# ALAMEDA COUNTY HEALTH CARE SERVICES



DAVID J. KEARS, Agency Director

AGENCY

May 18, 2007

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Mr. Tom Ferell Vulcan Materials Company 11599 Old Friant Road Fresno, CA 93730

Subject: Fuel Leak Case No. RO0002527 and Geotracker Global ID T06019700255, Vulcan Materials, 501 El Charro Road, Pleasanton, CA 94566

Dear Mr. Ferell:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

 Residual total petroleum hydrocarbons as diesel remain in groundwater at concentrations up to 140 ppm.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna L. Drogos, P.E. LOP and Toxics Program Manager

Enclosures:

- 1. Remedial Action Completion Certificate
- 2. Case Closure Summary

CC:

Ms. Cherie McCaulou (w/enc) SF- Regional Water Quality Control Board 1515 Clay Street, Suite 1400 Oakland, CA 94612

Ms. Danielle Stefani (w/enc) Livermore-Pleasanton Fire Department 3560 Nevada Street Pleasanton, CA 94566

City of Pleasanton Planning and Community Development (w/enc) 200 Old Bernal Avenue P.O. Box 520 Pleasanton, CA 94566-0802 Mr. Toru Okamoto (w/enc) State Water Resources Control Board UST Cleanup Fund P.O. Box 944212 Sacramento, CA 94244-2120

Ms. Colleen Winey, QIC 80201 (w/enc) Zone 7 Water Agency 100 North Canyons Parkway Livermore, CA 94551

Mr. Bryan Behr ENV America 244 California Street, Suite 500 San Francisco, CA 94111

Jerry Wickham (w/orig enc), D. Drogos (w/enc), File (w/enc)

# ALAMEDA COUNTY HEALTH CARE SERVICES



DAVID J. KEARS, Agency Director

AGENCY

May 18, 2007

Mr. Tom Ferell Vulcan Materials Company 11599 Old Friant Road Fresno, CA 93730 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

# REMEDIAL ACTION COMPLETION CERTIFICATE

Dear Mr. Ferell:

Subject: Fuel Leak Case No. RO0002527 and Geotracker Global ID T06019700255, Vulcan Materials, 501 El Charro Road, Pleasanton, CA 94566

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely Ariu Levi

Director // Alameda County Environmental Health

#### CASE CLOSURE SUMMARY LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

### I. AGENCY INFORMATION

Date: May 18, 2007

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Hazardous Materials Specialist

#### II. CASE INFORMATION

Site Facility Name: Vulcan Materials											
Site Facility Address: 501 El Charro Road, Pleasanton, CA 94566											
RB Case No.:   Local Case No.:   LOP Case No.: RO0002527											
URF Filing Date: 11/25/2002	APN: 946-1350-5-3										
Responsible Parties	Addresses	Phone Numbers									
Tom Ferrell, Vulcan Materials		925-485-5977									
Company	11599 Old Friant Road, Fresho, CA 93	730									
Company	11599 Old Friant Road, Fresho, CA 93	3730									

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	12,000 gallons	Diesel	Removed	11/05/2002
2	6,000 gallons	Gasoline	Removed	11/05/2002
	Piping	Removed	11/05/2002	

#### **III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and Type of Release: Unknown. No holes, cracks, or other signs of failure were observed in the tanks during removal.									
Site characterization complete? Yes	Date /	te Approved By Oversight Agency:							
Monitoring wells installed? No		Number:	Proper screened interval?						
Highest GW Depth Below Ground Surface: 56.	6	Lowest Depth: 57.5	Flow Direction: Assumed to southwest based on regional flow direction.						
Most Sensitive Current Use: Drinking water source.									

Summary of Production Wells in Vicinity: The nearest water supply well is 3S/1E14B1, which is approximately 550 feet northwest of the site. Based on the distance from the site and cross gradient direction, well 3S/1E14B1 is not expected to be a receptor for the site. Water supply well 3S/1E14A2 is located approximately 800 feet northeast of the site. Based on the distance from the site and cross gradient direction, well 3S/1E14A2 is not expected to be a receptor for the site. Water supply well 3S/1E14A1 is not expected to be a receptor for the site. Water supply well 3S/1E14G1 is the nearest downgradient well and is located approximately 1,200 feet west of the site. Based on the low concentrations of TPH as diesel detected in groundwater samples at the site and the distance from the site to well 3S/1E14G1, the well is not expected to be a receptor for the site.

Are drinking water wells affected? No	Aquifer Name: Amador Subbasin of Livermore/Amador Basin							
Is surface water affected? No	Nearest SW Name: Arroyo Mocho Canal is approximately 450 feet northeast of the site.							
Off-Site Beneficial Use Impacts (Addresses/Locat	Off-Site Beneficial Use Impacts (Addresses/Locations): None							
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and Livermore Pleasanton Fire Department							

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL									
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date						
Tank	1 – 12,000 gallon tank 1 – 6,000 gallon tank	Transported to Ecology Control Industries in Richmond, CA for disposal	11/05/2002						
Piping	Not reported	Transported to Ecology Control Industries in Richmond, CA for disposal	11/05/2002						
Free Product	None	-	-						
Soil	None	-							
Groundwater	None	-							

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

Contominant	Soil	(ppm)	Water (ppb)		
	Before	After	Before	After	
TPH (Gas)	31	<0.2	<50	<50	
TPH (Diesel)	1,800	<1	140	140	
Oil and Grease	NA	NA	NA NA		
Benzene	<0.005	<0.005	<0.5	<0.5	
Toluene	0.013	<0.005	<0.5	<0.5	
Ethylbenzene	0.034	<0.005	<0.5	<0.5	
Xylenes	0.018	<0.005	<0.5	<0.5	
Lead	7.1(1)	7.1(1)	<0.005(2)	<0.005(2)	
МТВЕ	<0.005(2)	<0.005(2)	<5(3)	<5(3)	
Other (8240/8270)	NA(4)	NA(4)	NA(4)	NA(4)	

(1) Total lead; no other metals analysis conducted.

