

# Site Investigation Work Plan for

# One Hour Martinizing Facility 36929 Plank Road Oconomowoc, WI Facility

June 26, 2008

Prepared For:

Mr. Brian Cass OHM Holdings, LLC 36929 Plank Road Oconomowoc, WI 53066

BRRTS # Pending

ALPHA TERRA SCIENCE, INC.

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I, Kendrick A. Ebbott, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature and Title

6-2608

Date

# **1.0 SITE CONDITIONS**

The site location and local topography are shown on Figure 1. The site is located in the NW¼ of the NW ¼ of Section 3, Township 7 North, Range 17 E, in Oconomowoc, Wisconsin (Figure 1). The site is owned by the OHM Holdings, LLC, and the property address is 36929 Plank Road, located on the south side of Plank Road, which is a frontage road for State Highway 16 / 67.

## 1.1 Site History and Contacts

Historical property use was obtained from discussions with Mr. Brian Cass, whose family has operated the facility for many years. Additional historic information about the property was determined by review of historic aerial photographs.

The site consists of one roughly rectangular parcel that consists of roughly 8.1 acres. The building houses the One Hour Martinizing drycleaner within a multi-tenant building that includes a Pick 'n Save grocery store. OHM is a tenant in the building, and the property owner is listed as Mcadams Realty Oconomowoc LLP on the Waukesha County tax listing.

The entire building will be demolished and a new grocery store constructed during the summer of 2008. Environmental testing, and, if necessary, remediation activities may be completed during the reconstruction period. The site investigation needs to be completed on a fast track to comply with the construction schedule.

Based on review of aerial photographs, the property was formerly a gravel pit from at least 1940 to 1963. Drycleaning has been completed in the north central portion of the building since the building was originally constructed in the mid-to-late 1960's, and will be terminated at the end of June 2008. The active drycleaning store measures roughly 100 feet east / west by 20 feet north / south, and other stores are housed in the building to the east, west, and south (Figure 2). The original building consisted of just the drycleaning store and the larger grocery store. Expansion between 1980 and 1990 added building space to the east and west of the drycleaning building.

According to Mr. Brian Cass of OHM, the drycleaning machine has always been located on the northeast corner of the store. Tetrachloroethene (PCE) has been the drycleaning solvent. Delivery of the solvent occurred through the northern doors located near the dryclean machine, and drums were stored adjacent to the machine. The dumpsters for the building are currently located to the southeast, but were located west of the building prior to the expansion of the structure in the 1980's.

The facility contacts are as follows:

Owner Contact: Mr. Brian Cass OHM Holdings, LLC 36929 Plank Road Oconomowoc, WI 53066 (262) 521-9710 / (414) 588-9847 Cell

Consultant: Mr. Kendrick Ebbott Alpha Terra Science 1237 S. Pilgrim Road Plymouth, WI 53073 (920) 892-2444 / 2620 FAX kenebbott@alphaterra.net

Legal Counsel: Mr. Don Gallo Reinhart, Boerner, et. al. P.O. Box 2265 Waukesha, WI 53187-2265 (262) 951-4555 / 4690 FAX dgallo@reinhartlaw.com

Regulatory Project Manager: Pending Assignment WDNR Waukesha Service Center 141 NW Barstow, Room 180 Waukesha, WI 53188 (262) 574-2100

#### **1.2 Detected Contaminants**

Giles Engineering, Waukesha, WI completed a Phase II investigation of the property in May 2008. Contamination was detected, and a release has been reported to the WDNR. The WDNR issued a "responsible party" letter requiring a site investigation be completed.

Three soil borings were advanced to depths of up to 16 feet, and five soil samples were obtained for laboratory analysis of volatile organic compounds (VOCs). The boring locations and soil chemistry results are shown on Figure 2. Groundwater was not present in the borings, so no water samples were obtained.

