

Texas Registered Engineering Firm F-2393

2.2. SAMPLING SUMMARY

-1 A g(1m²) of the total area sampled was collected. This is 1.00% of the total area (0.81 ha) or 0.003 Tc.

- The remaining six Appendix III analytes

Tables

TOC Elevation	498.63	TOC Elevation	496.92	TOC Elevation	497.19	TOC Elevation	498.48
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12/6/16 to 12/8/16	2/21/17 to 2/23/17	3/28/17 to 3/30/17	5/2/17 to 5/4/17	6/20/17 to 6/21/17	7/25/17 to 7/26/17	8/29/17 to 8/30/17	10/10/17 to 10/11/17	4/4/18 to 4/5/18	10/30/18 to
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TABLE 3

Groundwater Analytical Results Summary
 CPS Energy - Calaveras Power Station
 Bottom Ash Ponds

Constituents	Unit	12/7/16 Event 1 Dec 2016	2/22/17 Event 2 Feb 2017	3/28/17 Event 3 Mar 2017	5/3/17 Event 4 May 2017	6/20/17 Event 5 Jun 2017	7/25/17 Event 6 Jul 2017	8/29/17 Event 7 Aug 2017	10/10/17 Event 8 Oct 2017	4/4/18 Event 9 Apr 2018	10/30/18 Event 10 Oct 2018	4/9/19 Event 11 Apr 2019	10/22/19 Event 12 Oct 2019
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TABLE 3
Groundwater Analytical Results Summary
CPM6nergy - Calaveras PowterStationy

TABLE 3
 Groundwater Analytical Results Summary
 CPS Energy - Calaveras Power Station
 Bottom Ash Ponds

Constituents	Unit
Boron	mg/L
Calcium	mg/L
Chloride	mg/L
Fluoride	mg/L
Sulfate	mg/L
pH - Field Collected	SU
Total dissolved solids	mg/L
Fluoride	mg/L

NOTES: BLE 3.738 mg/L; TDS 434.15.2 mg/L; pH 7.23508; Total hardness 22.89 D; Total alkalinity 1713270 mg/L; Total arsenic 1.508 mg/L; Total barium 6045.2 mg/L; Total boron 36.9 mg/L; Total calcium 2210/30 mg/L; Total chloride 12813818 mg/L; Total fluoride 2210/22/19 ng/L; Total iron 682.3 mg/L; Total manganese 431207 mg/L; Total molybdenum 11.6 mg/L; Total sulfide 19813818 mg/L; Total thallium 1234/9 mg/L.

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
Bottom Ash Ponds

Constituents	Unit
Boron	mg/L
Calcium	mg/L

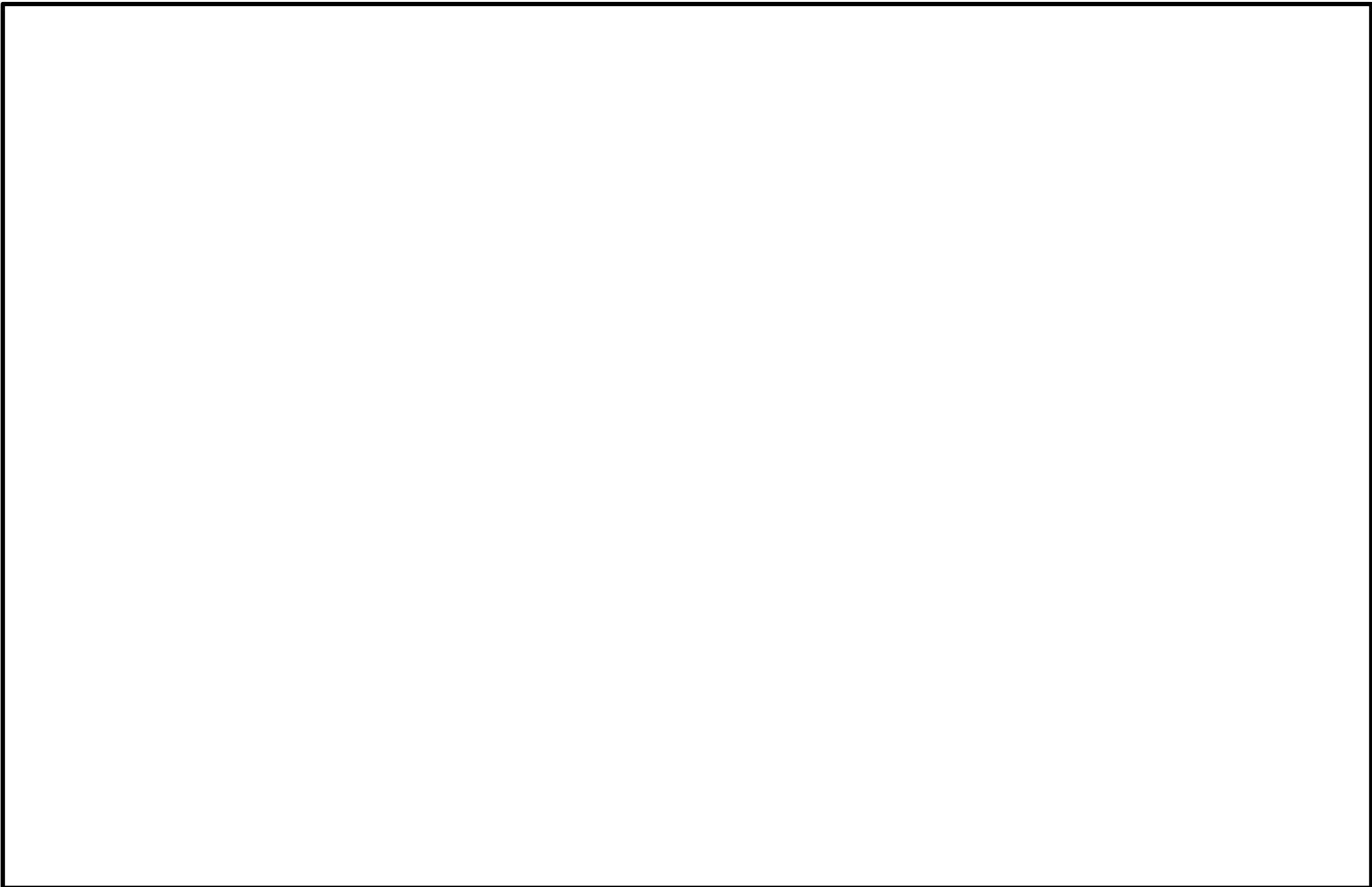
TABLE 3
 Groundwater Analytical Results Summary
 CPS Energy - Calaveras Power Station
 Bottom Ash Ponds

Constituents	Unit
Boron	mg/L
Calcium	mg/L
Chloride	mg/L
Fluoride	mg/L
Sulfate	mg/L
pH - Field Collected	SU
Total dissolved solids	mg/L
Appendix IV - Assessment Monitoring	
Antimony	mg/L
Arsenic	mg/L
Barium	mg/L
Beryllium	mg/L
Cadmium	mg/L
Chromium	mg/L
Cobalt	mg/L
Fluoride	mg/L
Lea-12604 (mg/L) T T mg/L	mg/L
FMercury-123257. (mg/L) T T BMolybdenm-1202(mg (mg/L) T T BSelnicm)-113769.5(mg/L) T T BThamg/L) To659.7 (mg/L) T T Radmg/-226m)-1449.5pCig/L	

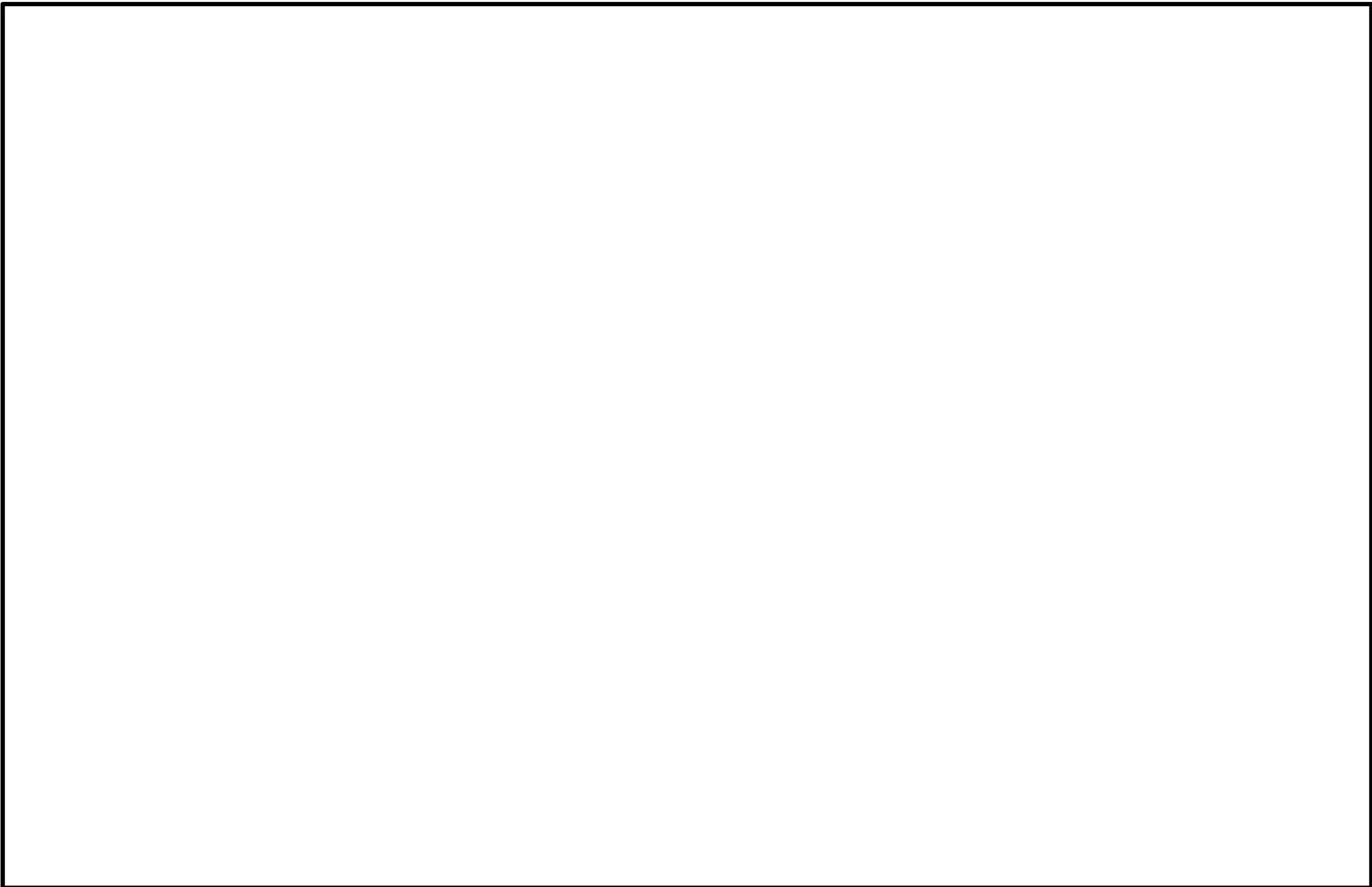
TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
Bottom Ash Ponds

Constituents	Unit
Boron	mg/L

Figures



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Laboratory Data Packages

Appendix A

(Data Packages Available Upon Request)

Statistical Analysis Tables and Figures

Appendix B

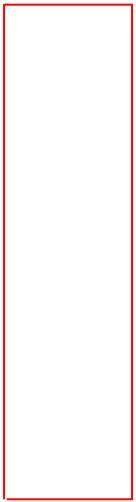
Analyte	N	Num Detects	Percent Detect	DF	KW Statistic	p-value	Conclusion	UPL Type
Boron	24	24	100.00%	1	17.3	<0.001	Significant Difference	Intrawell
Calcium	24	24	100.00%	1	16.3	<0.001	Significant Difference	Intrawell
Chloride	24	24	100.00%	1	0.0133	0.908	No Significant Difference	Interwell
Fluoride	24	23	95.83%	1	16.8	<0.001	Significant Difference	Intrawell
pH	24	24	100.00%	1	10.1	0.00146	Significant Difference	Intrawell
Sulfate	24	24	100.00%	1	16.8	<0.001	Significant Difference	Intrawell
Total dissolved solids	24	24	100.00%	1	6.62	0.0101	Significant Difference	Intrawell

NOTES:

Analyte	UPL Type	Well	N	Num	Percent	p-value	tau	Conclusion
				Detects	Detect			
Boron	Intrawell	JKS-49	12	12	100.00%	<0.001	-0.779	Decreasing Trend
Boron	Intrawell	JKS-51	12	12	100.00%	0.45	-0.168	Stable, No Trend
Calcium	Intrawell	JKS-49	12	12	100.00%	0.945	-0.0153	Stable, No Trend
Calcium	Intrawell	JKS-51	12	12	100.00%	0.638	-0.121	Stable, No Trend
Chloride	Interwell	JKS-49, JKS-51	24	24	100.00%	0.0114	0.371	Increasing Trend
Fluoride	Intrawell	JKS-49	12	12	100.00%	0.311	0.242	Stable, No Trend
Fluoride	Intrawell	JKS-51	12	11	91.67%	0.947	-0.0303	Stable, No Trend
pH	Intrawell	JKS-49	12	12	100.00%	0.484	-0.159	Stable, No Trend
pH	Intrawell	JKS-51	12	12	100.00%	0.459	-0.182	Stable, No Trend
Sulfate	Intrawell	JKS-49	12	12	100.00%	0.243	0.26	Stable, No Trend
Sulfate	Intrawell	JKS-51	12	12	100.00%	0.45	0.168	Stable, No Trend
Total dissolved solids	Intrawell	JKS-49	12	12	100.00%	0.459	0.182	Stable, No Trend
Total dissolved solids	Intrawell	JKS-51	12	12	100.00%	0.836	-0.0465	Stable, No Trend

NOTES:

Appendix B – Figure 1
Unit: Bottom Ash Ponds
Boxplots of Upgradient Wells



**Apm8Hix B – Figure re2
Unit: Bottom Ash Bnds
QQ Plots of Upgradient Wells**

Appendix B – Figure 2
Unit: Bottom Ash Ponds
QQ Plots of Upgradient Wells

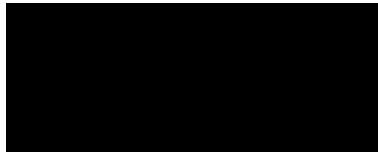
Appendix B – Figure 3
Unit: Bottom Ash Ponds

Appendix B – Figure 3

Appendix B – Figure 4
Unit: Bottom Ash Ponds
Trend Analysis of Downgradient Wells with Exceedances

July 11, 2019
CPS Energy

BAPs – The constituents associated with potential SSIs include boron in JKS-50R and JKS-56 and fluoride in JKS-48. As previously presented in the *Written Demonstrations*, the concentrations of



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