(2) Lead was not detected above a reporting limit of 5 ppb in a grab groundwater sample collected from boring B-5, which was filtered in the laboratory prior to preservation and analysis. Lead was detected at concentrations ranging from 140 to 1,000 ppb in four grab groundwater samples that were not filtered and were stored in acid preservative. Due to the high turbidity of the four grab groundwater samples and the potential for the acid preservative to leach lead from the suspended sediment, the analytical results for dissolved lead from these four grab groundwater samples are not considered accurate.

(2) MTBE <0.005 ppm; DIPE, ETBE, TAME, EDB, and EDC <0.005 ppm; TBA < 0.009 ppm in soil. (3) MTBE, DIPE, ETBE, TBA, TAME, EDB, and EDC <0.5 ppb in groundwater.

(4) No VOC, SVOC, or other analyses.

Site History and Description of Corrective Actions:

One 12,000-gallon diesel UST and one 6,000-gallon gasoline UST were removed from a shared excavation on November 5, 2002. Tank inverts were at reported depths of 11.5 and 12 feet bgs. Soil samples collected from native material at the base of the tank excavation contained up to 1,800 ppm of TPH as diesel and 31 ppm of TPH as gasoline. Benzene was not detected in the soil samples and toluene, ethylbenzene, and xylenes, were detected at concentrations of less than 2.1 ppm. MTBE and other fuel oxygenates were not detected in the soil samples collected during tank removal.

In order to investigate the extent of soil and groundwater contamination, four soil borings (B-1 through B-4) were advanced using a hollow stem auger drilling rig on November 27 and 28, 2006. The soil borings were continuously cored to total depths of approximately 58 feet bgs. No stained soil and odor was observed in the borings and no fuel hydrocarbons, oxygenates, or lead scavengers were detected in soil samples collected at depths of 15 and 55 feet bgs from each boring. Lead was detected in the soil samples at concentrations ranging from 3.5 to 7.1 ppm. Groundwater samples were collected from each of the four soil borings by installing a temporary well inside the hollow stem augers. TPH as diesel was detected in two of the grab groundwater samples collected at concentrations ranging from 140 to 1,000 ppb. The grab groundwater samples that were analyzed for lead were not filtered and were stored in sample containers with acid preservative. Due to the high turbidity of the grab groundwater samples and the potential for the acid preservative to leach lead from the suspended sediment, the analytical results for dissolved lead are not considered accurate.

A fifth soil boring (B-5) was advanced at the site to collect a more representative sample for dissolved lead in groundwater. The grab groundwater sample from boring B-5 was filtered in the laboratory prior to being preserved. Lead was not detected in the grab groundwater sample above the reporting limit of 5 ppb.

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan?								
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan?								
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.								
Site Management Requirements: None								
Should corrective action be reviewed if land us	e changes? No							
Was a deed restriction or deed notification filed	i? No	Date Recorded:						
Monitoring Wells Decommissioned: No Number Decommissioned: 0 Number Retained: 0								
List Enforcement Actions Taken: None								
List Enforcement Actions Rescinded:								

# V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

None.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

# VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	Title: Hazardous Materials Specialist
Signature: Jerus A. Juckleum	Date: OSLISIO7
Approved by: Dorina Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature:	Date: 05/15/07

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

#### VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist						
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:						
Signature: Chine Malanto	Date: 5/17/07						

#### VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: NA	Date of Well Decommissioning Report: NA								
All Monitoring Wells Decommissioned: NA	Number Retained: NA								
Reason Wells Retained: NA									
Additional requirements for submittal of groundwater data from retained wells: NA									
ACEH Concurrence - Signature: With Coloren Date: 05/17/07									
c c									

Attachments:

- Site Location Map and Site Plan Soil Sample Locations Site Map with Boring Locations Soil Analytical Data Groundwater Analytical Data 1.
- 2. 3.
- 4.
- 5.
- 6. Boring Logs

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.







#### TABLE 1

#### SUMMARY OF SOIL ANALYTICAL RESULTS

#### Vulcan Materials Company Pleasanton Facility 501 El Charro Road, Pleasanton, California

					VOC's <sup>1</sup> (mg/Kg) <sup>4</sup>								TEPH <sup>2</sup> (mg/Kg)	Metals <sup>3</sup> (mg/Kg)	
		1,2-Dichloroethane	Benzene	Ethylbenzene	MtBE	TAME	Toluene	Total Xylene <del>s</del>	TBA	3410	EDB	Ë	Gasoline Rang Organics	Diesel Range Organics	Lead
Sample ID	Sampie Date														
B-1@15'	11/27/06	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0089	<0.0089	<0,0045	<0,0045	<0,0045	<0,22	<1.0	7.1
B-1@55'	11/27/06	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0089	<0.0089	<0,0045	<0.0045	<0,0045	<0.22	<1.0	3,5
B-2@15'	11/27/06	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0096	<0.0048	<0.0048	<0.0048	<0,24	<0.99	5.9
B-2@55'	11/27/06	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.25	<0.99	3.9
B-3@15'	11/28/06	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0088	<0.0088	<0.0044	<0.0044	<0.0044	<0.22	<0.99	5.3
B-3@55'	11/28/06	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0097	<0.0097	<0.0049	<0.0049	<0.0049	<0.24	<1.0	4.0
B-4@15'	11/28/06	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0094	<0.0047	<0.0047	<0.0047	<0.24	<0.99	6.8
B-4@55'	11/28/06	<0.0047	<0.0047	<0.0047	<0,0047	<0.0047	<0.0047	<0.0094	<0.0094	<0.0047	<0.0047	<0.0047	<0.24	<1.0	3.6

Notes: 1 - Volatile Organic Compounds by Environmental Protection Agency (EPA) Test Method \$260B 2 - Total Extractable Petroleum Hydrocarbons analyzed by EPA Test Method 8015B Modified 3 - Metals as lead by EPA Test method 6010B 4 - Milligram per kilogram. <## - not detected at or above the laboratory reporting limit



# **Table 1- Analytical Data Spreadsheet**

Site Address: 501 El Charro Road, Pleasanton, CA

Project Number: 6546-004.00

Site Name: Vulcan Materials Sampling Date: 11/5/02

Reporting Date:12/17/02

Sample ID	TPHd	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylene	ТВА	MTBE	DIPE	ETBE	TAME	Total Lead
TANK 1										•	<u> </u>	
T1V-14.0'	68	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	0.011	<0.005	<0.010	<0.0050	<0.0050	6.3
T1F-12.4'	1,800 🌶	31	<0.025	<0.025	0.66	2.1	<0.025	<0.025	<0.050	<0.025	<0.025	4.6
TANK 2								-				
T2V-11.5'	N/A	<1.0	< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	2.0
T2F-12.5'	N/A	2.7	<0.0050	<0.0050	<0.0050	0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	6.3
DISPENS	ERS											
D1-2.0	50	<1.0	<0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	N/A
D2-2.0	2.8	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	N/A
D3-2.0	95	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	N/A
D4-2.0	29	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	N/A
D5-2.0	<1.0	<1.0	<0.0050	0.011	0.042	0.31	0.0083	<0.0050	<0.010	<0.0050	<0.0050	N/A
SOIL STO	DCKPILE											
SP-(A-D)	53	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	0.020	<0.0050	<0.010	<0.0050	<0.0050	2.7

Notes:

Samples results are in milligrams per kilogram (mg/kg), approximately equal to parts per million

< analytical results under laboratory reporting limit

N/A = samples were not analyzed for this constituent

TBA = tert-Butyl alcohol

*MTBE* = *Methyl tert-butyl ether* 

DIPE = Di-isopropyl Ether

ETBE = Ethyl tert-butyl ether

TAME = tert- Amyl methyl ether

#### TABLE 2

#### SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

## Vulcan Materials Company Pleasanton Facility 501 El Charro Road, Pleasanton, California

				· · · · · · · · · · · · · · · · · · ·	<del></del>	••	VOC's <sup>1</sup>	(µg/L) <sup>4</sup>						TEPH <sup>2</sup> (µg/L)	Metals <sup>3</sup> (mg/L) <sup>5</sup>
Sample ID	Sample	1,2-Dichloroethane	Benzene	Ethylbenzene	MtBE	TAME	Toluene	Total Xylenes	TBA	DIPE	EDB	EtBE	Gasoline Range Organics	Diesel Range Organics	Lead
Sample ID	Date														
B-1	11/27/06	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<5.0	<1,0	<0.50	<0.50	<50	140	1.0*
B-2	11/27/06	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<5.0	<1.0	<0.50	<0.50	<50	65	0.14*
B-3	11/28/06	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<5.0	<1.0	<0.50	<0.50	<50	<50	0.8*
B-4	11/28/06	<0.50	<0.50	<0.50	<0,50	<0.50	<0,50	<1,0	<5,0	<1,0	<0,50	<0,50	<50	<50	1.0*
B-5	1/31/07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0047

Notes: 1 - Volatile Organic Compounds by Environmental Protection Agency (EPA) Test Method 8260 2 - Total Extractable Petroleum Hydrocarbons analyzed by EPA Test Method 8015B Modifie 3 - Metals as lead by EPA Test method 6010B 4 - Micrograms per liter 5 - Milligrams per liter 5 - Milligrams per liter - ## - not detected at or above the laboratory reporting limi \* - Sample was not filterod prior to being analyzed in the laboratory NA - Not analyzed



	-		~				
<b>r</b> .	Drilling	Co:	Gre	egg C	orillir	ig & Testing, Inc. Drilling Method: <u>Hollow Stem Auger</u> Sampling Method: Modified California Drive Sampler 148" v 2 0"1 Approved by: A	3. Behr Atkinson
Date :		ted:	116	27/06	5	Hole Diameter: 6" Surface Elevation: 383 re	eet above msi
/th  -	Sample ID	Samples	Blow Count	PID	Water Levels	DESCRIPTION	
						POORLY GRADED GRAVEL (GP), light olive brown (2.5Y 5/4), moist, 90% fine to coarse gravel, 10% fine to medium gravel	
						POORLY GRADED GRAVEL with SAND (GP), light olive brown (2.5Y 5/4), wet, 75% fine to coarse subangular gravel, 25% medium sand	Type II-V Neat Cement Grout with a tremmie pipe to ground surface
المسلميا مراديا وال						· .	
			19 25 14	0		SILT (ML), olive brown (2.5Y 4/4), moist, 90% fines, 10% fine gravel, nonplastic	
			4 7 7	0			
			4 3 3 1	0			
			3 4 5 3	o			
			4 4 3	0		In plasticity	
			3 4 3	0			
-		$\left  \right\rangle$	4	0			
TES	ð:	·`	•		<u>بہ ، بہ</u>	· · · ·	
		A	I. M	IV E R		BORING LOG	
		ENV	RONM	ENTAL	ENGI	EERING, Project Location 501 El Charro Road,	

Pr	oject:	<u>v</u>	NC	Plea	isa	ntonBoring:B-1Pg.	_2_ of _4_
	Drilling	Co:	Gre	egg C	) rilli	ng & Testing, Inc. Drilling Method: <u>Hollow Stem Auger</u> Logged by: <u>E</u>	3. Behr
Dat	Date Sta e Comple	rted: eted:	<u>11/</u> 11/	<u>27/06</u> 27/06	<u>}</u>	Sampling Method: <u>Modified California Drive Sampler [18" x 2.</u> 0"] Approved by: <u>A. 7</u> Hole Diameter: 6" Surface Elevation: 383 fr	Atkinson et above msl
	· · · ·				т		
Depth in feet	Sample ID	Samples	Blow Count	Old	Water Levels	DESCRIPTION	
15	B-1-15.5		5			SANDY LEAN CLAY (CL) (Continued)	
16		$\left  \right $	5	0			Type II-V Neat Cement Grout with a tremmie
17			4 5 6	o		LEAN CLAY with GRAVEL (CL), olive brown (2.5Y 4/4), moist, 75% fines, 15% fine gravel, 10% fine sand, low to medium plasticity	surface
19			4			₺ 70% fines, 20% fine gravel, 10% fine sand	
		$  \setminus$	11	0		⊕ 65% fines, 25% fine to medium gravel as above	
20 21		$\overline{\ }$	5 10 11	0			
22	-		50 4 6	0		POORLY GRADED GRAVEL with CLAY and SAND (GP-GC), olive brown (2.5Y 4/4), moist, 70% fine to coarse rounded gravel, 20% fine to medium sand, 10% low plasticity fines	
23			20 22 23	o			
25			14 32 35	0			
26	-		18 32 35	0			
28			16 20 22	0		$\clubsuit$ 60% fine to medium subangular gravel, 30% fine sand, 10% low plasticity fines	
29 30			16 23	0			
	ES:						
		A	EA M	IV E R		BORING LOG	
		ENV CON	ironin Isulti	NG & C	ENGL	VIELERING, RUCTION         Project Location         501 El Charro Road, Pleasanton, CA         Project No.         Last	Revised . 2/8/2007

Pro	oject:	: <u>v</u>	MC	Plea	Isa	nton			Boring:	B-1	Pg. <u>3</u> of <u>4</u>
	Drilling	Co:	Gre	gg C	rilli	ng & Testing, Inc.	Drilling Method:	Hollow Stem Auger		Logged by:	B. Behr
	Date Sta	rted:	.11/	27/06	1		Sampling Method:	Modified California E	)rive Sampler <u>[18" x 2.</u> 0"	"] Approved by: Surface Elevation:	A. Atkinson
Date	e Comple	eted:	_11/	27/06	i		Hole Diameter:			Surrace Elevation:	383 feet above msi
Depth in feet	Sample (D	Samples	Blow Count	DIA	Water Levels			DESCRIPTION			
30 -		И	25			POORLY GRADED	OGRAVEL with CLA	Y and SAND (GP-C	GC) (Continued)		
31 -			29 32 28	0							Type II-V Neat Cement Grout with a tremmie pipe to ground
32 -		$\left[ \right]$	16 20 20	Q							surface
34 -			30 50								
35 -			46 14	0							
- - 36 -		$\left  \right\rangle$	22 25	0		POORLY GRADE	O GRAVEL with SAN	ID (GP), olive brow	n (2.5Y 4/4), moist, 1	70% fine to medium	
37 -		$\triangleright$	23 50/6	O		subangular gravel,	30% medium sand				
38 -		$\left \right\rangle$	22 35	0							
39 -			35 16	0							
40 -			30 35	0							
		$\left \right $	21 34 20	0							
43 -		$\square$	16 33	0							
- 44 - 44 - 44 - 44 - 44 - 44 - 44 - 4			40 24 30								
45 -		$  \rangle$	<u> </u>	0	[						
	S:										
NINIC ANN		A	EA M	IV E R				В	ORING I	_OG	
10 00		ENV CON	ironn Isulti	Ental NG&C	ENGA XONST	NEERING, RUCTION	Project Loca	tion 501 El Plea	Charro Road, isanton, CA	Project No. VMC0609	Last Revised 2/8/2007

`

Pro	oject:		MC	Plea	isa	nton			Boring:	<u>B-1</u>	Pg4_ of _4_
	Drilling	Co:	Gre	gg C	Drilli	ng & Testing, Inc.	Drilling Method:	Hollow Stem Auger		Logged by:	B. Behr
D	ate Sta	rted:	11/	27/06			Sampling Method:	Modified California D	rive Sampler (18" x 2.0"	Approved by:	A. Atkinson
Date	Comple	eted:	_ <b>11</b> //	27/06	;		Hole Diameter:	6"		Surface Elevation:	383 feet above msl
Depth       In         feet	G eldus	Samples	19 25 36 39 18 31 21 21 34 20 17 31 40 25 26 39 18 31 21 21 34 20 17 31 40 25 36 39 18 31 21 21 34 30 25 36 39 39 30 39 30 39 30 39 30 30 30 30 30 30 30 30 30 30 30 30 30		Water Levels	POORLY GRADE	D GRAVEL with SAN	DESCRIPTION			Type II-V Ne Cement Gro with a tremm pipe to group surface
<b>59</b>											
<sub>60</sub> ⊥										<u></u>	
NOTES	5:									Line - L L	
		A	E <b>r</b>	IV E R		C A		В	ORING I	_OG	
		ENV	RONM	ENTAL	ENGI	NEERING,	Project Loca	tion 501 El	Charro Road,	Project No.	Last Revised
ENVIRONMENTAL ENGINEERING, Projection Projection								oon ourter Plea	santon, CA	VMC0609	2/8/200

	Drilling Date Sta	Co: arted:	<u>Gre</u>	27/06	orillin	ng & Testing, Inc. Dril	ling Method: ling Method:	Hollow Stem Auger Modified California	Dorive Sampler [18" x 2.0	Logged by: "] Approved by: Surface Electric	B. Behr A. Atkinson
Date	Compl	eted:	_11/	27/06		Ho	ie Diamétér:	_ <b>6</b> "		Surrace clevation:	383 feet above in
Depth in feet	Sample ID	Samples	Blow Count	DId	Water Levels			DESCRIPTION			
$\begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 10 \\ 11 \\ 12 \\ 11 \\ 12 \\ 11 \\ 11 \\ 11$			10 13 13 5 4 6 13 19 4 4 10 4 3 9 8 7 7 4 4			POORLY GRADED GRA 10% fine to medium sand POORLY GRADED GRA medium subangular grave SILT (ML), olive brown (2 SANDY LEAN CLAY (CL medium plasticity	VEL (GP), lig VEL with SAN 1, 25% mediu 5Y 4/4), moi ), olive brown	nt olive brown (2.5) ID (GP), light olive m sand	fine gravel, nonplast	ne to medium gravel oist, 75% fine to ic	rel,
NOTE	S:		<del>.</del>								
		A	E <b>N</b>	IV E R				E	ORING	LOG	
		ENV	RONM	ENTAL	ENGI	EER(NG,	Project Loca	tion 501 E	Charro Road,	Project No.	Last Revised

Pro	oject:	<u></u>	NC	Plea	isa	ton	Boring:	B-2	Pg. <u>2</u> of <u>4</u>
	Drilling	Co:	Gre	egg C	Drilli	g & Testing, Inc. Drilling Method: Ha	ollow Stem Auger	Logged by:	B. Behr
] Dete	Date Sta	rted:	11/	27/06	i	Sampling Method: Mo	odified California Drive Sampler [18" x 2.0"]	Approved by: Surface Elevation:	A. Atkinson
	O e	S. S.	tount		Levels	. E	DESCRIPTION		
Jepth in	ample	ample	low C	Ω	/ater				
feet	ۍ ا	s.	8	<u>a</u> .	\$				
-			з			SANDT LEAN CLAT (CL) (Continued)			
16 - - -	B-2-15.5		6 10	o		LEAN CLAY with GRAVEL (CL), olive brow	vn (2.5Y 4/4), moist, 75% fines, 15%	fine gravel, 10% fin	Type II-V Neat Cement Grout with a tremmin
17 -		$\backslash$	10 12	0	}	sand, medium plasticity			surface
18 - - -			4						
19 - -		$\mathbb{N}$	8	0	,				
20 -		$\overline{}$	9						
21 -			10	0					
22 -		$\left[ \right]$	6 7 9	0					
23 - - -			16 19						
24 -			22 21	0					
25 - - -		$\backslash$	20 37	0			nd SAND (GP.GC) alive brown (2.5	Y 4/4) moist 70% (	ine
26 -		$\left  \right\rangle$	20 20			to medium gravel, 20% fine to medium san	id, 10% low plasticity fines		
27 -			27						
28 - -	·	$\left  \right\rangle$	21 31	0					
29 - -		$\vdash$	16 23						
- 30 30	1			0					
NOTE	S:								
			5	<b>V</b>			BORING L	.0G	
		A FMV	<b>M</b> IROMM	E A (Entai	ENGI	FRING Project Location	501 El Charro Road	Project No.	Last Revised
		CON	ISULTI	NG & C	CONST	истой	Pleasanton, CA	VMC0609	2/8/2007

Ρ	roje	ect:	V	NC	Plea	isa	nton			Boring:	B-2	Pg. <u>3</u> of <u>4</u>
	D	rilling	Co:	Gre	egg C	<u>Drilli</u>	ng & Testing, Inc.	Drilling Method:	Hollow Stem Auger		Logged by:	B. Behr
	Date	e Star	ted:	11/	27/06	i		Sampling Method:	Modified California D	)rive Sampler [18" x 2.0"	Approved by:	A. Atkinson
Da	ate Co	omple	ted:	11/	27/06	<u> </u>		Hole Diameter:	_6"		Surface Elevation:	383 feet above mst
Depti in feet	h .	Sample ID	Samples	Blow Count	Ole	Mater Levels			DESCRIPTION			
30	+			25	-	-	POORLY GRADE	D GRAVEL with CLA	Y and SAND (GP-C	GC), olive brown (2.5	5Y 4/4), moist, 60%	 fine
				29			to medium subang	gular gravel, 30% med	lium sand, 10% low	plasticity fines		
31			$\backslash$	31	0							Type II-V Neat Cement Grout
32	-			30								with a tremmie pipe to ground
			$\mathbf{N}$	19 24								surface
33			$  \setminus$	24	0							
				27								
34	-		$\backslash$	29 35	0							
35				31							·	
	-		$\backslash$	31	0							
36				39								
37			$\setminus$	35 38								
			$  \setminus$	40	0							
38	-			28								
39	-		$\backslash$	50/6	0							
				21								
40			$\backslash$	33	¢.							
41				20			POORLY GRADE subangular gravel	D GRAVEL with SAN 30% medium sand	ID (GP), olive brown	n (2.5Y 4/4), moist,	70% fine to medium	
			$\backslash$	18 31								
<b>42</b>			$  \setminus$	40								
100	-			24								
43 YOIN				40	0							
WY 44				38								
			$\backslash$	38	Q							
01 45	_1			×	L	·····						
	TES:											
						1		`				
					ľ				В	ORING I	LOG	
			A	M	EA				Kan	Obarra Data 1	Droin of Mo	Last Revised
000			CON	ISULTI	NG & C	ENG). CONST	RUCTION	Project Loca	Don 501 El	unarro Koad, Isanton, CA	VMC0609	2/8/2007

	Drilling	Co:	Gre	gg C	rillin	ng & Testing, Inc.	Drilling Method:	Hollow Stem Auger		Logged by:	B. Behr
Date	Date Sta e Comple	rted: ated:	_ <u>11/;</u> 	2 <u>7/06</u> 27/06	:		Sampling Method: Hole Diameter:	Modified California D	<u>rive Şampler [18" x 2.</u> 0'	Surface Elevation:	A. Atkinson 383 feet above msl
	Ð	0	unt		evels			DESCRIPTION			
)epth in feet	sample	samples	slow Co	Ū,	Vater Lo						
45 -		8	40	а.	~	POORLY GRADE	OGRAVEL with SAN	ID (GP) (Continued)	)		
46 -			19 27 32	0							Type II-V Ne Cement Gro with a tremn
47 -		$\overline{)}$	17 31	0							pipe to grour surface
48 - - 49 -			40 33 33								
50 -			37 16	0							
51 -		$\left  \right\rangle$	27 34	0							
52 -			21 31 38	0							
53 - -			21 21				·				
54 -			34 25	0							
55 - - - - -	B-2-55.5		20 32								
57 -	•	$\backslash$	28 35 41	о							
- - 58 -	]	L\	l		]	TOTAL DEPTH 57 GROUNDWATER	5 FEET BELOW GI	ROUND SURFACE T 56.5 FEET BELO		ACE	]
- - 59 -											
60 -							···· • • • • • • • • • • • • • • • • •				
NOTE	S:						·				
			Ņ	11				В	ORING I	_OG	
		A	М	E R	1	u a					

Pro	oject:	<u></u>	ис	Plea	asa	nton Boring: B-3	<sup>2</sup> g. <u>1</u> of <u>4</u>
	Drilling	Co:	Gre	egg C	Drilli	ng & Testing, inc. Drilling Method: Hollow Stem Auger Logged by:	B. Behr
C	Date Sta	rted:	11/	28/07	<u> </u>	Sampling Method: <u>Modified California Drive Sampler [18" x 2.</u> 0"] Approved by:	A. Atkinson
Date	Comple	eted:	_11/	28/07	Ľ	Hole Diameter: <u>6"</u> Surface Elevation: 3 <u>83</u>	2.5 feet above msl
Depth in feet	Sample ID	Samples	Blow Count	DID	Water Levels	DESCRIPTION	
0 -						POORLY GRADED GRAVEL (GP), light olive brown (2.5Y 5/4), moist, 90% medium subangular gravel, 10% fine to medium sand	
1						WELL GRADED GRAVEL with SAND (GW), light olive brown (2.5Y 5/4), moist, 75% fine subangular gravel, 25% medium sand	Type II-V Neat Cement Grout with a tremmie pipe to ground surface
5 +			10 12 14 7 8	0		SILT with GRAVEL (ML), olive brown (2.5Y 4/4), moist, 85% fines, 15% fine gravel, nonplastic	
			3 5 8	0		SANDY LEAN CLAY (CL), olive brown (2.5Y 4/4), moist, 55% fines, 35% fine sand, 10% fine gravel, low plasticity	_
10			6 7 4	o			
12 -			3 5 6 9	0			
14 - - -			3 4	0			
	s:	• <u> </u>	<u>N</u>		<u> </u>		
		A	E/ M	IV E R		BORING LOG	
		ENV	IRONN ISULTI	iental NG & (	engi Xonst	VEERING, Project Location 501 El Charro Road, Project No. La RUCTION Project No. La	ast Revised

LOG OF BORING VMC PLEASANTON.GPJ ENV AMERICA.GDT 2/8/07

. .

Pro	oject:		NC	Plea	Isa	nton			Boring:	B-3	Pg. <u>2</u> of <u>4</u>				
	Drilling	Co:	Gre	egg D	rilli	ng & Testing, Inc. Di	rilling Method:	Hollow Stem Au	ger	Logged by:	B. Behr				
0	Date Sta	rted:	11/	28/07	•	Sam	pling Method:	Modified Califor	nia Drive Sampler (18" x 2.0	7] Approved by:	A. Atkinson				
Date	e Comple	eted:	_11/	28/07	•	Н	lole Diameter:	6"		Surface Elevation:	382.5 feet above msl				
Depth in feet	Sample ID	Samples	<sup>2</sup> Blow Count	DIA	Water Levels			DESCRIPTI	ON						
-			3			SANDY LEAN CLAY (C	L) (Continued)								
16 - - - 17 -	B-3-15.5		3 4	O		LEAN CLAY with GRAV sand, low to medium pla	EL (CL), olive	orown (2.5Y 4/4	l), moist, 75% fines, 20	% fine gravel, 5% fin	Type II-V Neat Cement Grout with a tremmie pipe to ground				
- - 18 -		$\backslash$	4	o							surface				
- - 19 - -			548	0											
20 -			6	o											
21 - - - 22 -			7 23 20												
- - 23 -	•		29 31	0											
24 - 			30 28 16	0		POORLY GRADED GR subrounded gravel, 20%	AVEL with CLA medium sand	Y and SAND ( 10% low plasti	3P-GC), olive brown (2. city fines	5Y 4/4), moist, 70%	fine				
25 -			23	ο											
20 -			22 20 25	0											
- 28 - -		$\overline{)}$	30 36 25	ο											
29 - - -			18 23	0											
30 -	I	·`	N	L	L	L					· · · · · · · · · · · · · · · · · · ·				
NOTE	S:										•				
		A	E/ M	IV e r		G A			BORING	LOG					
		ENV COM	IRONN ISULTI	iental NG & C	ENGI ONST	NEERING, RUCTION	Project Loca	tion 50	1 El Charro Road,	Project No.	Last Revised				
									rieasanton, CA	VMC0609	2/8/2007				

Pr	oject	: <u>v</u>	NC	Plea	Isa	nton		Boring:	B-3	Pg. <u>3</u> of <u>4</u>	
:	Drilling Co: <u>Gre</u> Date Started: <u>11/2</u> Date Completed: <u>11/2</u>				Drilli	ng & Testing, Inc. Drilling Method	·	Logged by:	B. Behr		
						Sampling Metho	Modified California	Drive Sampler [18" x 2.0"]	Approved by:	A. Atkinson	
Date						Hole Diamete	<u> </u>	· · · · · ·	Surface Elevation:	382.5 feet above insi	
Depth	ple ID	Iples	/ Count	-	er Leveis	· · · · · · · · · · · · · · · · · · ·	DESCRIPTION				
feet	Sam	Sam	Blow	DID	Wate						
30		F	28		-	POORLY GRADED GRAVEL with C	LAY and SAND (GP-	GC) (Continued)			
31			16 19 24	0						Type II-V Neat Cement Grout with a tremmie	
32		$\vdash$	32							pipe to ground	
33			30 34	0							
34			22			POORLY GRADED SAND (SP), oliv	e brown (2.5Y 4/4), m	noist, 95% medium sa	nd, 5% fines		
35			30	0							
36	┰╾┰╸┰	$\left  \right\rangle$	30 34	o		POORLY GRADED GRAVEL with S	AND (GP), olive brow	/n (2.5Y 4/4), moist, 7	0% fine to coarse		
37		$\square$	28 31 30	o		subangular gravel, 30% medium sar	d				
38	-	$\vdash$	30 30								
39	-	$\left  \right\rangle$	30 35	0							
40		$\left \right $	19 25 24	0							
41	-	$\overline{\left\langle \cdot \right\rangle}$	18 19	0							
42	-	$\vdash$	20 18								
43		$\left  \right\rangle$	18 23	0							
44		$\sum$	21 34	0							
NOTE	ES:										
	ENV BORING LOG										
		ENV	IRONN ISULTI	iental NG & C	engi Xonst	VEERING, Project Lo	cation 501 E Plea	l Charro Road, asanton, CA	Project No. VMC0609	Last Revised 2/8/2007	

Pro	ject:		<u> C  </u>	Plea	Isal	nton			Boring:	B-3	Pg4_ of _4_
Drilling Co: <u>Gregg Drilling &amp; Testing, Inc.</u> Date Started: <u>11/28/07</u>						ng & Testing, Inc. Dr	ting, Inc. Drilling Method: Hollow Stem Auger Lo				B. Behr
						Samj H	ole Diameter:	Modified California	orive Sampler [18" x 2.0"	"] Approved by: Surface Elevation:	A. Atkinson 382.5 feet above msl
	0	s	ount		evels.			DESCRIPTION			
pth n	ample	ample	OW C	٩	later L						
et 15 -	ű	s,	30	<u>a.</u>	3			ID (CP) olive browt	a (2.5V A(4) moiet	75% fine to coarse	
		$\left  \right\rangle$	28			gravel, 25% medium san	d		r (2.01 4/4), molar,	O A Ame to Coarse	
16 -		$\left  \right\rangle$	32 35	0							Type II-V Nea Cement Grou
- 17 -		$\square$	35								pipe to ground
-		$\left  \right\rangle$	40	o							Surrace
18 - - -			41								
19 - 1		Ň	30 36	^							
-		$  \setminus$	40	U							
- 0 -		$\square$	25 32								
i1 -		$  \setminus$	40								
		$\vdash$									
- 22 - -											
53 - -											
- 											
								-			
55 -											
;6 -											
1 1 1						·					
7 -											
- - - 8		l	L	Ļ	]	TOTAL DEDTH SO SSS					
						GROUNDWATER ENCO	DUNTERED A	T 56.5 FEET BELO	W GROUND SURF	ACE	
59 - 											
50 <sup>-</sup>											
OTE	S:						<u> </u>				
							1				
				11				-			
		A	n n l	E A	ī	C A		В		LUG	
		ENV	RONM	ENTAL	ENGI	VEERING,	Project Loca	tion 501 El	Charro Road,	Project No.	Last Revised