The drycleaning solvent tetrachloroethene (PCE) was present in the soil beneath the building floor adjacent to the drycleaning machine at levels of up to 2.7 mg/kg. PCE was present in all five tested soil samples, but at low concentrations.

Typical potential areas for PCE release include incidental spills at the drycleaning machine, around solvent storage areas, spillage during solvent delivery, and disposal of PCE wastes during filter cleaning or lint disposal near the facility dumpster.

# 1.3 Geology/Hydrogeology

The soils at the site have been evaluated to a depth of 16 feet, and consist of clayey silt and fine sand. The previous use of the site as a gravel pit indicates this material is likely fill, and may extend a considerable depth. Gravel pit operations often terminate at the water table surface.

Three nearby environmental repair sites are located within approximately 2000 feet west of the site (Attachment A). These facilities encountered sandy geologic material, with a depth to water of approximately 15 feet below grade. The groundwater flow direction is generally to the north, with groundwater present at an elevation of approximately 865 feet above mean sea level. The Oconomowoc River water elevation is also approximately 865 feet msl, and the elevation at the site is approximately 890 feet msl. The depth to water beneath the site is estimated at 25 feet below grade.

The geology at the site is mapped as pitted outwash<sup>1</sup>, and the depth to bedrock is greater than 100  $\text{feet}^2$ .

# 1.4 Potential Contaminant Migration Pathways of Concern and Utilities

Utility corridors and potential municipal or private water supply wells will be located during the site investigation. Vapor migration into the existing building will not be a factor due to demolition of the structure. Upon reconstruction, steps should be taken to minimize the potential for vapor intrusion.

# 2.0 PROPOSED INVESTIGATION

The purpose of the project is to define the extent of drycleaning solvent contamination in the site soil and groundwater. If significant levels are present in the groundwater, an interim remedial action will likely be proposed to eliminate remaining contamination prior to reconstruction of the building.

Based on the existing information, it is not known if groundwater contamination exists. The need for active remediation will primarily be driven by the level of contamination, if any, present in the groundwater.

Due to the construction timeframe, expedited analysis of soil and groundwater samples is necessary. The cost for rapid analysis will not be eligible for reimbursement under the DERF program. The cost for routine turnaround of the laboratory analyses should be eligible for reimbursement.

<sup>1</sup> Hadley and Pelham, 1976, Glacial Deposits of Wisconsin <sup>2</sup> Trotta and Cotter, 1973, Depth to Bedrock in Wisconsin The scope of work has been broken down on a task-by-task basis for your convenience. As the project unfolds and results become known, it is possible additional borings or laboratory analyses may be necessary to define the limits of contamination. All significant changes to the scope of the project and the budget will be discussed and approved by you and the WDNR project manager prior to implementation.

# Task 1: Preparation and Approval of an NR 716 Site Investigation Work Plan

Per a requirement of DERP and WDNR regulations, this report serves as the Site Investigation Work Plan.

## Task 2: Soil Borings and Water Samples, Lab Analysis

The objective of this phase of the project is to define the horizontal and vertical extent of contamination in the soil, and evaluate whether groundwater contamination is present and laterally extensive. This information will be used to evaluate whether an interim remedial action is necessary.

If significant groundwater contamination is present, the investigation information will likely trigger the need for a soil remedial action, and allow focused placement of monitoring wells installed to the NR141 code requirements following building reconstruction and parking lot asphalt installation.

, and try to demolish and install new facilities around the wells during the reconstruction. If necessary, wells will be installed following reconstruction.

Twelve soil borings are proposed for installation, all using a Geoprobe rig for soil sampling purposes. The proposed boring locations are shown on Figure 2. The boring locations intend to evaluate potential release areas, both current and historic, across the drycleaning property.

Seven of the borings will be advanced to 32 feet below grade, or several feet into the water table, using a dual tube sampler to prevent hole collapse. Continuous soil samples will be retained for geologic logging and soil evaluation purposes. Five of the borings will only be advanced to 12 feet below grade. The recovered soil will be retained in two-foot intervals for field analysis of VOCs using a photoionization detector (PID). Two to three soil intervals will be retained for laboratory analysis of VOCs, based on the field meter response and previous results. The anticipated depth of the soil samples are shown on Figure 2, but may shift based on field observations.

