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April 26, 2022

Mr. Michael Malone
CPS Energy
500 McCullough Avenue
San Antonio, Texas 78215

Reference: Project No. 0636109

Subject: *Alternative Source Demonstration* – Responses to Potential Statistically Significant Increases
Calaveras Power Station
San Antonio, Texas

Executive Summary

Title 40, Code of Federal Regulations, Part 257 (40 CFR §257) Subpart D (a.k.a. the Coal Combustion Residual (CCR) Rule) was published in the Federal Register in April 2015 and became effective in October 2015. CPS Energy has been operating surface impoundments and a landfill primarily for temporary storage and historically for disposal of fly ash and bottom ash.

On June 28, 2021, the US EPA partially approved the Texas CCR Program. The Texas partial program, administered under Title 30, Texas Administrative Code, Chapter 352, became effective on July 28, 2021. Although the Texas partial program generally adopts by reference the federal CCR Rule (with some additions), the Texas partial program operates in lieu of the federal CCR program.

One of the many requirements of the CCR programs was for CPS Energy to determine if there are impacts to groundwater from any of the surface impoundments and landfill at the Calaveras Power Station that contain CCR, and post the evaluation to its website on an annual basis. The evaluation of the October 2021 groundwater sample results indicated a potential statistically significant increase (SSI) for a limited number of constituents from the Evaporation Pond (EP), Fly Ash Landfill (FAL), and Bottom Ash Ponds (BAPs). Groundwater sample results from the Sludge Recycle Holding (SRH) Pond did not indicate a potential SSI.

Based on the evidence provided in this *Alternative Source Demonstration*, no SSIs over background levels have been determined for any of the CPS Energy CCR units (EP, FAL, BAPs, and SRH Pond) and therefore, CPS Energy will continue with a detection monitoring program.

Introduction

CPS Energy owns and operates the Calaveras Power Station that consists of two power plants (J.T Deely and J.K. Spruce) that are subject to regulation under the CCR Rule. Currently, CPS Energy operates three CCR units at the Power Station: Evaporation Pond (EP), Fly Ash Landfill (FAL), and the Sludge Recycle Holding (SRH) Pond. Although the J.T. Deely Power Plant ceased operation at the end of December 2018 and sluiced bottom ash is no longer being received at the

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Texas Board of Professional Geoscientists Firm 50036

Bottom Ash Ponds (BAPs), the BAPs will continue to be monitored until the units have undergone closure. An *Annual Groundwater Monitoring and Corrective Action Report* (Report) was completed for each of these CCR units. Upper Prediction Limits (UPLs) and Lower Prediction Limits (LPLs) were calculated in each Report for the purpose of determining a potential statistically significant increase (SSI) over background levels. The Reports indicated that a potential SSI over background levels was determined for one or more Appendix III constituents from monitoring wells associated with the EP, FAL, and BAPs. A potential SSI over background levels was not determined from monitoring wells associated with the SRH Pond.

According to the CCR Rule [§257.94(e)], if the owner or operator of a CCR unit determines there is a SSI over background levels for one or more Appendix III constituents, the owner or operator may demonstrate that a source other than the CCR unit caused the SSI over background levels or that the SSI resulted from error in sampling, analysis, statistical evaluation or natural variation in groundwater quality. The CCR Rule also indicates that the owner or operator must complete the written demonstration within 90 days of detecting a SSI over the background levels. If a successful demonstration is completed within the 90-day period, the owner or operator may continue with a detection monitoring program. If a successful demonstration is not completed within the 90-day period, the owner or operator must initiate an assessment monitoring program.

General Comments and Terms

- Several groundwater monitoring wells were installed in the northern portion of the property prior to the construction of the EP and FAL (collectively termed Northern CCR Units). The EP was initially constructed as a landfill in 1990 and later converted to the surface impoundment in 1996 and the FAL was constructed in 1992.
- 'Historical data' refers to analytical data collected from 1988 through 1992 from monitoring wells that were in existence before the EP and FAL were operated. These monitoring wells are located over one-mile north of the BAPs, and although the BAPs were constructed in 1977, the historical data collected from these wells and the current data collected from upgradient wells of the Northern CCR Units is useful in evaluating BAP data.
- 'Background monitoring period' refers to the period from December 2016 to October 2017 when eight independent samples were collected from each background and downgradient well within the CCR monitoring well network.

Evaporation Pond (EP)

Downgradient monitoring well results determined to be a potential SSI (i.e., greater than the UPLs or less than the LPLs) for the EP are presented in the following table and are discussed below.

Analyte	Well	LPL	UPL	Sample Date	Value	Unit
Boron	JKS-61	--	1.80	2021-10-19	1.95	mg/L
pH	JKS-61	4.58	6.26	2021-10-19	6.52	SU
pH	JKS-62	4.58	6.26	2021-10-19	6.67	SU

Boron (JKS-61)

Boron concentrations detected in JKS-61 were previously discussed in the February 2019 and April 2020 *Written Demonstrations*[1] and no SSI was determined for boron in this well based on the lines of evidence provided below. The boron concentrations detected in JKS-61 during the October 2021 monitoring event (1.95 mg/L) and the February 2022 resampling event (1.86 mg/L) are less than or within the range of boron concentrations (between 2.67 to 3.48 mg/L) detected in upgradient monitoring well JKS-57 and are less than the boron concentrations (up to 2.27 mg/L) detected in upgradient monitoring well JKS-45 for the other Northern CCR Unit during the background monitoring period. The boron concentrations in these monitoring wells reflect the natural variability in groundwater quality. The laboratory analytical report from the February 2022 resampling event is provided in Attachment 1.

pH (JKS-61 and JKS-62)

pH values detected in JKS-61 and JKS-62 were previously discussed in the June 2021 *Written Demonstration* and no SSI was determined for pH in these wells based on the lines of evidence provided below. The pH value in JKS-61 during the October 2021 monitoring event (6.52 SU) is within the range of pH values (between 6.48 and 7.40 SU) detected during the background monitoring period. The pH value in JKS-62 during the October 2021 monitoring event (6.67 SU) is within the range of pH values (between 6.63 and 7.51 SU) detected during the background monitoring period. These pH values; however, are essentially neutral (between 6.0 to 8.0 SU) indicative of naturally occurring pH values.

Fly Ash Landfill (FAL)[2]

Downgradient monitoring well results determined to be a potential SSI (i.e., greater than the UPLs or less than the LPLs) for the FAL are presented in the following table and are discussed below.

Analyte	Well	LPL	UPL	Sample Date	Value	Unit
pH	JKS-31	4.87	6.73	2021-10-20	3.92	SU
pH	JKS-46	4.87	6.73	2021-10-20	3.41	SU

pH (JKS-31 and JKS-46)

pH values detected in JKS-31 and JKS-46 were previously discussed in the April 2018, February 2019, April 2020, and June 2021 *Written Demonstrations* and no SSI was determined for pH in these wells based on the same lines of evidence provided below. The pH value detected in JKS-31 during the October 2021 monitoring event (3.92 SU) is within the range of pH values (between 3.84 and 6.34 SU) detected in this well during the background monitoring period; however, historical data from JKS-31 indicate naturally occurring pH values ranging between 2.8 and 5.0 SU. The pH values detected in JKS-46 during the October 2021 monitoring event (3.41 SU) is within the range of pH values (between 2.1 and 3.6 SU) detected in this well during the background monitoring period. In addition, historical data from JKS-36, JKS-40, and JKS-43

[1] The term *'Written Demonstration'* was historically used for a document that provided responses to potential SSIs. In this document and all future documents, the term *'Alternative Source Demonstration'* will be used for these types of documents.

[2] The FAL is primarily used for the storage of fly ash prior to offsite beneficial use and does not store liquid CCR or non-CCR wastestreams.

located in the vicinity of the Northern CCR Units indicate naturally occurring pH values ranging between 2.9 and 4.9 SU.

Bottom Ash Ponds (BAPs)

Downgradient monitoring well results determined to be a potential SSI (i.e., greater than the UPLs or less than the LPLs) for the BAPs are presented in the following table and are discussed below.

Analyte	Well	LPL	UPL	Sample Date	Value	Unit
Boron	JKS-50R	--	2.63	2021-10-19	6.87	mg/L
Boron	JKS-56	--	2.63	2021-10-19	4.31	mg/L
Fluoride	JKS-56	--	0.894	2021-10-19	0.992	mg/L

Boron (JKS-50R and JKS-56)

Boron concentrations detected in JKS-50R and JKS-56 were previously discussed in the February 2019, April 2020, and June 2021 *Written Demonstrations* and no SSI was determined for boron in these wells based on the lines of evidence provided below. The boron concentrations detected in JKS-50R and JKS-56 during the October 2021 monitoring event (6.87 mg/L and 4.31 mg/L, respectively) and the February 2022 resampling event (6.59 mg/L and 4.06, respectively) are in the same order of magnitude detected in upgradient monitoring wells JKS-57 and JKS-45 (up to 3.48 mg/L and 2.27 mg/L, respectively) for the Northern CCR Units during the background monitoring period. The boron concentrations in these monitoring wells reflect the natural variability in groundwater quality.

For comparison, a study of groundwater contamination from coal power plants across the southeast United States documented a 1 to 2 order of magnitude increase in boron concentrations between background and affected monitoring wells (Harkness et al., 2016). The detections in the wells in the study had boron concentrations of 1 to 6 mg/L, compared to background levels ranging from non-detect to 0.04 mg/L. Another study of affected groundwater from a CCR site in Indiana (Buszka et al., 2007) documented a 2 to 3 order of magnitude increase in boron concentrations between background and affected monitoring wells.

In addition, the statistical analysis and February 2022 resampling results (See Fluoride (JKS-56) below) show that no other Appendix III constituents were identified as potential SSIs in JKS-50R or JKS-56. If the elevated boron concentrations were associated with a release, other elevated Appendix III constituent concentrations would also be expected in these wells (Milligan and Ruane, 1980).

Finally, the concentration of boron within the BAPs was considered with respect to concentrations in the surrounding monitoring wells. During two sampling events in February 2018, grab samples of effluent water from the BAPs had reported boron concentrations of 1.03 mg/L and 1.16 mg/L. Because boron is concentrated in coal ash compared to the original coal (Openshaw, 1992), and because boron is one of the more easily leached constituents in coal ash (Izquierdo and Querol, 2012), a low concentration of boron in the effluent indicates that the leachable boron concentration in the bottom ash is relatively low. In February 2018, a grab sample of the bottom ash being sent to the BAPs had a boron concentration of 122 mg/kg, and the toxicity characteristic leaching procedure (TCLP) analysis on this same sample had a boron concentration of 1.1 mg/L. The

concentration of boron in the effluent and the leachable concentration of boron in the bottom ash are less than the concentrations in JKS-50R or JKS-56.

Fluoride (JKS-56)
Fluoride concentrations detected in JKS-56 were not previously identified as a potential SSI necessitating discussion. While the fluoride concentration detected in JKS-56 during the October 2021 monitoring event (0.992 mg/L) exceeded the UPL, the concentration detected during the February 2022 resampling event (0.178 mg/L) does not exceed the UPL. Additionally, the fluoride concentration detected during the February 2022 resampling event is within the range of fluoride concentrations (0.096 U mg/L to 0.564 mg/L) detected in this well during the background monitoring period and prior detection monitoring events. In consideration of these observations, the fluoride concentration observed during the October 2021 event appears to be anomalous.

Summary

EP – The concentrations of constituents associated with potential SSIs (boron and pH) appear to be naturally occurring and reflect natural variability in groundwater quality.

FAL – The concentrations of constituents associated with potential SSIs (pH) appear to be naturally occurring and reflect natural variability in groundwater quality.

BAPs – The concentrations of constituents associated with potential SSIs (boron and fluoride) appear to be naturally occurring and reflect natural variability in groundwater quality. In addition, if the boron concentrations were associated with a release, other elevated Appendix III constituents would be expected and the expectation would be that the detected boron concentrations would be lower based on the effluent water and bottom ash analyses.

