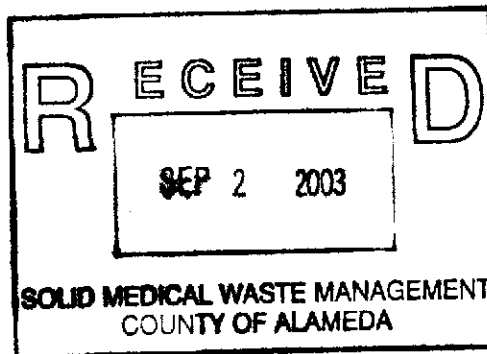


August 27, 2003

Mr. Bruce Lin  
Santini Foods, Inc.  
16505 Worthley Drive  
San Lorenzo, CA 94580

**Subject: Phase II Subsurface Investigation**  
16505 Worthley Drive  
San Lorenzo, CA 94580  
AEI Project No. 7151



Dear Mr. Lin:

Enclosed is the completed Phase II Subsurface Investigation report for the above referenced property. It was a pleasure working with you and please call me at (925) 283-6000 x120, if you have any questions.

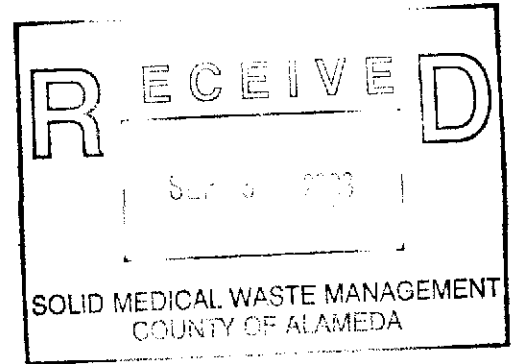
Sincerely,

*Brandi K. Reese*

Brandi K. Reese  
Project Manager, Geologist

CC: Ms. Eva Chu  
Alameda County Environmental Health Services  
Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

August 27, 2003



**SOIL & GROUNDWATER  
INVESTIGATION REPORT**

16505 Worthley Drive  
San Lorenzo, California

Project No. 7151

Prepared For

Mr. Bruce Lin  
Santini Foods, Inc.  
16505 Worthley Drive  
San Lorenzo, CA 94580

Prepared By

**AEI Consultants**  
2500 Camino Diablo, Suite 200  
Walnut Creek, CA 94597  
(925) 283-6000

**AEI**



August 27, 2003

Mr. Bruce Lin  
Santini Foods, Inc.  
16505 Worthley Drive  
San Lorenzo, CA 94580

**Subject: Soil & Groundwater Investigation**  
16505 Worthley Drive  
San Lorenzo, California  
Project No. 7151

Dear Mr. Lin:

The following letter report describes the activities and results of the subsurface investigation performed by AEI Consultants at the above referenced property (Figure 1: Site Location Map). The investigation included the advancement of one soil boring near the former underground storage tank (USTs) on the east side of the subject property. The investigation was designed to determine if the soil or groundwater had been impacted by any fuel oxygenates, including methyl tert-butyl ether (MTBE), from the former underground storage tanks (USTs) on site.

## **I Background**

The subject property (hereinafter referred to as the "site" or "property") is located south of the intersection between Worthley Drive and Grant Avenue. The site is approximately 5.76 acres in size and is developed with two industrial buildings. The property is located in an area east of San Francisco Bay known as the Bay Plain. The Bay Plain is characterized by marshlands and sloughs surrounding the Bay underlain by unconsolidated clay with irregular lenses of sand and gravel.

According to Alameda County Health Care Services Agency (ACHCSA) records, four USTs were formerly located at the site. One 10,000-gallon gasoline, one 5,000-gallon gasoline, one 5,000-gallon diesel and one 2,000-gallon diesel USTs were removed from the property in June 1998. Seven groundwater monitoring wells were installed at the property to determine the extent of impact to groundwater. Following a period of monitoring with low to non-detect levels of contaminant results, case closure has been requested by the property owners. Testing for MTBE and other ether oxygenates was requested by the ACHCSA from a soil boring advanced near the UST.