A Geoprobe mounted on a skid steer rig will be used to advance the borings, which include five locations inside the existing building.

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The depth to water is estimated at approximately 25 feet below grade. Upon reaching the water table surface, a grab water sample will be obtained from inside the Geoprobe sampler using individually dedicated polyethylene tubing. A vacuum pump or peristaltic pump will be used to draw water into the tubing, and the water will be placed in laboratory–provided containers for analysis of VOCs.

If the Geoprobe can not penetrate to below the water table due to refusal, a contingency for use of a conventional truck mounted drilling rig that advances hollow stem augers has been provided in our proposal. If necessary, the Geoprobe will complete the soil sampling to as great a depth as possible. Upon refusal, a drill rig with screened hollow stem augers will be used to blind drill to below the water table surface. Some limited soil sampling will be completed by advancing a 1.5 foot long split spoon sampler every five feet of penetration over the interval below the Geoprobe terminal depth. This obviously will not be possible at the inside locations, and the two water sample locations that are planned for inside the building may have to be shifted to the north immediately outside the building if refusal occurs.

At most locations, it does not make sense to install monitoring wells at the present time if grab water samples can easily be obtained. With pending construction activities and building demolition, it is likely wells within the building footprint would be lost or damaged. At locations B-8, B-9, B-10, and B-11, grab water samples will be obtained even if auger drilling is used to reach the water table surface.

However, if it is necessary to use a truck mounted drill rig to advance 8-inch diameter hollow stem augers to obtain water samples, at some of the locations, particularly the upgradient and downgradient locations B-7, B-12, and B-13, it would make sense to install an NR141 monitoring well. As long as the work has been done to reach the water table using an 8-inch diameter boring, an NR-141 compliant well should be installed at these locations. A contingency for use of the drill rig at all seven water sample locations, including completion of three of the borings as NR141 wells, has been included in the cost estimate portion of the proposal. If constructed, Alpha Terra Science will develop and sample the NR141 wells upon installation.

If drilling is necessary, soil cuttings displaced during drilling will be drummed and stored on-site in the rear of the property. Upon receipt of the laboratory analytical results, the drummed soil can be approved for landfill disposal. An estimated six drums of soil are expected to be generated if hollow stem auger drilling is necessary to obtain grab water samples. Disposal will presumably be completed as non-hazardous waste.

An estimated 26 soil samples and seven water samples will be run for VOC analysis. Due to the tight time frame, testing will be completed using a fixed base laboratory on a 24-hour turnaround. A duplicate water sample will be obtained, if sample volume permits, and a methanol blank and trip blank sample will also be run for quality control purposes.

# Task 3: Data Evaluation and Interpretation

Once the soil and groundwater sampling laboratory results are received, the data will be tabulated, mapped, and interpreted. If the results indicate a soil remedial action is warranted and the extent isn't completed define din all directions, it may be more cost effective to complete a test pit evaluation of the extent of contamination on the first day of the remedial action, rather than attempt to nail down the extent of contamination with a second Geoprobe mobilization.

The results will be discussed with the WDNR project manager, and e-mail correspondence will be exchanged regarding the next step in the project. The information will include an evaluation of the results and whether there is any need for additional action beyond the proposed scope of work. It is expected no additional action will be needed, and a site investigation report can be prepared.

## Task 4: Site Investigation Report Preparation

Upon completion of the proposed sampling, the findings will be compiled in a Site Investigation Report. The report will present the investigation findings in a concise manner, and will include all supporting data.

It is anticipated the extent of contamination will have been adequately defined for remediation purposes, and that some sort of remediation will be warranted. The report will include a proposal for completion of an Interim Remedial Action, which will be completed in conjunction with the building demolition and construction work. If appropriate, estimated volumes of soil to be excavated and landfilled will be calculated based in the investigation results. If necessary, a mobile laboratory may be proposed for use during the remedial excavation to define the extent of contamination at the excavation perimeter.