LOG OF BORING VMC PLEASANTON GPJ ENV AMERICA GDT 2/8/07

Pro	oject	: <u>v</u>	<u>AC F</u>	Plea	Isanton			Boring:	B-4	Pg. <u>1</u> of <u>4</u>
Drilling Co: Date Started: Date Completed:		) Co: arted: eted:	<u>Gre</u> 11/2 11/2	ag D 8/07 8/07	Prilling & Testing, Inc.	Drilling Method: Sampling Method: Hole Diameter:	Hollow Stem Auger Modified California I 6"	Drive Sampler [16" x 2.0	Logged by: "] Approved by: Surface Elevation:	B. Behr A. Atkinson 382.7 feet above msl
Depth in feet	Sample ID	Samples								
					POORLY GRADED GR medium subangular gra WELL GRADED GRAV subangular gravel, 25%	AVEL (GP), light oli vel EL with SAND (GW medium sand	ve brown (2.5Y 5/4 ), light olive brown	), 90% fine to coars (2.5Y 5/4), moist, 75	e gravel, 10% fine to	Type II-V Net Cement Grou with a tremm pipe to groun surface
4			0		SILT (ML), olive brown	(2.5Y 4/4), moist, 9(	0% fines, 10% fine	gravel, nonplastic		
/			0		SANDY LEAN CLAY (C medium plasticity	E), olive brown (2.5	Y 4/4), moist, 55%	fines, 35% fine sand	d, 10% fine gravel,	
11			0							
			0							
	»									
		A	N M	IV R			В		LOG	
		ENVI. CON:	ronme. Sulting	VTAL I B& CC	ENGINEERING, DNSTRUCTION	Project Locat	ion 501 El Plea	Charro Road, santon, CA	Project No. VMC0609	Last Revised 2/8/2007

.

.



	Pr	oject	: <u>v</u>	MCI	Plea	asanton	· · · · · · · · · · · · · · · · · · ·		Boring:	B-4	Pg.	<u>3</u> of <u>4</u>
	Drilling Co: Date Started:			Gre	gg C	Drilling & Testing, Inc.	Drilling Method:	Hollow Stem Auger		Logged by:	<u> </u>	<u>B. Behr</u>
				11/2	28/07	<u>.                                    </u>	Sampling Method:	Modified California D	rive Sampler [18" x 2.0"]	Approved by:	Α.	Atkinson
	Date	Date Completed: <u>11/2</u>				1	Hole Diameter:	_6"		Surface Elevation:	3 <u>82.7</u>	feet above msl
	Depth in feet 30 - - - - - - - - - - - - - - - - - - -	e Compl	eted:	-11/2 으 	Water Levels	POORLY GRADED GR subangular gravel, 30%	Hole Diameter:	 DESCRIPTION d SAND (GP-GM) (C	Continued)	Surface Elevation:	382.7	Type II-V Neat Cement Grout with a tremmie pipe to ground surface
RICA.GDT 2/8/07	38			0 0 0								
ON.GPJ ENV AME	44 45			0								
SANT	NOTE	S:										· · · · · ·
۲ <u>۲</u>												
F BORING VMC I			A	М 1	<b>V</b> R			B	ORING L	OG		
000			ENVI CONS	ronme Sulting	NTAL B&CC	ENGINEERING, ONSTRUCTION	Project Locat	Project Location 501 El Charro Road, Project No. Last Re				
Ľ				<u>~                                    </u>			·	rieas	anton, CA	AIMC0203	1	210/2007

Pro	oject:		AC F	Plea	santon			Boring:	B-4	Pg4_ of _4_	
Drilling Co: Date Started: Date Completed:			Gre 11/2 11/2	99 D 8/07 8/07	rilling & Testing, Inc.	Drilling Method: Sampling Method: Hole Diameter:	Hollow Stem Auger Modified California D 6"	rive Sampler [18" x 2.0"	Logged by: ) Approved by: Surface Elevation:	B. Behr A. Atkinson 382.7 feet above msl	
Depth in feet	Sample ID	Samples	PID	Water Levels			DESCRIPTION				
45 46 47 47 48 49 50 51 52 53 54 55 56 57 57 58	B-4-55.5		0 0 0 0 0		POORLY GRADED G	RAVEL with SAND (	GP) (Continued)			Type II-V Neat Cement Grout with a tremmie pipe to ground surface	
59 - 					TOTAL DEPTH 58 FEI GROUNDWATER ENG	ET BELOW GROUN COUNTERED AT 57	ID SURFACE FEET BELOW GRO	OUND SURFACE			
NOTE	S:									·	
	ENV BORING LOG										
		ENV. CON	Ronme	NTAL G&C	Engineering, Onstruction	Project Loca	tion 501 El Plea	Charro Road, santon, CA	Project No. VMC0609	Last Revised 2/8/2007	