Conclusions

Based on the evidence provided in this *Alternative Source Demonstration*, no SSIs over background levels have been determined for any of the CPS Energy CCR units (EP, FAL, BAPs, and SRH Pond) and therefore, CPS Energy should continue with a detection monitoring program.

References

Buszka, P. M., J. Fitzpatrick, L. R. Watson, and R. T. Kay. 2007. Evaluation of Ground-Water and Boron Sources by Use of Boron Stable-Isotope Ratios, Tritium, and Selected Water-Chemistry Constituents near Beverly Shores, Northwestern Indiana, 2004. U.S. Geological Survey Scientific Investigations Report Series 2007-5166.

Harkness, J. S., B. Sulkin, and A. Vengosh. 2016. Evidence for Coal Ash Ponds Leaking in the Southeastern United States. Environmental Science and Technology, v. 50 no. 12, p 6583-6592.

Izquierdo, M. and X. Querol. 2012. Leaching behaviour of elements from coal combustion fly ash: An overview. International Journal of Coal Geology. v. 94. p. 54-66.

Milligan, J. D. and R. J. Ruane. 1980. Effects of Coal-ash Leachate on Ground Water Quality. USEPA Interagency Energy/Environment R&D Program Report, EPA-600/7-80-066.

Openshaw, S. C. 1992. Utilization of Coal Fly Ash. MS Thesis. University of Florida.

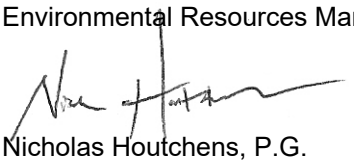
Certification

Certification from a Texas licensed professional geoscientist verifying the accuracy of the information provided in this *Alternative Source Demonstration* is provided in Attachment 2.

We appreciate the opportunity to work with you on this project. Please contact me if you should have any questions.

Yours sincerely,

Environmental Resources Management Southwest, Inc.



Nicholas Houtchens, P.G.
Senior Consultant

ATTACHMENT 1 LABORATORY ANALYTICAL REPORT

SAN ANTONIO TESTING LABORATORY

March 03, 2022

Chelsey Vasbinder
CPS Energy - Environmental Dept.
P.O. Box 1771
San Antonio, TX 78296-1771

SATL Report No.: 2202349
RE: Calaveras Power Station- CCR Units

Dear Chelsey Vasbinder

SATL received 3 Sample(s) on 02/23/2022 for analyses identified on the chain of custody. The analyses were performed using methods indicated on the laboratory report. Any deviations observed at sample receiving are notated on the Sample Receipt Checklist and/or Chain of Custody documents attached as part of this analytical report.

Sincerely,

For San Antonio Testing Laboratory, Inc.

Richard Hawk,
General Manager

Appendix A Laboratory Data Package Cover Page

This data package consists of:

- ☑ This signature page, the laboratory review checklist, and the following reportable data:
- ☑ R1 Field chain-of-custody documentation;
- ☑ R2 Sample identification cross-reference;
- ☑ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☑ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☑ R5 Test reports/summary forms for blank samples;
- ☑ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☑ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☑ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☑ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☑ R10 Other problems or anomalies.
- ☑ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Sandra Felix For Marcela Gracia Hawk, President

Richard Hawk, General Manager

03/03/22 15:40

Date/Time

Project Name:	Calaveras Power Station- CCR Units	Reviewer Name:	JL,SG
Laboratory Job Number:	2202349	Matrix :	

RG-366/TRRP-13 December 2002

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name:	San Antonio Testing Laboratory Inc.	LRC Date:	03/01/22 to 03/02/22
Project Name:	Calaveras Power Station- CCR Units	Laboratory Job Number:	2202349
Reviewer Name:	JL,SG	Prep Batch Number(s):	B210142,B210175

# [1]	A [2]	Description	Yes	No	NA [3]	NR [4]	ER# [5]
R1		**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2		**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3		**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, TICs reported?			X		
R4		**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5		**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6		**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7		**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8		**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9		**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10		**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

RG-366/TRRP-13 December 2002

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name:	San Antonio Testing Laboratory Inc.	LRC Date:	03/01/22 to 03/02/22
Project Name:	Calaveras Power Station- CCR Units	Laboratory Job Number:	2202349
Reviewer Name:	JL,SG	Prep Batch Number(s):	B210142,B210175

# [1]	A [2]	Description	Yes	No	NA [3]	NR [4]	ER# [5]
S1		**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2		**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3		**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?	X				
S4		**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5		**Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6		**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7		**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8		**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?	X				
S9		**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10		**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11		**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12		**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13		**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14		**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15		**Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16		**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

RG-366/TRRP-13 December 2002

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports			
Laboratory Name:	San Antonio Testing Laboratory Inc.	LRC Date:	03/01/22 to 03/02/22
Project Name:	Calaveras Power Station- CCR Units	Laboratory Job Number:	2202349
Reviewer Name:	JL,SG	Prep Batch Number(s):	B210142,B210175

ER#[1]	Description

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

RG-366/TRRP-13 December 2002

CPS Energy - Environmental Dept.
P.O. Box 1771
San Antonio TX, 78296-1771

Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
Project Manager: Chelsey Vasbinder

Reported:
03/03/22 15:40
Received:
02/23/22 09:13

Report No. 2202349

SAMPLE SUMMARY

Total Samples received in this work order: **3**

Sample ID	Laboratory ID	Matrix	Sampling Method	Date Sampled	Date Received
JKS-56-20220222-CCR	2202349-01	Liquid	Grab	02/22/22 08:47	02/23/22 09:13
JKS-61-20220222-CCR	2202349-02	Liquid	Grab	02/22/22 11:37	02/23/22 09:13
JKS-50R-20220222-CCR	2202349-03	Liquid	Grab	02/22/22 09:27	02/23/22 09:13

Notes

All quality control samples and checks are within acceptance limits unless otherwise indciated.
Test results pertain only to those items tested.
All samples were in good condition when received by the laboratory unless otherwise noted.

CPS Energy - Environmental Dept.
P.O. Box 1771
San Antonio TX, 78296-1771

Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
Project Manager: Chelsey Vasbinder

Reported:
03/03/22 15:40
Received:
02/23/22 09:13

Report No. 2202349

Sample ID #: JKS-56-20220222-CCR **Sampling Method: Grab** **Lab Sample ID #: 2202349-01**

Sample Matrix: Liquid **Date/Time Collected: 02/22/22 08:47**

Analyte	Result	MQL	Flag	MDL	SQL[SDL]	Units	PrepMethod	Method	Analyzed	Analyst	Notes
Anions by Ion Chromatography			***Batch ID >*** *B210175*								
Fluoride *	0.178	0.020		0.018	0.018	mg/L	EPA 300.0	EPA 300.0	02/28/22	SG	
Total Metals By ICP			***Batch ID >*** *B210142*								
Boron *	4.06	0.010		0.0006	0.0006	mg/L	EPA 3010A	EPA 6010B	02/28/22	JL	

CPS Energy - Environmental Dept.
P.O. Box 1771
San Antonio TX, 78296-1771

Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
Project Manager: Chelsey Vasbinder

Reported:
03/03/22 15:40
Received:
02/23/22 09:13

Report No. 2202349

Sample ID #: JKS-61-20220222-CCR **Sampling Method: Grab** **Lab Sample ID #: 2202349-02**

Sample Matrix: Liquid **Date/Time Collected: 02/22/22 11:37**

Analyte	Result	MQL	Flag	MDL	SQL[SDL]	Units	PrepMethod	Method	Analyzed	Analyst	Notes
Total Metals By ICP				***Batch ID >*** *B210142*							
Boron *	1.86	0.010		0.0006	0.0006	mg/L	EPA 3010A	EPA 6010B	02/28/22	JL	

CPS Energy - Environmental Dept.
P.O. Box 1771
San Antonio TX, 78296-1771

Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
Project Manager: Chelsey Vasbinder

Reported:
03/03/22 15:40
Received:
02/23/22 09:13

Report No. 2202349

Sample ID #: JKS-50R-20220222-CCR **Sampling Method: Grab** **Lab Sample ID #: 2202349-03**

Sample Matrix: Liquid **Date/Time Collected: 02/22/22 09:27**

Analyte	Result	MQL	Flag	MDL	SQL[SDL]	Units	PrepMethod	Method	Analyzed	Analyst	Notes
Total Metals By ICP			***Batch ID >*** *B210142*								
Boron *	6.59	0.010		0.0006	0.0006	mg/L	EPA 3010A	EPA 6010B	02/28/22	JL	

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Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
Project Manager: Chelsey Vasbinder

Reported:
03/03/22 15:40
Received:
02/23/22 09:13

Report No. 2202349

Anions by Ion Chromatography - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210175 - EPA 300.0									
Blank (B210175-BLK1)				Prepared: 02/28/22 10:00		Analyzed: 02/28/22 10:52			
Fluoride	<0.020	0.020	mg/L				–		
LCS (B210175-BS1)				Prepared: 02/28/22 10:00		Analyzed: 02/28/22 11:10			
Fluoride	1.05	0.020	mg/L	1.00		105	90–110		
LCS Dup (B210175-BSD1)				Prepared: 02/28/22 10:00		Analyzed: 02/28/22 11:28			
Fluoride	1.03	0.020	mg/L	1.00		103	90–110	2	20
Duplicate (B210175-DUP1)		**Source: 2202349-01**		Prepared: 02/28/22 10:00		Analyzed: 02/28/22 15:38			
Fluoride	0.176	0.020	mg/L		0.178		–	1	20
Matrix Spike (B210175-MS1)		**Source: 2202349-01**		Prepared: 02/28/22 10:00		Analyzed: 02/28/22 15:56			
Fluoride	1.18	0.020	mg/L	1.00	0.178	100	80–120		
Matrix Spike Dup (B210175-MSD1)		**Source: 2202349-01**		Prepared: 02/28/22 10:00		Analyzed: 02/28/22 16:14			
Fluoride	1.11	0.020	mg/L	1.00	0.178	93	80–120	6	20

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Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
Project Manager: Chelsey Vasbinder

Reported:
03/03/22 15:40
Received:
02/23/22 09:13

Report No. 2202349

Total Metals By ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B210142 - EPA 3010A									
Blank (B210142-BLK1)				Prepared: 02/28/22 10:00		Analyzed: 02/28/22 17:46			
Boron	<0.010	0.010	mg/L				–		
LCS (B210142-BS1)				Prepared: 02/28/22 10:00		Analyzed: 02/28/22 17:51			
Boron	2.08	0.010	mg/L	2.00		104	85–115		
LCS Dup (B210142-BSD1)				Prepared: 02/28/22 10:00		Analyzed: 02/28/22 17:57			
Boron	2.11	0.010	mg/L	2.00		105	85–115	1	20
Duplicate (B210142-DUP1)		**Source: 2202349-01**		Prepared: 02/28/22 10:00		Analyzed: 02/28/22 18:08			
Boron	4.05	0.010	mg/L		4.06		–	0.2	20
Matrix Spike (B210142-MS1)		**Source: 2202349-01**		Prepared: 02/28/22 10:00		Analyzed: 02/28/22 18:14			
Boron	6.16	0.010	mg/L	2.00	4.06	105	75–125		
Matrix Spike Dup (B210142-MSD1)		**Source: 2202349-01**		Prepared: 02/28/22 10:00		Analyzed: 02/28/22 18:19			
Boron	6.15	0.010	mg/L	2.00	4.06	105	75–125	0.08	20

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Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
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03/03/22 15:40
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Report No. 2202349

DEFINITIONS

*	TNI / NELAC accredited analyte
PQL	Practical Quantitation Limit
MCL	Maximum Contaminant Level
mg/Kg	Milligrams per Kilogram (Parts per Million)
mg/L	Milligrams per Liter (Parts per Million)
PPM	Parts per Million
ND	This qualifier indicates that the analyte was analyzed but not detected above the MDL
J	This qualifier indicates that the analyte is an estimate value between MQL and MDL
SQL	Sample Quantitation Limit
MQL	Method Quantitation Limit
MDL	Method Detection Limit
L	LCS/LCSD recovery is outside QC limits, the results may have a slight bias.
M	MS/MSD recovery is outside QC limits due to possible matrix interferences, results may have a slight bias .
S	RPD is outside QC limits.
RMCCL	Recommended Maximum Concentration of Contaminants Level
µR/hr	MicroRoentgens per hour (Measure of Radioactivity Level)
HT	Sample received past holdtime
IC	Improper Container
IT	Improper Temperature
V	Insufficient Volume
B	Sample collected in Bulk
AB	VOA Vial contained air bubbles.
OP	ortho-Phosphate was not filtered in the field within 15minutes of collection.
CCV	Continuing Calibration Verification Standard.
ICV	Initial Calibration Verification Standard.
Surr L	Surrogate recovery is low outside QC limits.
Surr H	Surrogate recovery is high outside QC limits.
NR	Not Recovered due to source sample concentration exceeds spiked concentration.

Test Methods followed by the laboratory are referenced in the following approved methodology, unless otherwise specified.

Standard Methods for the Examination of Water and Wastewater, 23rd Edition, 2017
Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020, Rev. March 1983
EPA SW Test Methods for the Examination of Solid Waste, SW-846, 1996

CPS Energy - Environmental Dept.
P.O. Box 1771
San Antonio TX, 78296-1771

Notes:

Project: Calaveras Power Station- CCR Units

Project Number: [none]
Project Manager: Chelsey Vasbinder

Reported:
03/03/22 15:40
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02/23/22 09:13

Report No. 2202349

Sandra Felix For Marcela Gracia Hawk, President For

Richard Hawk, General Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

EnviroChain® By Promium

2202349

Submission key J053-OAS-370N	NOT SUBMITTED	Page 1/1

Client Information	Project Information	Laboratory Information	COC Information
CPS Energy - Environmental Dept. P.O. Box 1771 San Antonio TX 78296-1771 Phone: (210) 353-4719 Fax: (210) 353-4271	Calaveras Power Station- CCR Units Number: [none] Sample count: 3 TAT: 7	San Antonio Testing Laboratory 1610 S. Laredo St San Antonio TX 78207 Phone: 210-229-9920 Fax: 210-229-9921	Shipped via: Walk-in

		Analyses	Containers
#1	JKS-56-20220222-CCR 02/22/2022 08:47 Grab / Liquid	B_T TAT: 7 Fluoride_IC TAT: 7	250 mL Plastic HNO3 (1) 250 mL Plastic Unpreserved (1)
	Comments: TRRP REPORTING		
#2	JKS-61-20220222-CCR 02/22/2022 11:37 Grab / Liquid	B_T TAT: 7	250 mL Plastic HNO3 (1)
	Comments: TRRP REPORTING		
#3	JKS-50R-20220222-CCR 02/22/2022 09:27 Grab / Liquid	B_T TAT: 7	250 mL Plastic HNO3 (1)
	Comments: TRRP REPORTING		

1.6°C | 1.6°C TG#7 Iced N.C.S.

Relinquished by	Date/Time	Accepted by	Date/Time
Lance Simmons	~~2-23-22 0840~~	Barnes Pew Rod	2-23-22 0843
Barnes Pew Rod	2-23-22 0913	AJ Ld Aimee Landon FEB 23 2022 ~~0918~~ 0913	

SATESTING

From: Vasbinder, Chelsey <CVasbinder@cpsenergy.com>
Sent: Wednesday, February 23, 2022 12:05 PM
To: Simmons, Lance E.
Cc: SATESTING
Subject: Re: [InternetMail] Calaveras Power Station - CCR Units, Closed Landfills, and Waste Water Permit

Yes, it's 2173863.

We are on the way with the oil sample now.

Chelsey Vasbinder

On Feb 23, 2022, at 11:42 AM, Simmons, Lance E. <LESimmons@cpsenergy.com> wrote:

Aimee, the wastewater does not not need to be TRRP.

Chelsey, can you please confirm the PO?

Thanks,

Lance Simmons

On Feb 23, 2022, at 11:06 AM, SATESTING <satesting@satestinglab.com> wrote:

James brought in the samples for Calaveras Power Station - CCR Units (2202349), Closed Landfills (2202350), and Waste Water Permit (2202351). Since these are electronic invoices and there isn't a place for the PO# I just want to confirm that these will be under the PO# 2173863. Also Does the Waste Water Permit CoC 2202351 need TRRP Reporting as well?

Aimee Landon
San Antonio Testing Laboratory
1610 S. Laredo St.
San Antonio, TX 78207
210-229-9920

<2202351_draftCoC.pdf>
<2202350_draftCoC.pdf>
<2202349_draftCoC.pdf>

SAN ANTONIO TESTING LABORATORY, INC.

Sample Receipt Checklist

Client: CPS Report Number: 2202349

Project Name: Date Received: 2/23/22

Shipped via: ☐FedEx ☐UPS ☐Lonestar ☐Hand Delivered ☐DHL ☒SATL ☐Other Date Due: 3/4/22

Rush: ☐ Specify: ☐3-5 ☐2 ☐1

Items to be checked upon Receipt: [Yes, No, N/A]

	Yes	No	NA	If NA–reason:
1. Custody Seals present?			✓	
2. Custody Seals intact?			✓	
3. Air Bill included in folder, if received?			✓	
4. Is COC included with samples?	✓			
5. Is COC signed and dated by client?	✓			
6. Sample temperature: Thermal preservation between >0° - 6°C? (Samples that are delivered to the laboratory on the same day that they are collected may not meet this criterion, but are acceptable if they arrive on ice.)	✓			Temp: 1-6 °C
7. Samples received with ice ☒ ice packs ☐ other cooling ☐	✓			
8. Is the COC filled out correctly, and completely?	✓			
9. Information on the COC matches the samples?	✓			
10. Samples received within holding time?	✓			
11. Samples properly labeled?	✓			
12. Samples submitted with chemical preservation? (e.g. pH adjusted, or sodium thiosulfate added for microbiological tests)	✓			
13. Proper sample containers used?	✓			
14. All samples received intact, containers not damaged or leaking?	✓			
15. VOA vials (requesting BTEX/VOC analysis) received with no air bubbles? Bubbles acceptable on VOA vials for TPH.			✓	no VOAs
16. Preservative for THMs only ($Na_2S_2O_3$)			✓	no THMs
17. Sample volume sufficient for requested analysis?	✓			
18. Sample amount sufficient for TCLP analysis?			✓	no TCLP
19. Subcontracted Samples: [if Yes, complete the next section]			✓	

Analyses Subcontracted Out: _____ No. of Samples _____

Samples sent to: _____ Sent By: _____

Date samples sent: _____ Samples shipped via: _____

TAT Requested: _____

Tracking number [if any]: _____

Comments:

Received By: [signature] Date: 2/23/22

Labeled By: _____ Date: _____

Logged into LIMS By: _____ Date: _____

Logged into RF By: _____ Date: _____

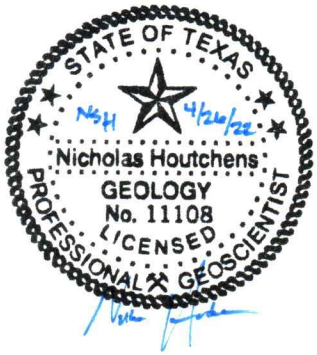
ATTACHMENT 2 CERTIFICATION

ALTERNATIVE SOURCE DEMONSTRATION CERTIFICATION

Calaveras Power Station
San Antonio, Texas
CPS Energy

CERTIFICATION

I hereby verify the accuracy of the information provided in this *Alternative Source Demonstration* in accordance with the requirements of 40 CFR §257.94(e)(2).



Nicholas Houtchens, P.G.
Texas Licensed Professional Geoscientist No. 11108