SEVERN
TRENT
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

February 7, 2001

STL LOT NUMBER: **E1B050172**
PO/CONTRACT: 05160-SEV002

Rus Purcell
Kennedy/Jenks Consultants
2151 Michelson Drive
Suite 100
Irvine, CA 92612

Dear Mr. Purcell,

This report contains the additional analytical result for C_2_34_1_5 requested on February 5, 2001. This sample is associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures meet method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading beyond 2 to 6 degrees Celsius is considered not within acceptable criteria unless otherwise noted such as limited transit time from field and test requested. Any matrix related anomaly is footnoted within the report.

STL Los Angeles certifies that the test results provided in this report meet all the requirements of NELAC. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at 714-258-8610.

Sincerely,

Diane Suzuki
Project Manager

cc: Project File

SEVERN TRENT SERVICES

CHANGE ORDER

Lab Analysis No.	E1B050172
Client Name	Kennedy Jenks
Contact	Beth Baustenbaugh

- [ ] CANCEL Work
- [x] ADD Work
- [ ] Chain of Custody Discrepancy
- [ ] TAT Change
- [ ] Matrix
- [ ] Sample Problem
- [ ] Tests Not Defined
- [ ] Other

EXPLANATION/RESOLUTION

Chromium VI by 7196 DZ
C_2_341_5

Initiated By: [signature]

Date/Time: 2/5/01

Received By: _____

Date/Time: _____

Distribution:
Original - Sample Control/Job Folder; Yellow - Lab; Pink - Initiator

ENS—3008

STL – LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: _____

Quantims Lot #: EIB050172 Quote #: 38629
Client Name: Kennedy Jenks Project: Rosebound
Received by: Andy Date/Time Received: 02/05/01
Delivered by : ☐Client ☐Airborne ☐Fed Ex ☐DHL ☐Ultra-Ex ☐Rey B.
☐UPS ☐DES ☐Other _____

		Initial / Date
Custody Seal Status:	☐Intact ☐Broken ☒None	AR 02/05
Custody Seal #(s):	☒No Seal #	
Sample Container(s):	☐STL-LA ☒Client ☐N/A	
Temperature(s) (COOLER/BLANK) in °C:	4°C (CORRECTED TEMP)	
Thermometer Used :	☒IR (Infra-red) ☐Digital (Probe)	
Samples:	☒Intact ☐Broken ☐Other	
Anomalies:	☐No ☐Yes (See Clouseau)	
Labeled by	AR	
Labeling checked by	RS	

Turn Around Time: ☐RUSH–24HR ☐RUSH–48HR ☐RUSH–72HR ☒NORMAL
Short-Hold Notification: ☐Ph ☒Wet Chem ☐Metals (Filter/Pres) ☐Encore ☐N/A
Outside Analysis(es) (Test/Lab/Date Sent Out) : none

•••••••••• LEAVE NO BLANK SPACES ; USE N/A ••••••••••

Fraction	1										PH
VOAh /*											N/A
sleeve	1										

h:HCl na:Sodium Hydroxide zna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/lf:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Andy 02/05/01 REVIEWED BY/DATE:

EXECUTIVE SUMMARY - Detection Highlights

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
NO DETECTABLE PARAMETERS				

METHODS SUMMARY

E1B050172

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Hexavalent Chromium	SW846 7196A	SW846 7196A/DI

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

BOE-C6-0144736

SAMPLE SUMMARY

E1B050172

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
DVLFD	001	C_2_341_5	01/18/01	10:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

KENNEDY/JENKS CONSULTANTS

Client Sample ID: C_2_341_5

General Chemistry

Lot-Sample #...: E1B050172-001 **Work Order #...:** DVLFD **Matrix.....:** SOLID
Date Sampled...: 01/18/01 10:00 **Date Received..:** 01/18/01 15:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	ND	0.10	mg/kg	SW846 7196A	02/06/01	1037499

Dilution Factor: 1 Analysis Time..: 21:08 Analyst ID.....: 000135
Instrument ID..: W06 MS Run #.....: 1037266 MDL.....: 0.050

QC DATA ASSOCIATION SUMMARY

E1B050172

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	SOLID	SW846 7196A		1037499	1037266

METHOD BLANK REPORT

General Chemistry

Client Lot #...: E1B050172 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium		Work Order #:	DVNJ21AA	MB Lot-Sample #:	E1B060000-499	
	ND	0.10	mg/kg	SW846 7196A	02/06/01	1037499

Dilution Factor: 1

Analysis Time..: 20:56 Analyst ID.....: 000135 Instrument ID..: W06

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: E1B050172 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium			Work Order #:	DVNJ21AC	LCS Lot-Sample#:	E1B060000-499	
	0.250	0.240	mg/kg	96	SW846 7196A	02/06/01	1037499

Dilution Factor: 1

Analysis Time..: 20:58 Analyst ID.....: 000135 Instrument ID..: W06

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: E1B050172 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium		Work Order #: DVNJ21AC	LCS Lot-Sample#: E1B060000-499		
	96	(80 - 120)	SW846 7196A	02/06/01	1037499

Dilution Factor: 1

Analysis Time..: 20:58 Analyst ID.....: 000135 Instrument ID..: W06

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: E1B050172 Matrix.....: SOLID
Date Sampled...: 01/17/01 08:44 Date Received..: 01/17/01 18:00

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium			WO#: DVGN31AC-MS/DVGN31AD-MSD				MS Lot-Sample #: E1B010289-001		
	ND	0.250	0.230	mg/kg	92		SW846 7196A	02/06/01	1037499
	ND	0.250	0.225	mg/kg	90	2.3	SW846 7196A	02/06/01	1037499

Dilution Factor: 1
Analysis Time..: 21:02 Instrument ID..: W06 Analyst ID.....: 000135
MS Run #.....: 1037266

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: E1B050172 **Matrix.....:** SOLID
Date Sampled...: 01/17/01 08:44 **Date Received..:** 01/17/01 18:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium		WO#: DVGN31AC-MS/DVGN31AD-MSD				MS Lot-Sample #: E1B010289-001	
	92	(80 - 120)			SW846 7196A	02/06/01	1037499
	90	(80 - 120)	2.3	(0-20)	SW846 7196A	02/06/01	1037499

Dilution Factor: 1
Analysis Time..: 21:02 Instrument ID..: W06 Analyst ID.....: 000135
MS Run #.....: 1037266

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Supporting Raw Data

Classical Chemistry

Lot # E1B050172

Quanterra--Santa Ana

Spectrophotometric Worksheet

Test:	HEX CHROME	Calib Ref:	020601	Calib Start:	20:30	Date:	2/6/01
Method:	7196A	Instr ID:	W06	Cal Incr:	0.5	Analyst:	DCB
SOP#:		Samp Start	20:30	Samp Incr:	2	Reviewer:	

Calibration Summary

Std Source	Type	Conc mg/L	Instrument Reading	Time	
99-6-1-4	Cal	0	0.000	---	20:30
		0.01	0.010	---	20:30
		0.02	0.021	---	20:31
		0.05	0.047	---	20:31
		0.1	0.095	---	20:32

ERA 08098.1	ICV		0.046	---	

Reporting Limits

	Liquid	Solid
RL:	0.02	0.1
MDL:	0.003	
Units:	mg/L	mg/Kg

Regression Stats

Slope	0.9420
y-inter	0.0007
r	0.9997

Spike Levels (mg/L)

ICV	0.05
CCV	0.05

Sample No	Matrix	Blank Abs	Sample Abs	Factors Prep	Factors Dil	Raw Data	RL	Result	Units	Time	Comments
ICV/LCS	L		0.046	1	1	0.0481	0.02	0.0481	mg/L	20:30	96.2
ICB/MB	L		0.000	1	1	-0.0007	0.02	ND	mg/L	20:32	
DVNED	L	0.009	0.008	1	1	-0.0018	0.02	ND	mg/L	20:34	
DVNEE	L	0.006	0.005	1	1	-0.0018	0.02	ND	mg/L	20:36	
DVNEF	L	0.011	0.010	1	1	-0.0018	0.02	ND	mg/L	20:38	
VNEG	L	0.005	0.007	1	1	0.0014	0.02	ND	mg/L	20:40	
DVNEH	L	0.005	0.006	1	1	0.0003	0.02	ND	mg/L	20:42	
DVNEJ	L	0.003	0.003	1	1	-0.0007	0.02	ND	mg/L	20:44	
DVNEL	L	0.000	0.002	1	1	0.0014	0.02	ND	mg/L	20:46	
DVNELS	L	0.001	0.046	1	1	0.0470	0.02	0.047	mg/L	20:48	
DVNELD	L	-0.002	0.046	1	1	0.0481	0.02	0.0481	mg/L	20:50	
CCV	L		0.046	1	1	0.0481	0.02	0.0481	mg/L	20:52	96.2
CCB	L		-0.001	1	1	-0.0018	0.02	ND	mg/L	20:54	
MB-S	S		-0.001	5	1	-0.0090	0.1	ND	mg/Kg	20:56	
LCS-S	S		0.046	5	1	0.2405	0.1	0.241	mg/Kg	20:58	
DVGN3	S	0.004	0.003	5	1	-0.0090	0.1	ND	mg/Kg	21:00	
DVGN3S	S	0.003	0.047	5	1	0.2299	0.1	0.23	mg/Kg	21:02	
DVGN3D	S	0.003	0.046	5	1	0.2246	0.1	0.225	mg/Kg	21:04	
DVGPJ	S	0.000	0.000	5	1	-0.0036	0.1	ND	mg/Kg	21:06	
DVLFD	S	0.002	0.002	5	1	-0.0036	0.1	ND	mg/Kg	21:08	
CCV	L		0.045	1	1	0.0470	0.02	0.047	mg/L	21:10	94.1
CCB	L		-0.001	1	1	-0.0018	0.02	ND	mg/L	21:12	

Saved as: n:\wetchem\wrkshts\ C6020601.xls
Saved on: 2/6/01 9:31 PM

spec.xls
ver.09/23/98

02/06/01

D. BECKWITH

20:30

Cr+6 7196A

I	1.	540.nm	%T =	100.0	A =	0.000	F =	0.	C =	0.00	0.00
ID	2.	540.nm	%T =	97.7	A =	0.010	F =	0.	C =	0.00	0.01
ID	3.	540.nm	%T =	95.4	A =	0.021	F =	0.	C =	0.00	0.02
ID	4.	540.nm	%T =	89.7	A =	0.047	F =	0.	C =	0.00	0.05
ID	5.	540.nm	%T =	80.4	A =	0.095	F =	0.	C =	0.00	0.10
ID	6.	540.nm	%T =	90.0	A =	0.046	F =	0.	C =	0.00	ICV/LCS * DISSOLVED
ID	7.	540.nm	%T =	100.1	A =	0.000	F =	0.	C =	0.00	ICB/MB
ID	8.	540.nm	%T =	98.0	A =	0.009	F =	0.	C =	0.00	* DVNED E1B060251-2
ID	9.	540.nm	%T =	98.2	A =	0.008	F =	0.	C =	0.00	
ID	10.	540.nm	%T =	98.6	A =	0.006	F =	0.	C =	0.00	* DVNEE -3
ID	11.	540.nm	%T =	98.9	A =	0.005	F =	0.	C =	0.00	
ID	12.	540.nm	%T =	97.5	A =	0.011	F =	0.	C =	0.00	* DVNEF -4
ID	13.	540.nm	%T =	97.7	A =	0.010	F =	0.	C =	0.00	
ID	14.	540.nm	%T =	98.8	A =	0.005	F =	0.	C =	0.00	* DVNEG
ID	15.	540.nm	%T =	98.4	A =	0.007	F =	0.	C =	0.00	-5
I	16.	540.nm	%T =	98.8	A =	0.005	F =	0.	C =	0.00	* DVNEH
I	17.	540.nm	%T =	98.6	A =	0.006	F =	0.	C =	0.00	-6
ID	18.	540.nm	%T =	99.4	A =	0.003	F =	0.	C =	0.00	* DVNEJ
ID	19.	540.nm	%T =	99.3	A =	0.003	F =	0.	C =	0.00	-1
ID	20.	540.nm	%T =	100.1	A =	0.000	F =	0.	C =	0.00	* DVNEL
ID	21.	540.nm	%T =	99.5	A =	0.002	F =	0.	C =	0.00	-8
ID	22.	540.nm	%T =	99.9	A =	0.001	F =	0.	C =	0.00	* DVNELS
ID	23.	540.nm	%T =	90.0	A =	0.046	F =	0.	C =	0.00	-8S
ID	24.	540.nm	%T =	100.5	A =	-0.002	F =	0.	C =	0.00	* DVNELD
ID	25.	540.nm	%T =	90.0	A =	0.046	F =	0.	C =	0.00	-8D
ID	26.	540.nm	%T =	89.9	A =	0.046	F =	0.	C =	0.00	CCV
ID	27.	540.nm	%T =	100.3	A =	-0.001	F =	0.	C =	0.00	CCB

* SAMPLE ALIQUOT FILTERED PRIOR TO ANALYSIS PER CLIENT REQ. 02/06/01

02/06/01
DWB

CrH6 7196A

ID	28.	540.nm	%T =	100.2	A =	-0.001	F =	0.	C =	0.00	MB-S
ID	29.	540.nm	%T =	89.9	A =	0.046	F =	0.	C =	0.00	LCS-S
ID	30.	540.nm	%T =	99.1	A =	0.004	F =	0.	C =	0.00	DVGN3
ID	31.	540.nm	%T =	99.3	A =	0.003	F =	0.	C =	0.00	↓
ID	32.	540.nm	%T =	99.3	A =	0.003	F =	0.	C =	0.00	DVGN3S
ID	33.	540.nm	%T =	89.8	A =	0.047	F =	0.	C =	0.00	↓
ID	34.	540.nm	%T =	99.4	A =	0.003	F =	0.	C =	0.00	DVGN3D
ID	35.	540.nm	%T =	89.9	A =	0.046	F =	0.	C =	0.00	↓
ID	36.	540.nm	%T =	100.1	A =	0.000	F =	0.	C =	0.00	DVGPJ
ID	37.	540.nm	%T =	100.1	A =	0.000	F =	0.	C =	0.00	↓
ID	38.	540.nm	%T =	99.5	A =	0.002	F =	0.	C =	0.00	DVLFD
ID	39.	540.nm	%T =	99.4	A =	0.002	F =	0.	C =	0.00	↓
ID	40.	540.nm	%T =	90.2	A =	0.045	F =	0.	C =	0.00	CCV
ID	41.	540.nm	%T =	100.1	A =	-0.001	F =	0.	C =	0.00	CCB

NOTE:

SOIL SAMPLES CENTRIFUGED TO REDUCE TURBIDITY INTERFERENCE

02/06/01

02/06/01

QUANTERRA--SOUTHERN CALIFORNIA
DI LEACHATE PREP SHEET

Analytes: Cr+6

Prep Date: 02/06/01

Prep Method: DI Leach

BATCH 1037499

Prep Time--Start: 1900

Analyst: D. BECKWITH

Prep Time--Finish: 20:30

SAMPLE ID	CLIENT	Sample Wt. (grams)	FINAL VOL (mLs)	SPIKING SOL'N Analyte/Vol/ID #	COMMENTS
Prep Blank		20.0	100.0		
LCS		20.0		* ERA 08098.1 0.050 mL of 100 mg/L	
DVGN3S	E1B010281-1	20.0			
DVGN3D	-1s	20.0			
DVGN3	-1d	20.0			
DVGP3	-1l	20.0			
DVLFD	E1B050192-1	20.0			

* ERA 08098.1 IS AT 1,000 mg/L CONCENTRATION. A 100 mg/L SPIKE SOLUTION IS PREPPED FROM THIS SOURCE

02/06/01

02/06/01

DIPREP.DOC 01/08/99

000018

BOE-C6-0144749