science Engineers, Inc.**

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/09/22-01.01**

LCS: 2000/09/22-01.01-001 Extracted: 09/22/2000 06:58 Analyzed 09/22/2000 06:58

LCSD: 2000/09/22-01.01-002 Extracted: 09/22/2000 07:32 Analyzed 09/22/2000 07:32

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	485	459	500	500	97.0	91.8	5.5	75-125	20		
Benzene	99.7	98.4	100.0	100.0	99.7	98.4	1.3	77-123	20		
Toluene	98.0	95.5	100.0	100.0	98.0	95.5	2.6	78-122	20		
Ethyl benzene	103	95.7	100.0	100.0	103.0	95.7	7.3	70-130	20		
Xylene(s)	329	300	300	300	109.7	100.0	9.3	75-125	20		
Surrogate(s)											
Trifluorotoluene	462	448	500	500	92.4	89.6		58-124			
4-Bromofluorobenzene-FI	354	347	500	500	70.8	69.4		50-150			

To: **Aqua Science Engineers, Inc.**

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

2000-09-0357

54575

Chain of Custody

Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391
FAX (925) 837-4853

PAGE 1 OF 1

SAMPLER (SIGNATURE) Ian T. Reed (PHONE NO.) (925) 820-9391

PROJECT NAME ZIMA JOB NO. 3011

ADDRESS 2951 High Street, Oakland CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

5-day

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080)	FUEL OXYGENATES (EPA 8260)	Pb (TOTAL or DISSOLVED) (EPA 6010)	TPH-G/BTEX/5 OXY'S (EPA 8260)	TPH-G/BTEX/7 OXY'S / HVOCS (EPA 8260)			COMPOSITE
MW-2	9/18	1420	water	3	X																	
MW-5	9/18	1450	water	3	X																	
MW-4	9/18	1550	water	3	X																	

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) Ian T. Reed (time) 0730	(signature) (time) 1025	(signature) (time) 1845	(signature) Denise Harrington (time)	3.5°C
(printed name) Ian T. Reed (date) 9/18/00	(printed name) (date) 9/19/00	(printed name) (date) 9/19/00	(printed name) D. Harrington (date) 1845	TURN AROUND TIME
Company- ASE	Company-	Company-	Company- Chromalab 9/19/00	STANDARD 24Hr 48Hr 72Hr
				OTHER: