



October 15, 2009  
Project No. 20092598V1

Mr. Ranajit Sahu, C.E.M., Ph.D.  
Basic Remediation Company  
875 West Warm Springs Road  
Henderson, Nevada 89011

PROVIDING

- Geotechnical Engineering
- Construction Materials Engineering
- Environmental Engineering
- Drilling Services

**RE: *Galleria North and Sunset North Additional Sampling, Henderson, Nevada***

Dear Dr. Sahu:

On September 29, 2009 and September 30, 2009, Geotechnical and Environmental Services, Inc. (GES) implemented a sampling program per the direction of Basic Remediation Company (BRC). This activity report details the scope of services performed, which consisted of the following:

- September 25, 2009: USA Underground utility alert was called in after field marking the project area.
- September 25, 2009: Staked and located fifteen (15) sampling locations with a GPS Trimble ProXH Unit. The sample location coordinates were provided by ERM.
- September 29 – September 30, 2009: Collected fifteen (15) samples from fifteen (15) boring locations throughout the sites at depths ranging from 4.0 to 13 feet. A total of two (2) field duplicate samples, one (1) matrix spike/matrix spike duplicate sample and one (1) rinsate sample were taken throughout the sampling event.

GES's scope of services was to implement the field sampling program so that others can evaluate the data resulting from our sampling efforts. Therefore, this report does not provide conclusions regarding the analytes or their levels of occurrence.

### **Field Investigation Methodology**

**Soils** - Soil samples were taken from fifteen (15) borings drilled using the hollow stem auger method. The boreholes were initiated using a Diedrich D-50+ Track Drill Rig outfitted with 6-1/2 inch outside diameter hollow stem augers. A California modified split spoon sampler was advanced at least 18 inches per sampling interval by using an autohammer with an equivalent force of a 140-pound hammer falling 30 inches for each blow.

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Soil samples were logged according to the USCS Classification by a qualified Geologist. Boring logs were prepared for the locations drilled (Appendix A, Figures 5 through 7). The soil from each sample interval was also field screened for volatile organic vapors (VOCs) using 10.6 eV and 11.7 eV photoionization detector probes (PIDs). The PID results and any odors or soil staining observed during the course of fieldwork are shown on the boring logs.

At each sample location and depth interval, the samples were collected in two (2) clean 2.5-inch diameter by 6.0-inch long stainless steel sleeves using standard split spoon sampling techniques. The ends of each sleeve(s) retained for analysis were covered with Teflon sheeting and placed in a sealable ZipLock™ type plastic bag. For each sample interval, one sleeve was shipped to Test America Laboratories (Earth City, Missouri) and one sleeve was shipped to GEL Laboratory (Charleston, South Carolina).

Each sample was provided a unique sampling number with the following designation: Sample Location, Depth Interval, Date, and Time. For example, the first sampling location was identified as JP04E-10, 9/29/09, 0647, while the final sampling location was identified as BD25E-10, 9/30/09, 0902. The soil samples were stored in coolers with ice and shipped daily via FedEx to Test America Laboratories and GEL Laboratory.

Soil samples and the breathing zone were monitored by two photoionization detector probes (10.6 eV and 11.7 eV) by GES personnel. The health and safety monitoring effort complied with the ***BRC Health and Safety Plan, October, 2005***.

#### **Decontamination Procedures**

The drilling equipment and down-hole equipment were decontaminated prior to initial usage and then between each borehole location. Decontamination of drilling equipment consisted of high pressure washing prior to the initial boring. The down-hole equipment was washed between borehole locations using Liquinox™ detergent wash, a potable water rinse, and a final rinse with commercially available distilled water.

#### **Investigative Derived Waste (IDW)**

All Investigative Derived Waste consisted of drilling cuttings (soil) and equipment decontamination waste (Liquinox laboratory grade detergent and rinse water). Ground water was not encountered, therefore the drill cuttings were returned to the borehole after the sampling was completed. Decontamination fluid was minimal and disposed of in the boreholes.

#### **Documentation**

Documentation of the field activities consists of figures showing the site location (Vicinity Map, Figure 1), boring locations (Site Map, Figure 2 and Figure 3), photographs of representative boring locations (Figure 4) and boring logs for the central boring of each group (Figure 5 through 7). Only one boring log was prepared for each group of borings due to the close proximity of the locations (within 10-feet of the central boring). These documents are included as attachments. Copies of the Chain-of-Custodies and daily safety meeting forms are also included as attachments.