Although not expected to be necessary due to the planned construction of a parking lot over the former drycleaner portion of the site, the interim remedial action may include vapor mitigation activities.

Costs for implementation of the remedial action will be provided, and WDNR approval of the Interim Remedial Action will be necessary prior to implementation.

#### Task 5: Project Management

Project management activities include bidding, scheduling, management, project coordination, budget tracking, and subcontractor invoice evaluation. Alpha Terra Science will track the project budget on a monthly basis versus the approved amount on our invoices.

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# 3.0 SCHEDULE

Based on DERP rules, WDNR approval of the scope of work and budget is necessary to ensure DERF reimbursement of the expenses. It is our understanding that the WDNR will work cooperatively with us on the schedule to fast track this project.

We have checked with the driller and laboratory, and the following schedule can be implemented:

Work Plan Approval by WDNR Field Investigation (2 to 3 days) Lab Results Data Evaluation, Interpretation, E-mail Data, Discuss Report Submittal WDNR Approval of Interim Remedial Action Implement Remedial Action Remedial Action Documentation Report NR141 Monitoring Well Installation (if needed) By July 3 Week of July 7 July 11, July 14 Week of July 14 July 23 July 28 August 2008 End August 2008 Fall 2008





# ATTACHMENT A

# OFF-SITE GEOLOGIC INFORMATION



	GIS REGISTH	TINFORMATIO	N			· · .
SITE NAME:	Dairular	nd Fuels	.Inc.			
BRRTS #:	03-68-00300	FID # (if a	appropriate):	2683505	500	алан Алан
COMMERCE # (if appropriate):	530669	99918	te vilitia.			
CLOSURE DATE:	5-6-05	-				
STREET ADDRESS:	37217	E. Wisc	onsin /	Ave.		
CITY:	Oconom	OWOC				•
SOURCE PROPERTY GPS COOR WTM91 projection):	DINATES (meters in	x=(642	3245	Y=293	3782	· .
CONTAMINATED MEDIA:	Groundwater	$\square$	Soil		Both	
OFF-SOURCE GW CONTAMINAT	ION >ES:	Yes		No		
IF YES, STREET ADDRESS 1:						
GPS COORDINATES (meters in W	TM91 projection):	Х= <u>(оЧ</u>	3314	Y= 29	3782	•
OFF-SOURCE SOIL CONTAMINA Specific RCL (SSRCL):	TION >Generic or Site-	Yes		No		
IF YES, STREET ADDRESS 1:	· · · · · · · · · · · · · · · · · · ·					
GPS COORDINATES (meters in W	TM91 projection):	X=		Y=		
CONTAMINATION IN RIGHT OF W	VAY:	Yes		No		
DOCUMENTS NEEDED:						
Closure Letter, and any conditional c	losure letter issued					マ
Copy of most recent deed, including	legal description, for all aff	ected properties			1	$\mathbf{Z}$
County Parcel ID number, if used for	county, for all affected pro	perties SUM	the legal descript TOKOA	an) for all affected	a properties	~
Location Map which outlines all properties parcels to be located easily (8.5x14" if paper wells within 1200' of the site.	within contaminated site bounda copy). If groundwater standards	aries on USGS topog are exceeded, the r	praphic map or plat map must also inclu	t map in sufficient deta ude the location of all	ail to permit the municipal and potable	1
Detailed Site Map(s) for all affected p potable wells. (8.5x14", if paper copy) This the source property and in relation to the bou generic or SSRCLs.	roperties, showing buildings, n map shall also show the location indaries of groundwater contamin	oads, property bound of all contaminated nation exceeding ch.	daries, contaminan public streets, high NR 140 ESs and	nt sources, utility lines, way and railroad righ soil contamination exc	, monitoring wells and ts-of-way in relation to ceeding ch. NR 720	~
Tables of Latest Groundwater Analyt	ical Results (no shading or	r cross-hatching)	{pdf (en	maile of the P	(* 14) (* 1	$\mathbf{x}$
Tables of Latest Soil Analytical Resu	Its (no shading or cross-ha	atching)				F
extent of groundwater contamination defined	for site investigation (SI) (8 . If not available, include the is	3.5x14" if paper copy atest extent of cont	aminant plume m	iration map should ha ap,	ve now direction and	V
GW: Table of water level elevations, GW: Latest groundwater flow directi greater than 20 degrees)	with sampling dates, and f on/monitoring well location	iree product note n map (should be	d if present 2 maps if max	imum variation in	flow direction is	V
SOIL: Latest horizontal extent of co	ntamination exceeding ger	eric or SSRCLs,	with one conto	ur diago dialag		MA
Geologic cross-sections, if required	for Si. (8.5x14' if paper cop	v)				WA
Copies of off-source notification latt	criptions are complete and	accurate				₩-
Letter informing ROW owner of resid	iual contamination (if appli	cable)(public, high	way or railroad	ROW)		
Copy of (soil or land use) deed restri	ction(s) or deed notice if a	ny required as a	condition of cid	)sure		NA
		en e				

revised 7/2/03





#### TABLE 1

#### **Historical Groundwater Elevations Dairyland Fuels Oconomowoc Bulk Plant** Oconomowoc, Wisconsin

MSV-1 NIV N. 199 26. 90 M C ANNY A CONTRACT A CONTRACTOR NAW-6 1(0) (0) -02 (10) = 0.75) S74 TOC Reventer with 96 a from Beventer with 293 TOC Elevation = \$7534 TOCHEVATOR \$73.11 TCC Elevation = 873/26 11.11.25 TRESPERSION CONCERNE TONE WATCHES TOS Elevation = 868.9 TOS DECEMBER 362-2 TOS Elevation = 869.2 TOSTREVIDEN WERS ? SPATE OF Dievelon al y time Rechto Elevation A CONTRACTOR 100.40 36326000 1323.465 1000 Mills Dievation - WOOD de Welters N. Change Water 03/08/93 7.68 865.69 NA NA NA NA NA NA 7.17 865.94 8.63 864.63 04/19/93 3.2 870.17 1.25 871.71 3.63 869.3 7.56 868.29 865.78 5.71 867.4 4.97 10/21/93 6.9 866.47 6.56 866.4 6.6 866.33 11.77 861.57 7.25 865.86 7.64 865.62 EXC EXC EXC 06/13/96 4.96 868.41 EXC EXC EXC 6.85 866.26 7.2 866.06 EXC EXC EXC EXC 862.52 8.2 865.17 EXC EXC 9.9 10.74 09/18/96 863.21 EXC EXC EXC 10/23/96 7.23 866.14 EXC EXC EXC 9.71 863.4 10.31 862.95 EXC EXC EXC 7.93 865.44 EXC EXC 10.83 862.43 11/20/96 EXC 10.02 863.09 EXC EXC 862.31 12/13/96 8.11 865.26 EXC EXC EXC EXC 10.11 863 10.95 EXC EXC EXC EXC 862.39 01/20/97 NA NA EXC EXC 10.05 863.06 10.87 02/21/97 3.46 869.91 EXC EXC EXC EXC EXC EXC 6.55 866.56 NA EXC EXC EXC EXC EXC NA 03/20/97 6.34 867.03 EXC 9.35 863.76 867.46 EXC EXC EXC EXC EXC EXC 7.96 865.15 5.86 867.4 5.91 03/26/97 NA EXC EXC EXC EXC EXC EXC 866.19 04/08/97 5.45 867.92 6.92 EXC EXC 6.85 866.41 865.04 EXC EXC EXC EXC 8.1 865.01 8.33 05/30/97 867.29 EXC EXC EXC EXC EXC EXC 9.49 863.62 5.97 06/19/97 7.44 865.93 EXC EXC EXC EXC NA NA NA EXC EXC ·NA 07/25/97 NA NA EXC EXC EXC 11.71 861.55 EXC EXC 11.15 861.96 11/14/97 . 9 864.37 EXC EXC EXC EXC 862.51 7.5 EXC EXC EXC 10.8 862.31 10.75 865.87 03/04/98 EXC 9.84 863.42 866.72 EXC EXC EXC EXC EXC 9.57 863.54 05/19/98 6.65 EXC EXC EXC EXC NA NA EXC EXC NA NA 7.35 866.02 09/22/98 NA EXC EXC EXC EXC EXC EXC NA NA NA NA NA 12/15/98