## **II Investigative Efforts**

Prior to drilling, AEI obtained a permit from the Alameda County Public Works Agency (ACPWA) (permit # W03-0712). AEI performed a subsurface investigation at the property on August 12, 2003. One soil boring (SB-1) was advanced. The location of the boring was selected by the ACHCSA. It was to be advanced directly through the former gasoline tank excavation, if possible, or no more than 10 feet to the west. Due to miscellaneous materials stored directly on the excavation location, AEI advanced the boring approximately 5 feet to the west of the former tanks. The location of the soil boring is shown on Figure 2.

### ***Soil Sample Collection***

The boring was advanced with a truck-mounted Geoprobe® direct push drilling rig to a depth of 16 feet bgs. Soil samples were collected at approximately 2 to 4 foot intervals.

No significant odor was observed during the advancement of the soil boring and sample collection. The soil samples were screened in the field using a Photo-ionizing Detector (PID). The soil screening data is presented on the borings log found in Attachment A.

Soil cores were continuously collected in 2" diameter acrylic liners, from which a six-inch sample was chosen at selected depths. The soil samples were sealed with Teflon™ tape and plastic caps and placed in a cooler with wet ice to await transportation to the laboratory.

### ***Groundwater Sample Collection***

Upon drilling to the target depth, temporary ¾" diameter slotted polyvinyl chloride (PVC) casing was inserted into the boring to facilitate collection of the groundwater sample. Groundwater was encountered at 12.5 feet bgs in the boring.

The groundwater sample was collected through a drop tube into one 1-liter amber bottle and two 40-mL volatile organic analysis (VOA) vials. The groundwater samples were capped so that there was no head space or visible air bubbles within the vials, then placed in a cooler with wet ice to await transportation to the laboratory.

Following sample collection, the temporary PVC casing was removed and the boring was backfilled with neat cement grout.

### ***Laboratory Analysis***

On August 12, 2003, the groundwater sample and soil samples were transported to McCampbell Analytical Inc. (Department of Health Services Certification #1644) under chain of custody protocol for analysis. Analytical results and chain of custody documents are included as Attachment B.

Soil and groundwater samples were analyzed for fuel oxygenates including diisopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), MTBE, tert-amyl methyl ether (TAME), and t-butyl alcohol (TBA) (EPA Method 8260B).

The remaining soil samples were placed on hold at the laboratory.

### III Findings

The near surface native soil encountered during the boring advancement consisted of clay with very little sand and gravel. Refer to Attachment A for a detailed log of the boring.

Saturated soils were apparent in the boring in the range of 15 to 16 feet bgs; however, groundwater was generally measured in the boring at approximately 12.5 feet bgs. Based on local topography, groundwater beneath the area generally flows in a southward direction.

No concentrations of ether oxygenates were detected above laboratory limits in the soil sample ACHCSA requested for analysis. MTBE and TBA were detected in the groundwater sample at 1.8 µg/L and 72 µg/L, respectively.

Soil sample analytical data is summarized in Table 1, and groundwater sample analytical data is summarized in Table 2.

### IV Conclusions and Recommendations

AEI advanced one soil boring west the former UST, located on the east side of the property, as directed by the ACHCSA. AEI analyzed one soil and one groundwater sample for ether oxygenates, including MTBE. No concentrations of ether oxygenates were detected in the soil sample selected for analysis, however slight levels of MTBE and TBA were detected in the groundwater sample.

MTBE found in the groundwater is an order of magnitude below the Maximum Contaminant Levels (MCLs) as set by the California Department of Health Services (CDHS) as drinking water standards. The most recent MCL for MTBE is 13 µg/L. TBA lacks a MCL and is unregulated as a drinking water contaminant. However, it is included in Title 22 of the California Code of Regulations §64450 as a chemical with an action level (AL) of 12 µg/L. ALs are health-based advisory levels established by CDHS for chemicals in potential drinking water.

Although TBA exceeds the AL of 12 µg/L, the levels are relatively low. Based on the findings of this investigation, AEI recommends no further investigations for the subject property.

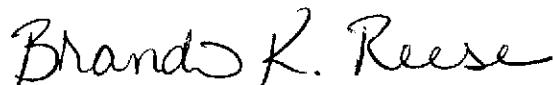
## V Report Limitation

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the required information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

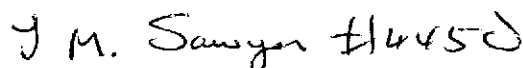
If you have any questions regarding our investigation, please do not hesitate to contact me at (925) 283-6000 x120.

Sincerely,



Brandi Kiel Reese  
Staff Geologist

Technical Review By:



Lorraine M. Sawyer, RG

### Figures

Figure 1: Site Map

Figure 2: Site Plan with Sample Analytical Data

### Tables

Table 1: Soil Sample Analytical Data

Table 2: Groundwater Sample Analytical Data

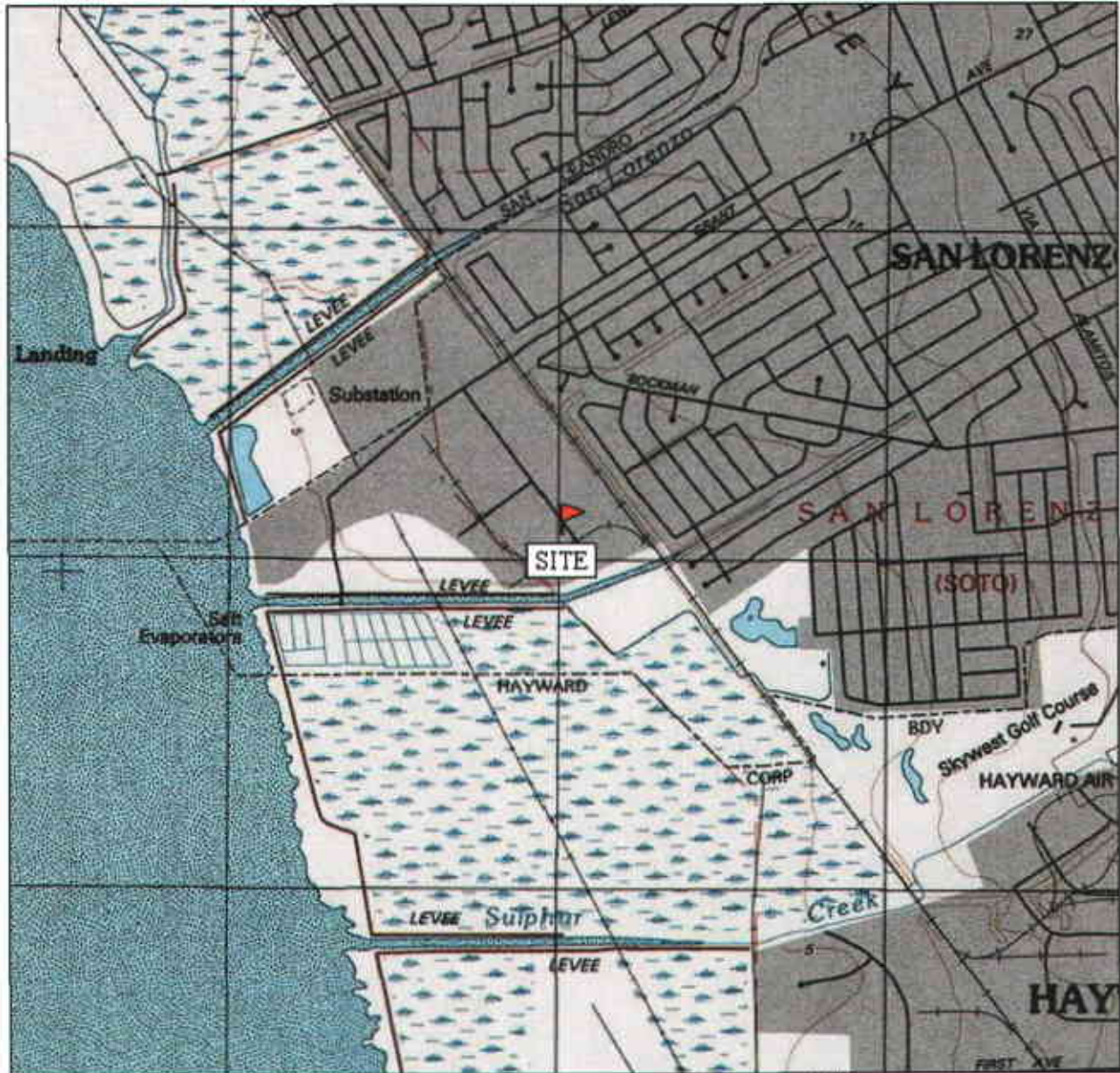
### Attachments

Attachment A: Soil Boring Logs

Attachment B: Sample Analytical Documentation

Attachment C: Permit Documentation

SAN LEANDRO QUADRANGLE 37°40.043' N, 122°09.027' W WGS84



TN \* MN  
15°



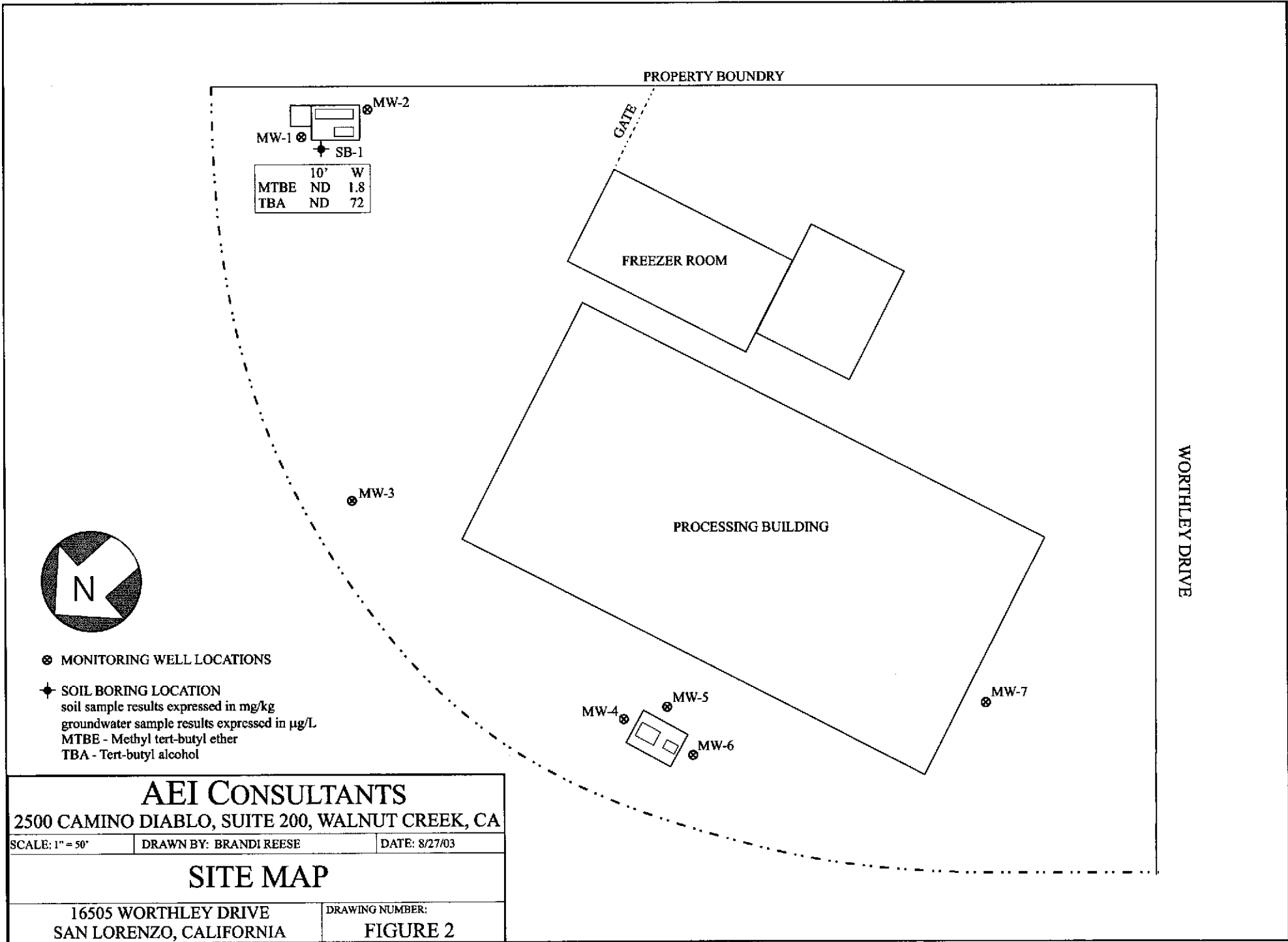
Map created with TOPO!® ©2002 National Geographic ([www.nationalgeographic.com/topo](http://www.nationalgeographic.com/topo))

AEI CONSULTANTS

SITE LOCATION MAP

16505 WORTHLEY DRIVE  
SAN LORENZO, CALIFORNIA

FIGURE 1  
PROJECT NO. 7151





**Table 1:  
Soil Sample Analytical Data**

<b>Sample ID</b>	<b>DIPE mg/kg</b>	<b>ETBE mg/kg</b>	<b>MTBE mg/kg</b>	<b>TAME mg/kg</b>	<b>TBA mg/kg</b>
SB-1 10'	<5.0	<5.0	<5.0	<5.0	<25
RL	5.0	5.0	5.0	5.0	25

mg/kg = milligrams per kilogram (ppm)

DIPE = Diisopropyl ether

ETBE = Ethyl tert-butyl ether

MTBE = Methyl-tert butyl ether

TAME = tert-Amyl methyl ether

TBA = t-Butyl alcohol

RL = Reporting Limit where the dilution factor is 1

Please refer to Attachment B: Sample Analytical Documentation for further detailed lab information including reporting limits and dilution factors

**Table 2:  
Groundwater Sample Analytical Data**

<b>Sample ID</b>	<b>DIPE µg/L</b>	<b>ETBE µg/L</b>	<b>MTBE µg/L</b>	<b>TAME µg/L</b>	<b>TBA µg/L</b>
SB-1 W	<0.5	<0.5	1.8	<0.5	72
RL	0.5	0.5	0.5	0.5	5.0

µg/L = micrograms per liter (ppb)

DIPE = Diisopropyl ether

ETBE = Ethyl tert-butyl ether

MTBE = Methyl-tert butyl ether

TAME = tert-Amyl methyl ether

TBA = t-Butyl alcohol

RL = Reporting Limit where the dilution factor is 1

Please refer to Attachment B: Sample Analytical Documentation for further detailed lab information including reporting limits and dilution factors

Project No: 7151

Sheet: 1 of 1

Project Name: Santini Foods

**Log of Borehole: SB-1**

Client: Bruce Lin

Location: near former UST

Depth	USCS		Subsurface Description	Sample Data				Well Data	Remarks
	Symbol	Label		Sample Label	Type	Blow/ft	Recovery		
0			Ground Surface						
			<b>Fill/asphalt</b>						
2	▨	CL	<b>Clay</b> with minor amounts of coarse sand few gravels poorly sorted medium brown color loose	SB-1 4'	C		75%		PID < 1ppm
4									
6									
8									
10		CI	<b>Clay</b> black color soft very plastic	SB-1 8'	C		75%		No odor noted PID < 1ppm
12									
14		CL	gray color very slight moisture very few sands						
16			saturated at 16'	SB-1 15'	C		100%		
18			End of Borehole						
20									