**Changes to Original Planned Work**

During this work there were no modifications to the original scope of services.

We appreciate this opportunity to provide our professional services. If you have questions or comment, feel free to contact our office at (702) 365-1001.

Sincerely,  
**Geotechnical & Environmental Services, Inc.**



Richard A. Cooke, C.E.M.  
Project Geologist  
C.E.M. #1820



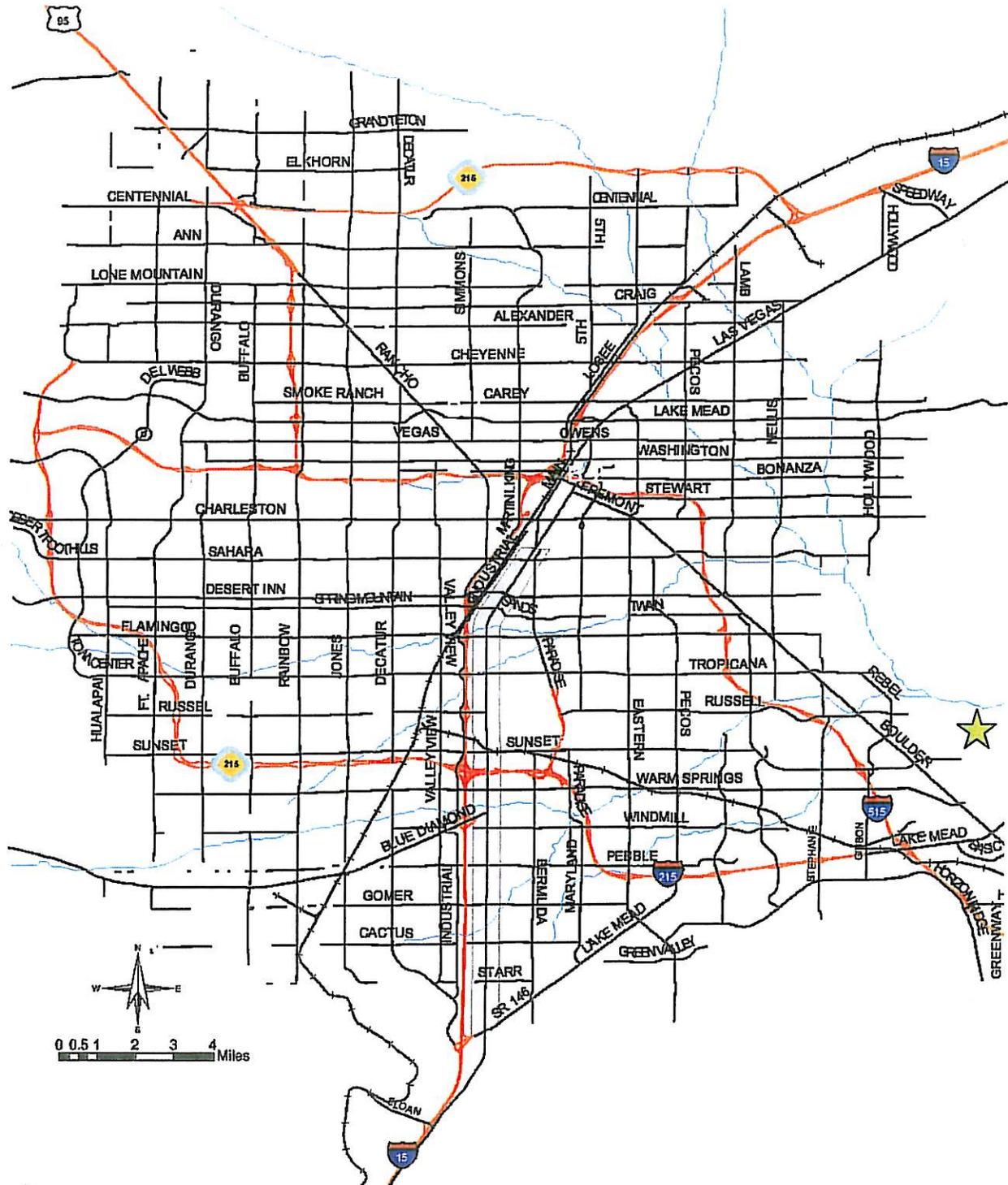
Kyle S. Hansen, C.E.M.  
Environmental Program Manager  
C.E.M. #2167

RAC:KSH:ac

Enc.: Figures 1, 2, 3 and 4  
Boring Logs (3)  
Chain-of-Custody Records (4)  
Tailgate Safety Meeting Forms (2)

Dist: 1 pdf copy emailed to client at sahuron@earthlink.net  
1 original mailed to addressee  
1 cc to project file

**FIGURES:  
VICINITY MAP  
EXPLORATION LOCATION MAPS  
BORING LOGS**

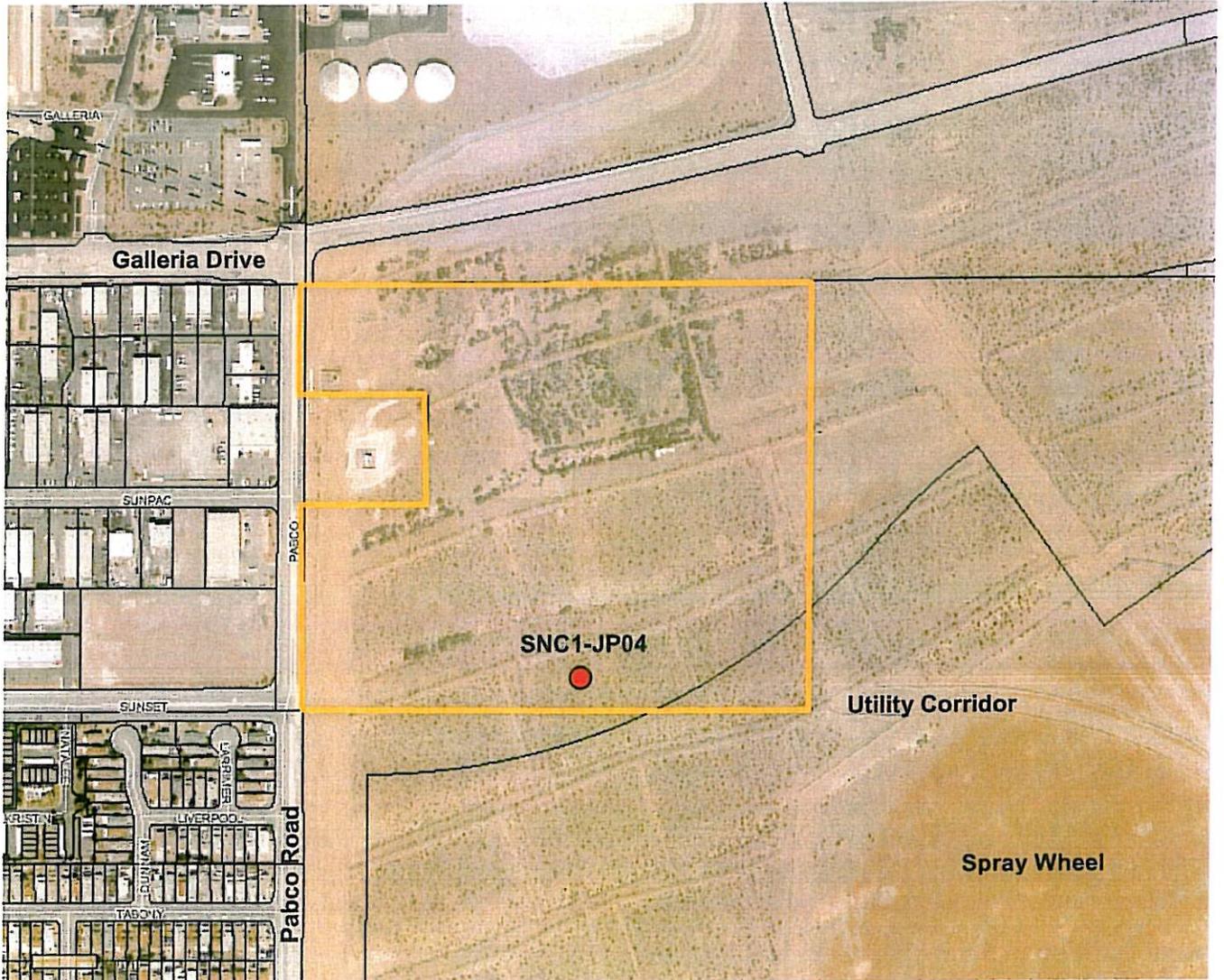


★ SITE LOCATION



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<b>Vicinity Map</b> Galleria North & Sunset North Sub-Area	
Job #20092598V1	Figure 1



● Exploration Location

□ Site Boundary

Clark County Nevada  
 Southern Nevada GIS  
 IM3.7 Aerial Photograph  
 Fall 2009-Spring 2009

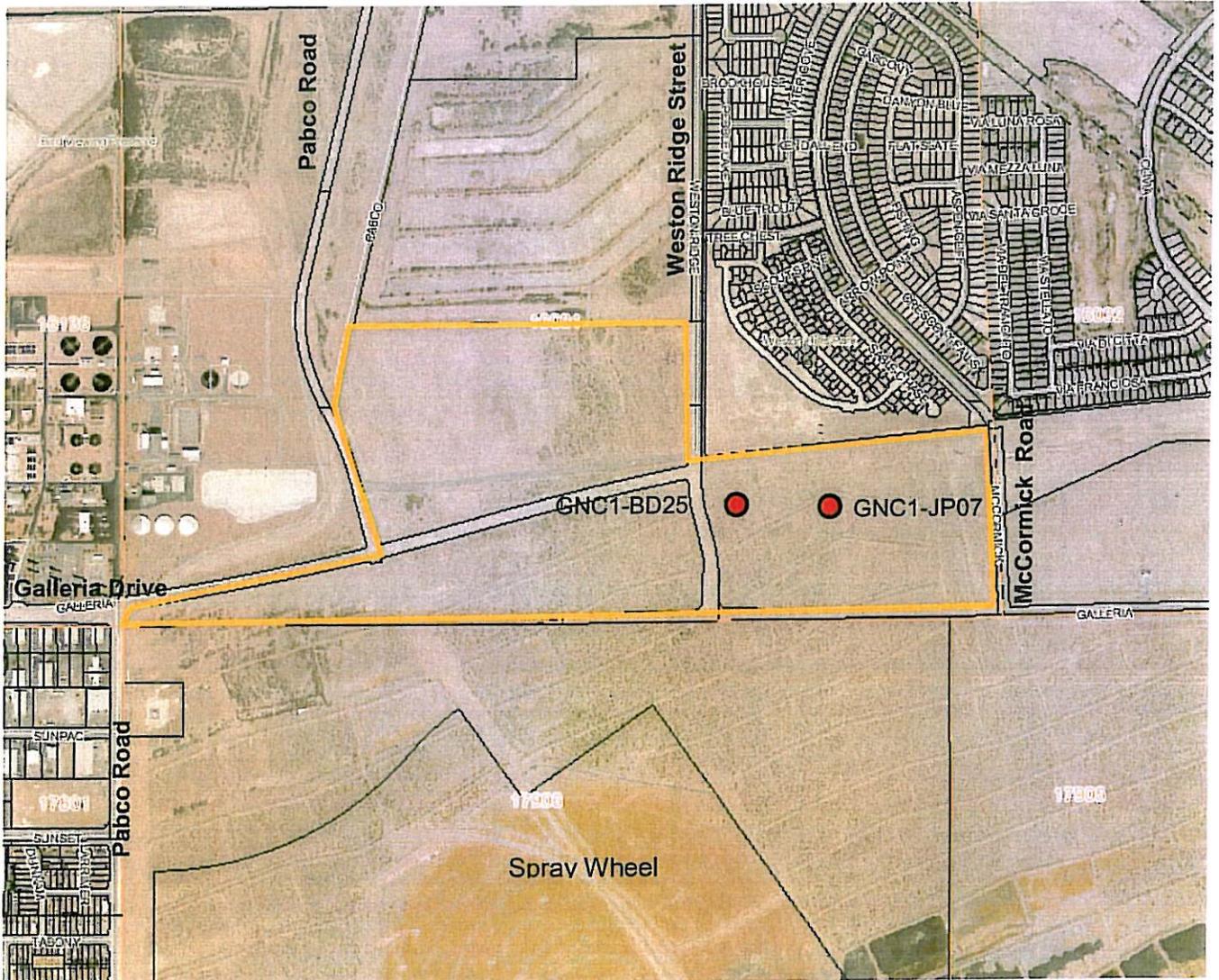


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Exploration Location Map  
 Sunset North Commercial Sub-Area  
 Las Vegas, Nevada

Job #20092598V1

Figure 2



● Exploration Location

□ Site Boundary

Clark County Nevada  
 Southern Nevada GIS  
 IM3.7 Aerial Photograph  
 Fall 2009-Spring 2009



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 ENVIRONMENTAL  
 SERVICES, INC.**  
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 Las Vegas, Nevada 89119

Exploration Location Map  
 Galleria North Sub-Area  
 Las Vegas, Nevada

Job #20092598V1

Figure 3



1. Sunset North: View showing JP04 group of borings.



2. Galleria North: View showing JP07 boring group.



3. Galleria North: View showing BD25 borings group.

	<p><b>PROJECT:</b> Galleria and Sunset North Sampling 20092598V1 <b>FIGURE 4</b> <b>Site Photographs</b></p>
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# EXPLORATION LOG GNC1-JP07C

PROJECT: GALLERIA & SUNSET NORTH SAMPLING  
 EXPLORATION LOCATION: HENDERSON, NEVADA  
 EXPLORATION SIZE (dia.): 6 1/4" O.D. H.S. AUGERS  
 ELEVATION: EXISTING GROUND SURFACE

PROJECT NO.: 20092598V1  
 EXPLORATION DATE: 9/29/09  
 EQUIPMENT: DIEDRICH D-50 TRACK RIG  
 LOGGED BY: SANCHEZ/DAVIS

INITIAL DEPTH TO WATER: NOT ENCOUNTERED  
 FINAL DEPTH TO WATER: NOT ENCOUNTERED

DATE MEASURED: NA  
 DATE MEASURED: NA

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	PI	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
		SM	Light brown (7.5YR 6/3)silty SAND with gravel, dry and medium dense.  ...six-inch thick gravel layer.  ...PIDs: 10.6 eV = 0.0 ppmV; 11.7 eV = 0.0 ppmV.						
			END OF BORING AT 5.5 FEET						

The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made. It is not intended to be representative of subsurface conditions at other locations or times.

# EXPLORATION LOG GNC1-BD25C

PROJECT: GALLERIA & SUNSET NORTH SAMPLING  
 EXPLORATION LOCATION: HENDERSON, NEVADA  
 EXPLORATION SIZE (dia.): 6 1/4" O.D. H.S. AUGERS  
 ELEVATION: EXISTING GROUND SURFACE

PROJECT NO.: 20092598V1  
 EXPLORATION DATE: 9/29/09  
 EQUIPMENT: DIEDRICH D-50 TRACK RIG  
 LOGGED BY: SANCHEZ/DAVIS

INITIAL DEPTH TO WATER: NOT ENCOUNTERED  
 FINAL DEPTH TO WATER: NOT ENCOUNTERED

DATE MEASURED: NA  
 DATE MEASURED: NA

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	PI	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
		SM	<p>Light brown (7.5YR 6/3)silty SAND with gravel, dry and medium dense.</p> <p>...six-inch thick gravel layer.</p> <p>...PIDs: 10.6 eV = 0.0 ppmV; 11.7 eV = 0.0 ppmV.</p> <p>...weakly cemented, dry.</p>						
			END OF BORING AT 13.2 FEET						

The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made. It is not intended to be representative of subsurface conditions at other locations or times.

# KEY TO SYMBOLS

Symbol Description

## Strata symbols

 Silty sand

## Soil Samplers

 California sampler

## Notes:

1. Exploratory borings were drilled on 9/29/09 using 6 1/4-inch outside diameter continuous flight power auger.
2. No free water was encountered at the time of drilling.

**CHAIN-OF-CUSTODY FORMS  
AND  
TAILGATE SAFETY MEETING FORMS**

ERM CHAIN OF CUSTODY RECORD

**ERM CONTACT PERSON**  
 Name: Maria Barajas-Albalawi  
 Address: 2525 Natomas Park Drive, Suite 350  
 Sacramento, CA 95833  
 Phone #: (916) 924-9378  
 FED EX #:

**LABORATORY: TestAmerica-St. Louis**  
 Contact Person: Jerry Everett  
 Address: 13715 Rider Trail North  
 Earth City, Missouri 63045  
 Phone: (314) 298-8566

Date: 9-28-05

SAMPLER(S) PRINTED NAME AND SIGNATURE  
*Doris Davis*

SAMPLE ID	DATE	TIME	Container						Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	EDA
PROJECT NAME: OPEN SPACE SUB AREA															
PROJECT NUMBER: 200055664- 2005 25384															
JP04E-10	9-28-05	0647													
JP04S-10	9-28-05	0705													
JP04W-10	9-28-05	0727													
JP04N-10	9-28-05	0743													
JP04C-10	9-28-05	0802													
JP04C-10DUP	9-28-05	0802													
JP07N-4	9-28-05	1205													
JP07N-4DUP	9-28-05	1205													
JP07E-4	9-28-05	1238													
JP07C-4	9-28-05	1245													

ANALYSIS REQUEST

IONs* by EPA 300.0	
Dioxins/Furans* by EPA 8290	
Gen. Chem* (please see methods)	
pH by EPA 8045C/8040B	
METALS* by EPA Methods	X
6010B/6020/7471A/7470A	X
Hex chromium by EPA 7196A	
OC Pesticides* by EPA 8081A	
Aroclors* by EPA 8082	
Congeners* by EPA 1668	
Aldehydes* by EPA 8315	
VOCs* by EPA 8260B	
Physical Parameters 3*	
Percent Moisture	

Comments/Instructions:

- \* Please refer to Table 5 (Southern Ribs Sampling: emailed on October 17, 2008)
- 1 Analyze at TA-Sacramento
- 2 Analyze at TA-Nashville
- 3 Analyze at TA-Burlington
- 4 Please report results in dry weight, therefore all soil will require % moisture testing.
- 5 Extract samples for Aroclors by 8082 only. If sum of the congeners result (method 1668) is greater than 33 ppb, please analyze for aroclors by 8082

RELINQUISHED BY: *Doris Davis* Signature: *Doris Davis* Print Name: *Doris Davis*  
 RECEIVED BY: *Craig Roberts* Signature: *Craig Roberts* Print Name: *Craig Roberts*  
 RELINQUISHED BY: \_\_\_\_\_  
 RECEIVED BY: \_\_\_\_\_

Company Name/Title: *TA-SLL*  
 Date: *9-28-05* Time: *1615*  
*10/19 0915*

For Lab Use Only: Sample Condition Upon Receipt  
 ORIGINAL: Send with sample (sign only in blue or black ink)  
 COPIES: Retained by Sampler, Sent to Office

WR 105

ERM CHAIN OF CUSTODY RECORD

ERM CONTACT PERSON

Name: Maria Barajas-Albalawi  
Address: 2525 Natomas Park Drive, Suite 350  
Sacramento, CA 95833  
Phone #: (916) 924-9378

LABORATORY: TestAmerica-St. Louis  
Contact Person: Jerry Everett  
Address: 13715 Rider Trail North  
Earth City, Missouri 63045  
Phone: (314) 298-8566

FED EX #:

SAMPLER(S) PRINTED NAME AND SIGNATURE

*Doug Davis*

Galleria North & Sunset North Sampling RC

PROJECT NAME: ~~SOUTHERN RIBS SUB AREA 1 - CHINA RIVERS~~

PROJECT NUMBER: 20092474V1

20092474V1

Container

SAMPLE ID	DATE	TIME	Container							
			Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	EDA	
JP07C-405	9-25-09	12:55	X							
JP07C-4MS0	9-25-09	13:00	X							
JP07S-4	9-25-09	13:15	X							
JP07W-4	9-25-09	13:22	X							

ANALYSIS REQUEST

IONs* by EPA 300.0	Dioxins/Furans* by EPA 8290	Gen. Chem* (please see methods)	pH by EPA 9046C/9040B	METALS* by EPA Methods	6010B/6020/7471A/7470A	Hex chromium by EPA 7196A	OC Pesticides* by EPA 8081A	Aroclors** by EPA 8082	Congeners* by EPA 1668	Aldehydes* by EPA 8216	VOCs* by EPA 8260B	Physical Parameters 3*	Percent Moisture

Date: 9-25-09

Comments/Instructions:

- \* Please refer to Table 5 (Southern Ribs Sampling: emailed on October 17, 2008)
- 1 Analyze at TA-Sacramento
- 2 Analyze at TA-Nashville
- 3 Analyze at TA-Burlington
- 4 Please report results in dry weight, therefore all soil will require % moisture testing.
- 5 Extract samples for Aroclors by 8082 only. If sum of the congeners result (method 1668) is greater than 33 ppb, please analyze for aroclors by 8082

RELINQUISHED BY: *[Signature]* Signature: *Doug Davis* Print Name: *Doug Davis* Date: 9-29-09 Time: 10:15

RECEIVED BY: *[Signature]* Signature: *Craig Roberts* Print Name: *Craig Roberts* Date: 10/19/09 Time: 0915

RELINQUISHED BY:

RECEIVED BY:

For Lab Use Only: Sample Condition Upon Receipt

ORIGINAL: Send with sample (sign only in blue or black ink)

COPIES: Retained by Sampler, Sent to Office

ERM CHAIN OF CUSTODY RECORD

ERM CONTACT PERSON

Name: Maria Barajas-Albalawi  
 Address: 2525 Natomas Park Drive, Suite 350  
 Sacramento, CA 95833  
 Phone #: (916) 924-9378

LABORATORY: GEL Laboratories, LLC  
 Contact Person: Amanda Rasco  
 Address: 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171

FED EX #: \_\_\_\_\_ Date: 9-30-09

SAMPLER(S) PRINTED NAME AND SIGNATURE

*Doris Dams*

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	Container						PERCHLORATE* by EPA 314.0	SVOCs* by 8270	PAHs* by 8270SIM	PERCENT MOISTURE
			Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH				
BD25S-10	9-30-09	0640	X									
BD25C-10	9-30-09	0720	X									
BD25W-10	9-30-09	0752	X									
BD25N-10	9-30-09	0830	X									
BD25E-10	9-30-09	0902	X									
R-093009	9-30-09	0945	X									

Comments/Instructions:

\* ~~Retention time for samples is 30 days.~~  
 Retention time for samples is 30 days.

RELINQUISHED BY: *[Signature]* Signature: \_\_\_\_\_ Print Name: Doris Dams  
 RECEIVED BY: \_\_\_\_\_ Date: 9-30-09 Time: 1700  
 Company Name/Title: GES/GSR  
 RECEIVED BY: \_\_\_\_\_  
 RECEIVED BY: \_\_\_\_\_

For Lab Use Only: Sample Condition Upon Receipt:

ORIGINAL: Send with sample (sign only in blue or black ink)

COPIES: Retained by Sampler, Sent to Office



TAILGATE SAFETY MEETING FORM

Date: 9-25-09 Time: 0630 Job Number: 2009259241

Client: BRC

Site Specific Location: \_\_\_\_\_

Safety Topics Presented

Protective Clothing/Equipment: Level 1 PPE

Chemical Hazards: Residual chemicals/metals in soil - see analytical list on C-0-08 for details.

Physical Hazards: Heat, slip, trip, falls,

Special Equipment: None

Other: Some wildlife - biting insects, snakes, coyotes.

Emergency Procedures: call 911

Hospital: St. Rose Phone: \_\_\_\_\_ Ambulance Phone: 911

Hospital Address and Route: Boulder Hwy at Lake Mead.

ATTENDEES

NAME PRINTED

SIGNATURE

Doug Davis  
Clint Dickson  
Eduardo Luis

[Signature]  
Clint Dickson  
Eduardo Luis

Meeting Conducted By: Doug Davis  
Name Printed

Signature

On-Site Safety Officer: Doug Davis

Project Manager: Richard Cooke

TAILGATE SAFETY MEETING FORM

Date: 9-30-09 Time: 0630 Job Number: 200925841

Client: BRC

Site Specific Location: Gallens E Sunset

Safety Topics Presented

Protective Clothing/Equipment: Level 1 PPE

Chemical Hazards: Residual chemicals/metals in soil - see

Physical Hazards: analytical list on C-0-C8 for details.  
Heat, slip, trip, falls

Special Equipment: None

Other: Some wildlife - biting insects, snakes, Coyotes.

Emergency Procedures: Call 911

Hospital: St. Rose Phone: \_\_\_\_\_ Ambulance Phone: 911

Hospital Address and Route: Boulder Hwy and Lake Mead.

ATTENDEES

<u>NAME PRINTED</u>	<u>SIGNATURE</u>
<u>Doug Davis</u>	<u>[Signature]</u>
<u>Walker McKenry</u>	<u>[Signature]</u>
<u>Clint Beckom</u>	<u>[Signature]</u>
<u>Eduardo Luis</u>	<u>[Signature]</u>

Meeting Conducted By: Doug Davis Name Printed [Signature] Signature

On-Site Safety Officer: Doug Davis Project Manager: Richard Cooke