Notes:

Elevations are in feet above mean sea level. Feet to water was measured from the top-of-casing (TOC).

Not analyzed NA:

removed during excavation EXC:

Top-of-screen TOS:

Checked by: SwT 2/4/41 Approved by: (Continued)

NA

NA

NA

# TABLE 1 (Continued) Historical Groundwater Elevations Dairyland Fuels Oconomowoc Bulk Plant Oconomowoc, Wisconsin

	MW-7		MW/s		MW-9		W-10 MT		Y-II	MW-12		
TOARCO.	TOC Elevation = \$76.44 TOC Elev		KOC Elevel	an = 875.67 TOC, Elevation = 879.00		TOC Elevation = 872.79		TOC-Elevation = \$77.36		TOC Elevation = 875.89		
Sec. 19	TOS Eleva	tion = 872.4	ROSIDIATA	ion=874.4	Rospiera	tion=874.7	TOS Elever	ion = 869.2	STOR FILM	rian = 873.9	TOS Eleval	tion = 872.3 .
	Feet to	Elevation	Feet to	Elevation	Feet to	-Elevation -	Reet to	Elevation	Reet to	Elevation	Feet to	Elevation
	Water		Water		Water	3 - C.	Water		Wafer	1. S. S. P.	Water	
03/08/93	11.86	864.58	10.94	864.73	14.41	864.59	NA	NA	NA	NA	NA	NA
04/19/93	10.3	866.14	9.55	866.12	12.86	866.14	NA	NA	NA	NA	NA	NA
10/21/93	11.0	865.44	10.0	865.67	13.47	865.53	6.0	866.79	11.4	865.96	10.47	865.42
06/13/96	11.0	865.44	10.04	865.63	13.65	865.35	EXC	NA	10.98	866.38	10.99	864.9
09/18/96	12.08	864.36	11.04	864.63	14.5	864.5	EXC	NA	12.57	864.79	11.83	864.06
10/23/96	11.79	864.65	10.72	864.95	14.28	864.72	EXC	NA	12.2	865.16	11.61	864.28
11/20/96	11.82	864.62	11.05	864.62	14.61	864.39	EXC	NA	NA	NA	12.13	863.76
12/13/96	12.16	864.28	11.09	864.58	14.71	864.29	EXC	NA	12.61	864.75	12.05	863.84
01/20/97	NA	NA	11.22	864.45	14.81	864.19	EXC	NA	12.65	864.71	12.04	863.85
02/21/97	NA	NA	NA	NA	14.15	864.85	EXC	NA	NA	NA	11.61	864.28
03/20/97	NA	NA	10.46	865.21	14.21	864.79	EXC	NA	11.22	866.14	9.73	866.16
03/26/97	11.38	865.06	10.55	865.12	14.19	864.81	EXC	NA	11.45	865.91	9.3	866.59
04/08/97	11.34	865.1	10.34	865.33	14.21	864.79	EXC	NA	11.86	865.5	11.43	864.46
05/30/97	11.8	864.64	10.51	865.16	14.29	864.71	EXC	NA	11.74	865.62	11.59	864.3
06/19/97 <sup>.</sup>	12.36	864.08	11.25	864.42	14.9	864.1	EXC	NA	12.13	865.23	11.99	863.9
07/25/97	NA	NA	NA	NA	NA	NA	EXC	NA	NA	NA	NA	NA .
11/14/97	12.75	863.69	12.05	863.62	15.8	863.2	EXC	NA	13.05	864.31	12.79	863.1
03/04/98	12.48	863.96	11.9	863.77	15.4	863.6	EXC	NA	12.83	864.53	12.68	863.21
05/19/98	11.58	864.86	10.59	865.08	14.62	864.38	EXC	NA	11.85	865.51	11.3	864.59
09/22/98	NA	NA	11.53	864.14	NA	NA	EXC	NA	NA	NA	12.92	862.97
12/15/98	12.04	864.4	10.97	864.7	14.5	864.5	EXC	NA	NA	NA	11.85	.864.04