Drill Date: 8/12/03

Reviewed by: LMS

AEI Consultants  
2500 Camino Diablo, Suite 200  
Walnut Creek, CA 94597  
(925) 283-6000

Drill Method: Direct push

Logged by: BKR

Total Depth: 16

Depth to Water: 12.5



McC Campbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
Telephone : 925-798-1620 Fax : 925-798-1622  
<http://www.mcccampbell.com> E-mail: [main@mcccampbell.com](mailto:main@mcccampbell.com)

All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #7151; SANTINI	Date Sampled: 08/12/03
		Date Received: 08/12/03
	Client Contact: Brandi Kiel-Reese	Date Reported: 08/18/03
	Client P.O.:	Date Completed: 08/18/03

WorkOrder: 0308152

August 18, 2003

Dear Brandi:

Enclosed are:

- 1). the results of 2 analyzed samples from your #7151; SANTINI project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



McC Campbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
 Telephone : 925-798-1620 Fax : 925-798-1622  
 http://www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #7151; SANTINI	Date Sampled: 08/12/03
		Date Received: 08/12/03
	Client Contact: Brandi Kiel-Reese	Date Extracted: 08/12/03
	Client P.O.:	Date Analyzed: 08/13/03

**Oxygenated Volatile Organics by P&T and GC/MS\***

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0308152

Lab ID	0308152-003A				Reporting Limit for DF =1
Client ID	SB-1 10'				
Matrix	S				
DF	1				

Compound	Concentration				µg/Kg	ug/L
	Diisopropyl ether (DIPE)	ND				5.0
Ethyl tert-butyl ether (ETBE)	ND				5.0	NA
Methyl-t-butyl ether (MTBE)	ND				5.0	NA
tert-Amyl methyl ether (TAME)	ND				5.0	NA
t-Butyl alcohol (TBA)	ND				25	NA

**Surrogate Recoveries (%)**

%SS:	107			
------	-----	--	--	--

Comments

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



McC Campbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
 Telephone : 925-798-1620 Fax : 925-798-1622  
 http://www.mcccampbell.com E-mail: main@mcccampbell.com

All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #7151; SANTINI	Date Sampled: 08/12/03
		Date Received: 08/12/03
	Client Contact: Brandi Kiel-Reese	Date Extracted: 08/13/03
	Client P.O.:	Date Analyzed: 08/13/03

**Oxygenated Volatile Organics by P&T and GC/MS\***

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0308152

Lab ID	0308152-005A				Reporting Limit for DF=1	
Client ID	SB-1 W					
Matrix	W					
DF	1				S	W

Compound	Concentration				ug/kg	µg/L
Diisopropyl ether (DIPE)	ND				NA	0.5
Ethyl tert-butyl ether (ETBE)	ND				NA	0.5
Methyl-t-butyl ether (MTBE)	1.8				NA	0.5
tert-Amyl methyl ether (TAME)	ND				NA	0.5
t-Butyl alcohol (TBA)	72				NA	5.0

**Surrogate Recoveries (%)**

%SS:	113				
Comments	i				

\* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.

 Angela Rydelius, Lab Manager



**QC SUMMARY REPORT FOR SW8260B**

Matrix: S

WorkOrder: 0308152

EPA Method: SW8260B		Extraction: SW5030B		BatchID: 8128		Spiked Sample ID: 0308109-001A				
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/Kg	µg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	50	92.2	94.6	2.53	96.7	97.3	0.572	70	130
t-Butyl alcohol (TBA)	ND	250	100	104	3.51	97.9	98.8	0.981	70	130
Diisopropyl ether (DIPE)	ND	50	116	116	0	119	119	0	70	130
Ethyl tert-butyl ether (ETBE)	ND	50	99	101	2.05	103	104	0.509	70	130
Methyl-t-butyl ether (MTBE)	ND	50	99.9	102	2.10	103	102	1.73	70	130
%SS1:	110	100	93.2	91.3	2.03	98.3	97.1	1.27	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
 NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ;  $RPD = 100 * (MS - MSD) / (MS + MSD) * 2$ .

\* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



**QC SUMMARY REPORT FOR SW8260B**

Matrix: W

WorkOrder: 0308152

EPA Method: SW8260B		Extraction: SW5030B		BatchID: 8141		Spiked Sample ID: 0308148-008A				
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	85.1	84.5	0.695	79.9	102	24.7	70	130
t-Butyl alcohol (TBA)	ND	50	89.6	87.2	2.70	77.8	112	35.9	70	130
Diisopropyl ether (DIPE)	ND	10	103	102	0.853	100	121	19.0	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	89.8	89.3	0.603	85	107	23.1	70	130
Methyl-t-butyl ether (MTBE)	ND	10	93.4	94.1	0.756	82.2	105	24.1	70	130
%SS1:	110	100	106	107	0.682	103	101	1.78	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
 NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / (MS + MSD) \* 2.

\* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



**McC Campbell Analytical Inc.**

**CHAIN-OF-CUSTODY RECORD**



110 Second Avenue South, #D7  
 Pacheco, CA 94553-5560  
 (925) 798-1620

WorkOrder: 0308152

**Client:**

All Environmental, Inc.  
 2500 Camino Diablo, Ste. #200  
 Walnut Creek, CA 94597

TEL: (925) 283-6000  
 FAX: (925) 283-6121  
 ProjectNo: #7151; SANTINI  
 PO:

*Date Received:* 8/12/03

*Date Printed:* 8/12/03

Sample ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests						
					SW8260B						
0308152-001	SB-1 4'	Soil	8/12/03	<input checked="" type="checkbox"/>	A						
0308152-002	SB-1 8'	Soil	8/12/03	<input checked="" type="checkbox"/>	A						
0308152-003	SB-1 10'	Soil	8/12/03	<input type="checkbox"/>	A						
0308152-004	SB-1 15'	Soil	8/12/03	<input checked="" type="checkbox"/>	A						
0308152-005	SB-1 W	Water	8/12/03	<input type="checkbox"/>	A						

Prepared by: Michelle Lopez

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

REL

0308152

**McCAMPBELL ANALYTICAL INC.**

110 2<sup>nd</sup> AVENUE SOUTH, #D7  
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

**CHAIN OF CUSTODY RECORD**

**TURN AROUND TIME**

RUSH  24 HR  48 HR  72 HR  5 DAY

EDF Required?  Yes  No

Report To: Brandi K. Reese Bill To:  
Company: AEI Consultants  
2500 Camino Diablo, Suite 200 breese@  
Walnut Creek 94597 E-Mail: aeiconsultants.com  
Tele: ( ) 925-283-6000 Fax: ( ) 925-944-2895  
Project #: 7151 Project Name: SANTINI  
Project Location: SAN LORENZO  
Sampler Signature: Brandi K. Reese

Analysis Request Other Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED								
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other					
SB-1 4'		8/12		1	PLAST	X					X								
SB-1 8'				1		X					X								
SB-1 10'				1		X					X								
SB-1 15'				1		X					X								
SB-1 W		8/12		4	VOA <sub>3</sub>	X					X	X							

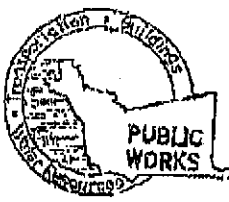
BTEX & TPH as Gas (602/8020 + 8015) AMTBE	
TPH as Diesel (8015)	
Total Petroleum Oil & Grease (5520 E&F/B&F)	
Total Petroleum Hydrocarbons (418.1)	
EPA 601 / 8010	
BTEX ONLY (EPA 602 / 8020)	
EPA 608 / 8080	
EPA 608 / 8080 PCB's ONLY	
EPA 624 / 8240 / 8260	
EPA 625 / 8270	
PAH's / PNA's by EPA 625 / 8270 / 8310	
CAM-17 Metals	
LUFT 5 Metals	
Lead (7240/7421/239.2/6010)	
RCI	
FUEL OXYS (including MTBE)	X
8260	

150

Relinquished By: Brandi Reese	Date: 8/12	Time: 11:05	Received By: [Signature]
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/C	<input checked="" type="checkbox"/>	PRESERVATION	<input checked="" type="checkbox"/>	VOAS	<input checked="" type="checkbox"/>	O&G	<input type="checkbox"/>	METALS	<input type="checkbox"/>	OTHER	<input type="checkbox"/>
GOOD CONDITION	<input checked="" type="checkbox"/>	APPROPRIATE	<input checked="" type="checkbox"/>								
HEAD SPACE ABSENT	<input checked="" type="checkbox"/>	CONTAINERS	<input checked="" type="checkbox"/>								
DECLORINATED IN LAB	<input checked="" type="checkbox"/>	PERSERVED IN LAB	<input checked="" type="checkbox"/>								

LG: v.2.



# ALAMEDA COUNTY PUBLIC WORKS AGENCY

**WATER RESOURCES SECTION**  
399 ELMHURST ST. BAYWARD CA. 94544-1396  
PHONE (510) 670-6633 James Yoo  
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS  
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 16505 WORTHLEY DR.  
SAN LORENZO, CA

FOR OFFICE USE

PERMIT NUMBER W03-0712  
WELL NUMBER \_\_\_\_\_  
APN \_\_\_\_\_

CLIENT  
Name ROGER TAN / SANTIINI FOODS  
Address 16505 WORTHLEY DR Phone 510-317-8343  
City SAN LORENZO Zip 94580

APPLICANT  
Name BRANDI REESE FOR  
AEI CONSULTANTS Fax 925-283-6121  
Address 2300 CAMINO DIABLO Phone 925-283-6000  
City SUITE 200 Zip 94597  
WALNUT CREEK

TYPE OF PROJECT  
Well Construction \_\_\_\_\_ Geotechnical Investigation \_\_\_\_\_  
Cathodic Protection  General   
Water Supply  Confirmation   
Monitoring  Well Destruction

PROPOSED WATER SUPPLY WELL USE  
New Domestic  Replacement Domestic   
Municipal  Irrigation   
Industrial  Other \_\_\_\_\_

DRILLING METHOD:  
Mud Rotary  Air Rotary  Auger   
Cable  Other  **DIRECT PUSH**

DRILLER'S NAME VIRONEX  
DRILLER'S LICENSE NO. 705927

WELL PROJECTS  
Drill Hole Diameter \_\_\_\_\_ in. Maximum \_\_\_\_\_ ft.  
Casing Diameter \_\_\_\_\_ in. Depth \_\_\_\_\_ ft.  
Surface Seal Depth \_\_\_\_\_ ft. Owner's Well Number \_\_\_\_\_

GEOTECHNICAL PROJECTS  
Number of Borings \_\_\_\_\_ Maximum \_\_\_\_\_ ft.  
Hole Diameter \_\_\_\_\_ in. Depth \_\_\_\_\_ ft.

STARTING DATE 8-12-03

COMPLETION DATE same day

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Brandi Reese DATE 7/31/03

PLEASE PRINT NAME BRANDI REESE Rev. 9-18-02

### PERMIT CONDITIONS

Cited Permit Requirements Apply

#### A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

#### B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 30 feet for domestic and irrigation wells unless a lesser depth is specially approved.

#### C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

#### D. GEOTECHNICAL / CONFIRMATION

Backfill hole with tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind.

#### E. CATHODIC

Fill hole inside zone with concrete placed by tremie.

#### F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

#### G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and confirmation investigations.

APPROVED \_\_\_\_\_ DATE 8-1-03