(Continued)

Notes:

g an s

Elevations are in feet above mean sea level. Feet to water was measured from the top-of-casing (TOC).

NA: Not analyzed

EXC: removed during excavation

TOS: Top-of-screen

Checked by: <u>Swf "/4/19</u> Approved by: \_

## TABLE 1

#### (Continued)

# Historical Groundwater Elevations

# Dairyland Fuels Oconomowoc Bulk Plant

# Oconomowoc, Wisconsin

9 (24)	MW-13			W-14	M	W-15.	MW-18		
Date	TOC Eleve	tion=874.78	TOCHEV	tion = 870.7	TOC Elevation #871 79		Sector TOC Elevation = 877.57		
	0805(3)	tion= 871.3	0.00000000	tion = 868.3	TONDAY	(ion = 86355.5.5.5.	TOS Elevation = 874.64		
14. A.	Reet to Water	Elevation	Reet to Water	Elevation	Reet to Water	Elevention	Rectio Water	Elevation	
03/08/93	NA	NA	NA	NA	NA	NA	NA	NA	
04/19/93	NA	NA	NA	NA	NA	NA	NA	NA	
10/21/93	9.5	865.28	5.57	865.13	6.45	865.34	NA	NA	
06/13/96	9.64	865.14	5.62	865.08	5.0	866.79	NA	NA	
09/18/96	10.5	864.28	6.58	864.12	7.73	864.06	NA	NA	
10/23/96	10.26	864.52	6.33	864.37	7.11	864.68	NA	NA	
11/20/96	10.78	864	6.71	863.99	7.63	864.16	NA	NA	
12/13/96	NA	NA	6.74	863,96	NA	NA	NA	NA	
01/20/97	10.78	864	6.82	863.88	NA	NA	NA	NA	
02/21/97	11.09	863.69	5.95	864.75	NA	NA	NA	NA	
03/20/97	10.15	864.63	6.22	864.48	6.48	865.31	NA	NA	
03/26/97	10.12	864.66	6.19	864.51	6.18	865.61	NA	NA	
04/08/97	10.17	864.61	6.2	864.5	6.86	864.93	NA	NA	
05/30/97	10.29	864.49	6.32	864.38	7.15	864.64	NA	NA	
06/19/97	10.92	863.86	6.8	863.9	7.85	863.94	NA	NA	
07/25/97	NA	NA	NA	NA	NA	NA	NA	NA	
11/14/97	. 11.57	863.21	7.47	863.23	8.55	863.24	NA	NA	
03/04/98	11.19	863.59	6.75	863.95	8.2	863.59	NA	NA	
05/19/98	10.32	864.46	6.35	864.35	7.15	864.64	NA	NA	
09/22/98	11.37	863.41	NA	NA	8.07	863.72	14	863.57	
12/15/98	NA	NA	NA	NA	NA	NA	13.27	864.3	

Notes:

Elevations are in feet above mean sea level. Feet to water was measured from the top-of-casing (TOC).

50.0

NA: Not analyzed

EXC: removed during excavation

TOS: Top-of-screen

Checked by: <u>SWT 2/4/19</u> Approved by: