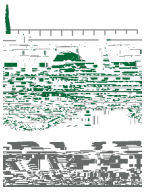


3.1. GROUNDWATER FLOW RATE AND DIRECTION

				(msl)
487.02	18.85	485.60	15.67	480.78

TABLE 3
Ah Landfill3

ppendix L- Detection Monitorng3

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
Fly Ash Landfill

Constituents	Unit

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
Fly Ash Landfill

Constituents	Unit
Appendix III - Detection Monitoring	
Boron	mg/L
Calcium	mg/L
Chloride	mg/L
Fluoride	mg/L
Sate d	mg/L

Analyte	N	Num Detects	Percent Detect	DF	KW Statistic	p-value	Conclusion	UPL Type
Boron	28	28	100.00%	1	14	<0.001	Significant Difference	Intrawell
Calcium	27	27	100.00%	1	19.5	<0.001	Significant Difference	Intrawell
Chloride	28	28	100.00%	1	0.931	0.335	No Significant Difference	Interwell
Fluoride	28	22	78.57%	1	16.6	<0.001	Significant Difference	Intrawell
pH	28	28	100.00%	1	15.8	<0.001	Significant Difference	Intrawell
Sulfate	28	28	100.00%	1	15.6	<0.001	Significant Difference	Intrawell
Total dissolved solids	28	28	100.00%	1	15.3	<0.001	Significant Difference	Intrawell be ofoled.ulae

Analyte	Well	Units	N	Num Detects	Percent Detect	Min ND	Max ND	Min Detect	Median	Mean	Max Detect	SD	CV	Distribution
Boron	JKS-45	mg/L	14	14	100.00%			1.11	2.24	2.27	3.24	0.627	0.27580402	Normal

Well	Sample	Date	Analyte	Detect	Concentration	Distribution	Statistical Outlier	Statistical Outlier	Visual Outlier	Log Visual Outlier	Normal Outlier	Log-normal Outlier	Statistical and Visual Outlier	Final Decision	Analyst Decision

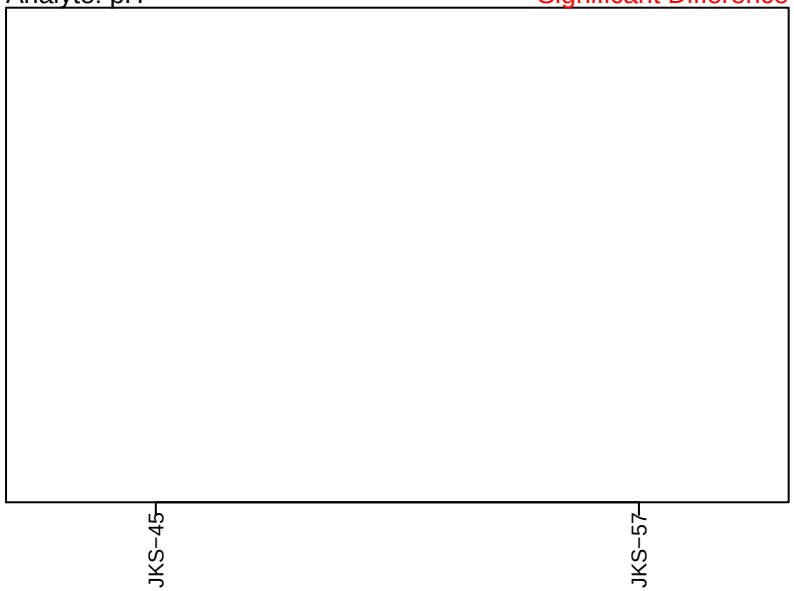
Analyte	UPL Type	Trend	Well	N	Num Detects	Percent Detects	LPL	UPL	Units	ND Adjustment	Transformation	Alpha	Method	Final LPL	Final UPL
Boron	Intrawell	Increasing Trend	JKS-45	14	14	100.00%		4.22	mg/L	None	No	0.00188	NP Detrended UPL		
Boron	Intrawell	Stable, No Trend	JKS-57	14	14	100.00%		5.97	mg/L	None					

Analyte	Well	LPL	UPL	Units	Recent Date	Observation	Qualifier	Obs > UPL	Notes

Appendix B − Figure 1
Unit: Fly Ash Landfill
Boxplots of Upgradient Wells

Analyte: pH

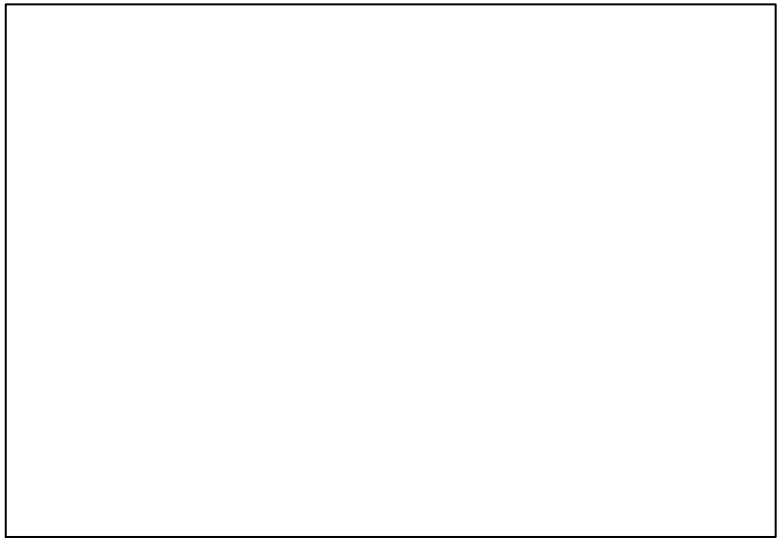
Significant Difference



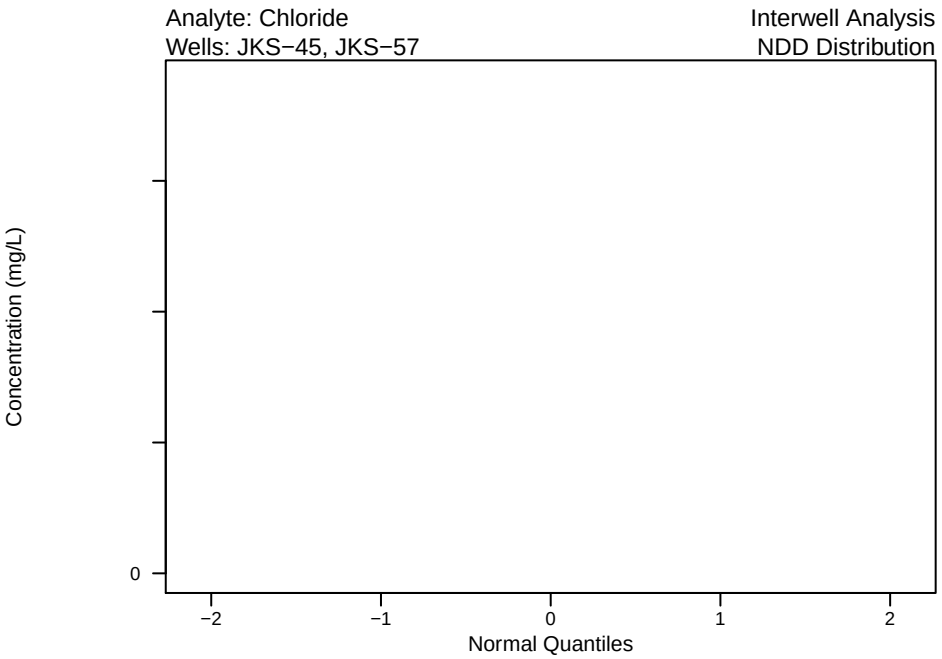
Appendix B − Figure 2
Unit: Fly Ash Landfill
QQ Plots of Upgradient Wells

Analyte: Calcium
Wells: JKS−45

Intrawell Analysis



Appendix B − Figure 2
Unit: Fly Ash Landfill
QQ Plots of Upgradient Wells



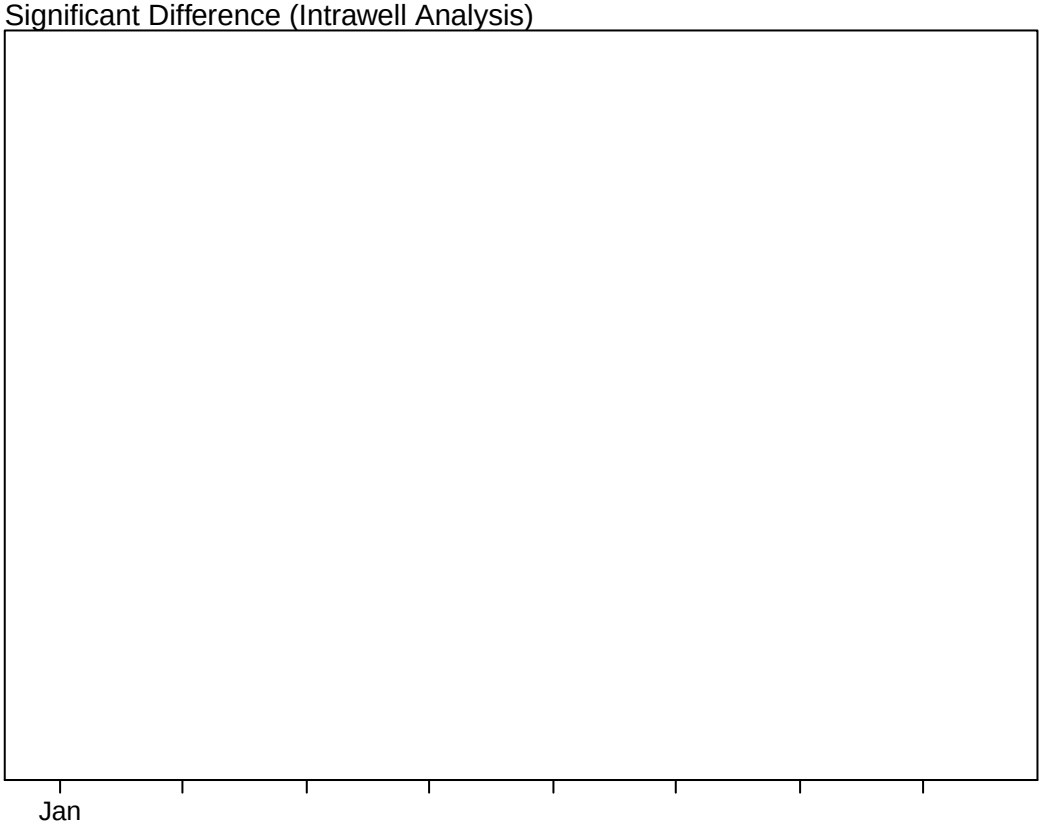
Appendix B − Figure 2
Unit: Fly Ash Landfill
QQ Plots of Upgradient Wells

Appendix B − Figure 2
Unit: Fly Ash Landfill
QQ Plots of Upgradient Wells

Analyte: Total dissolved solids Intrawell Analysis
Wells: JKS−57 Normal Disaa

Appendix B − Figure 3
Unit: Fly Ash Landfill
Timeseries of Upgradient Wells

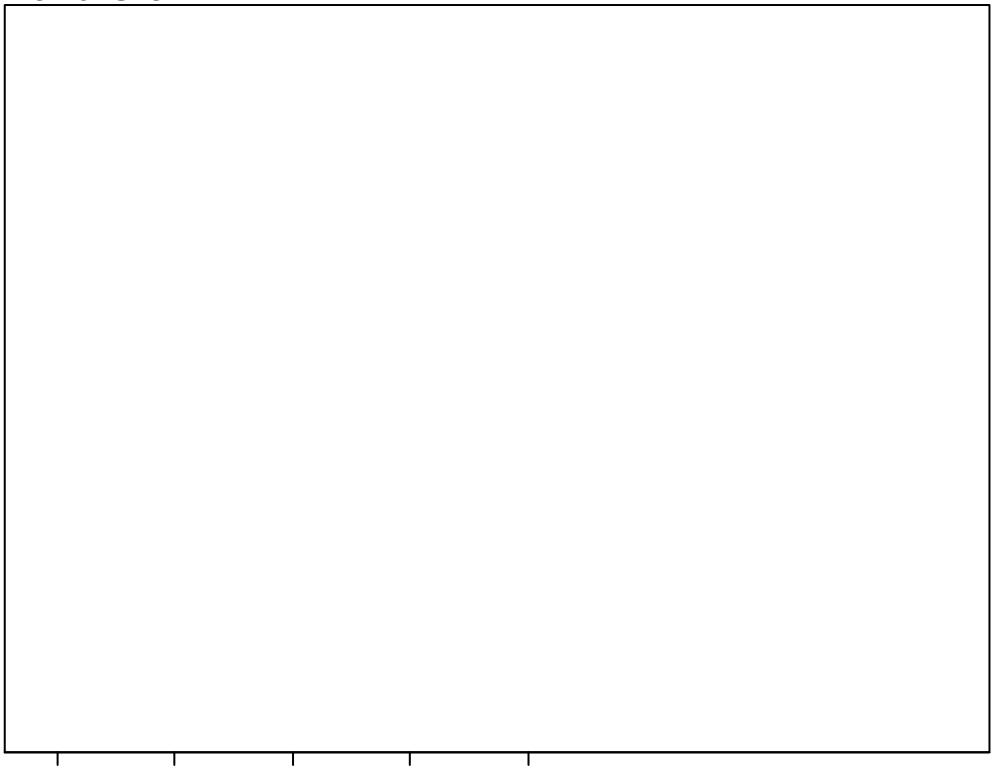
Chemical: Boron
Significant Difference (Intrawell Analysis)

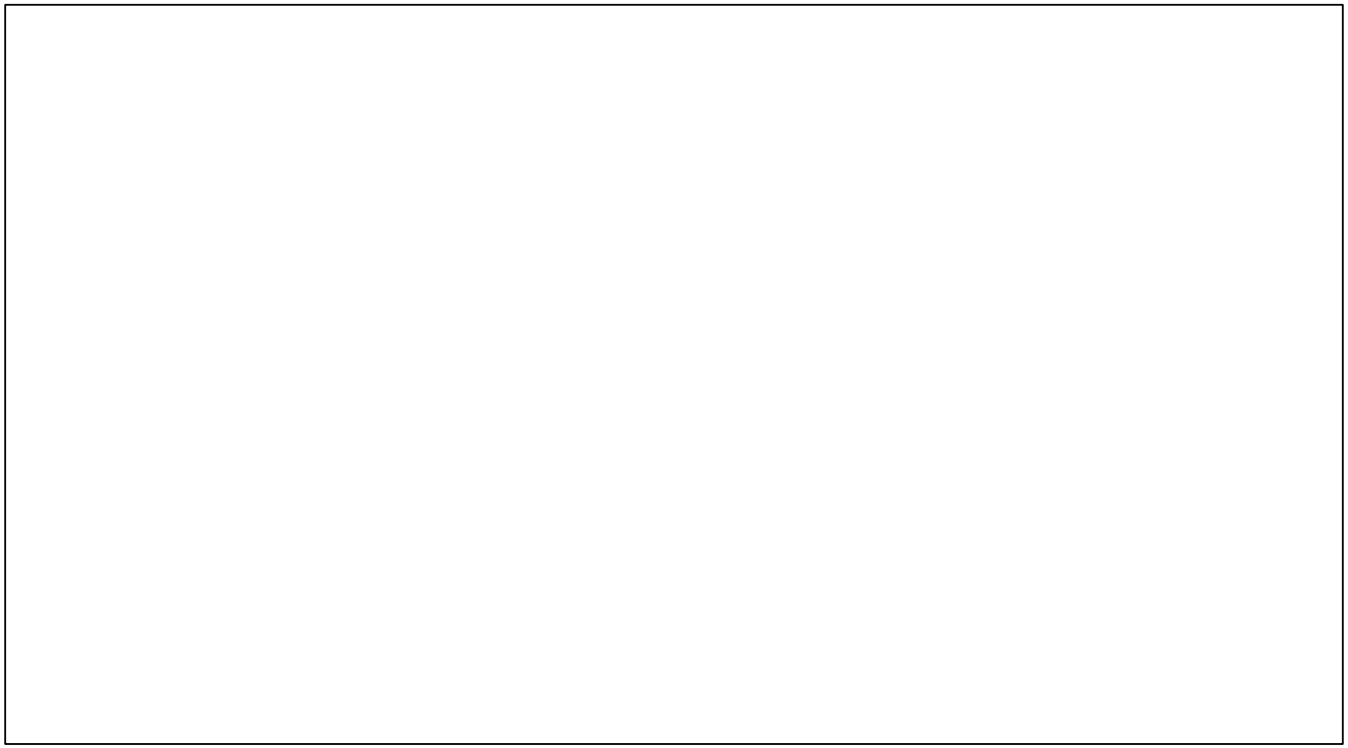


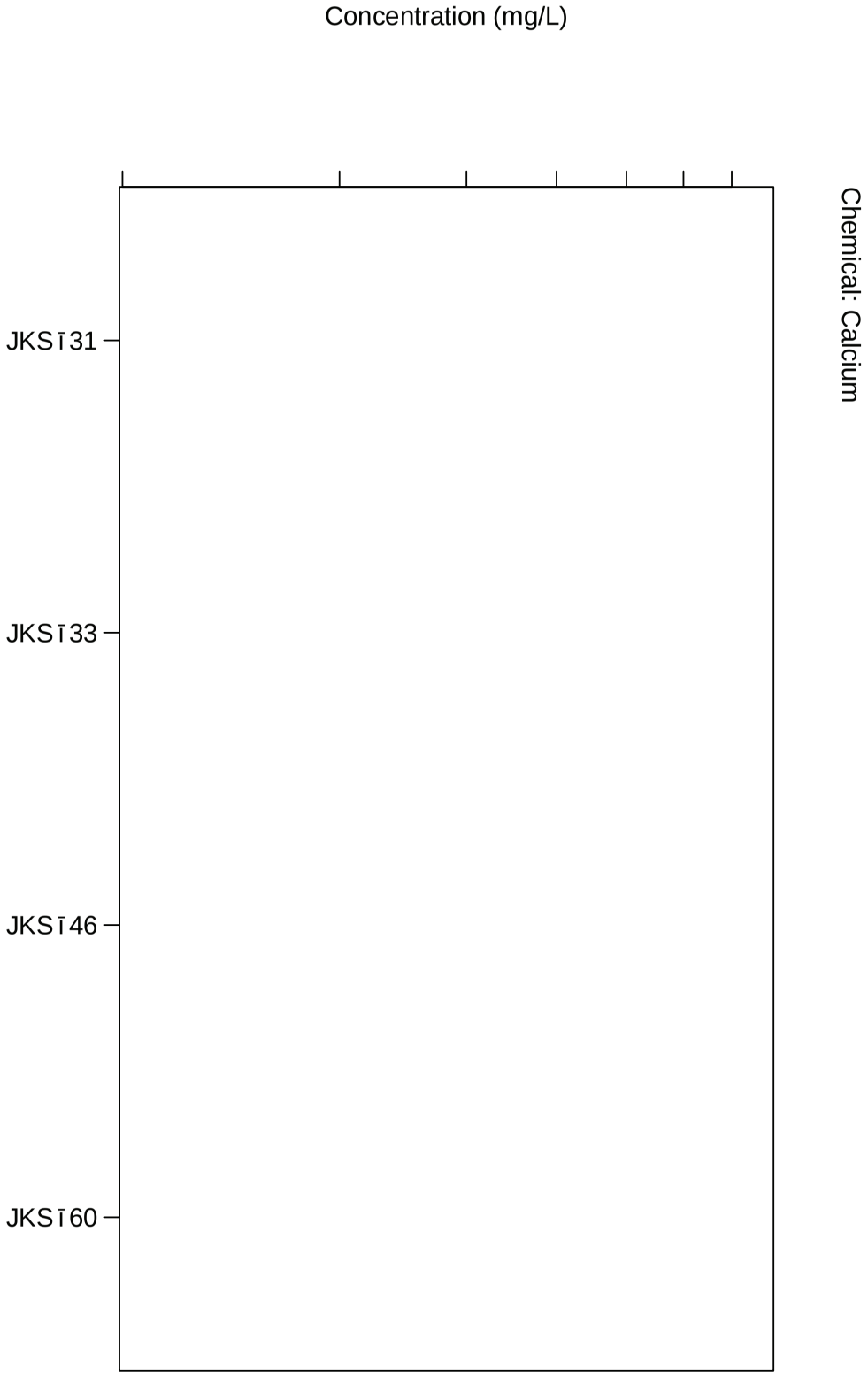
Appendix B − Figure 3
Unit: Fly Ash Landfill

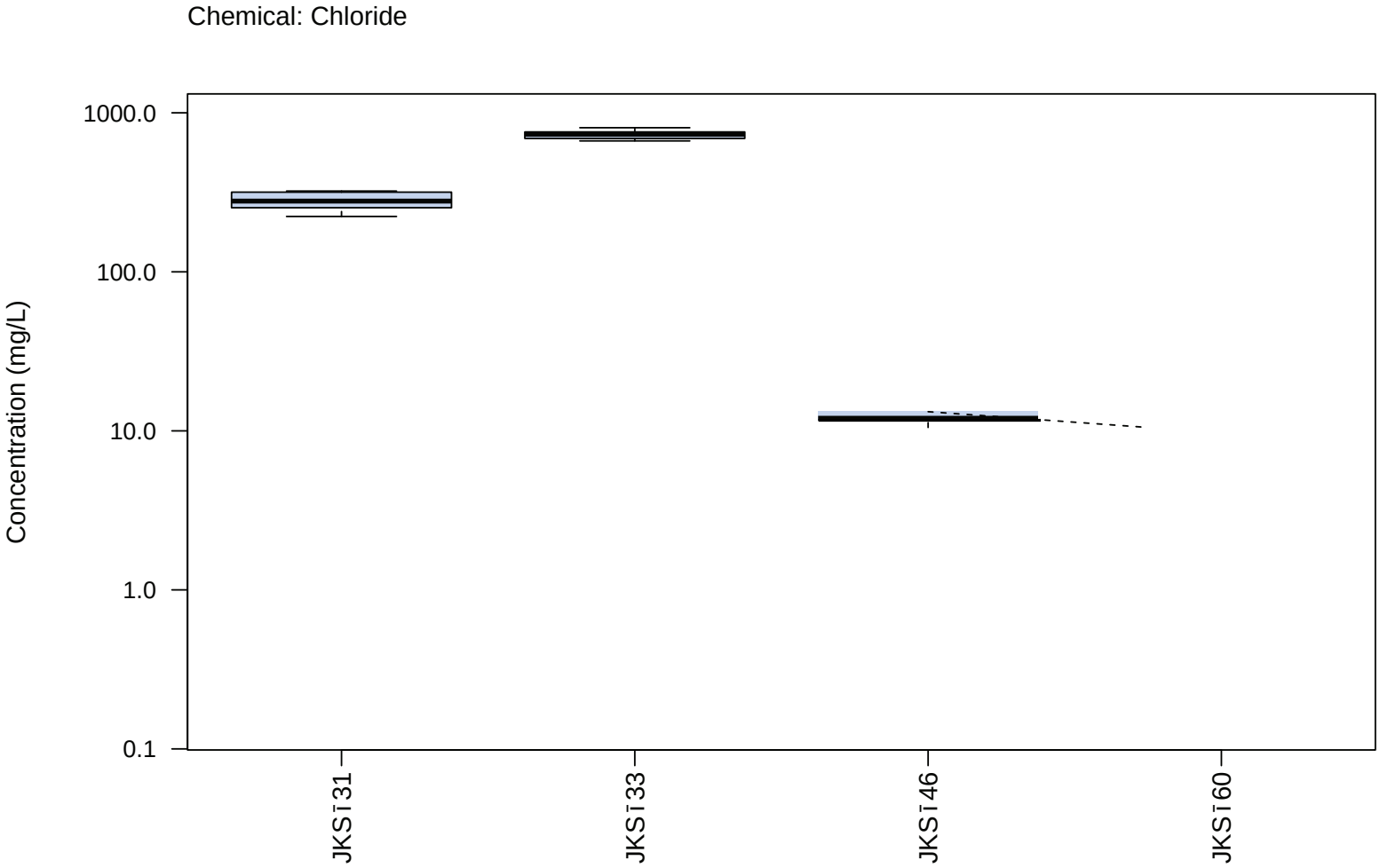
Appendix B − Figure 4
Unit: Fly Ash Landfill
Trend Analysis of Downgradient Wells with Exceedances

Chemical: pH
Well: JKS−31

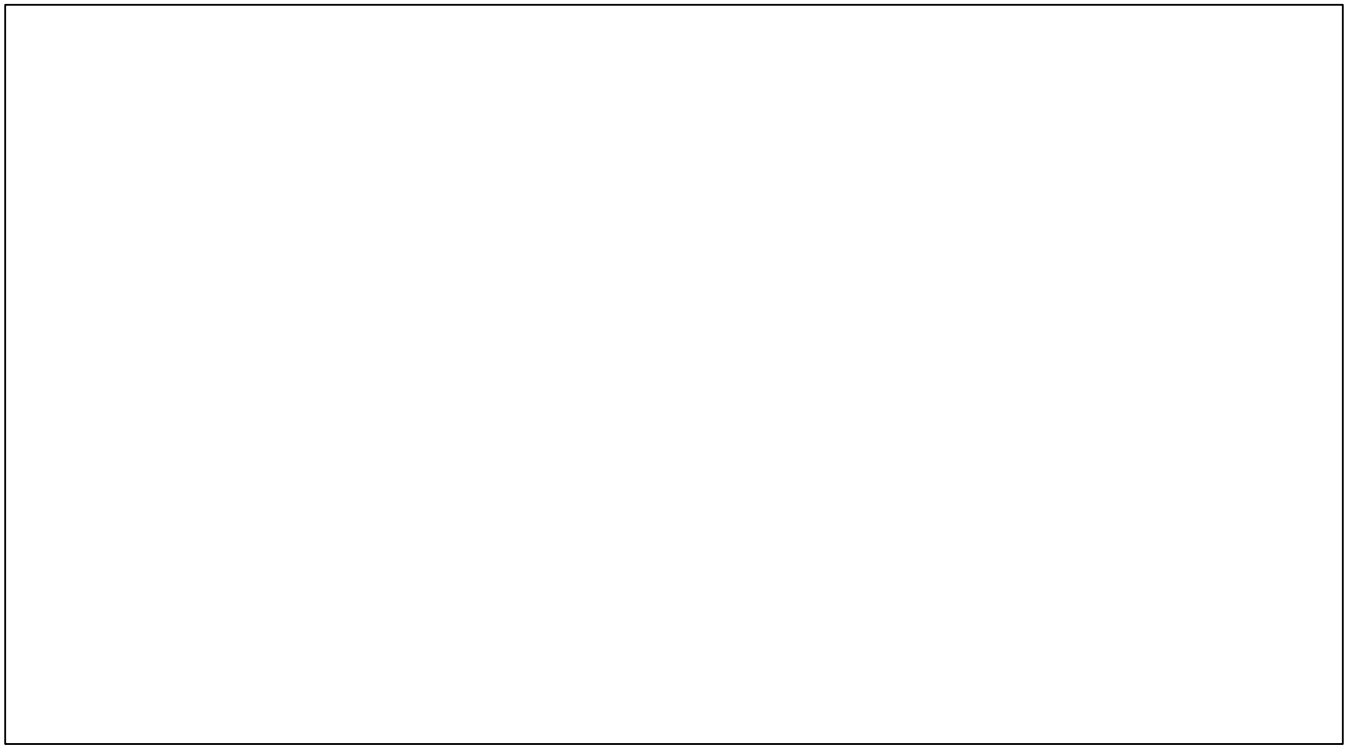


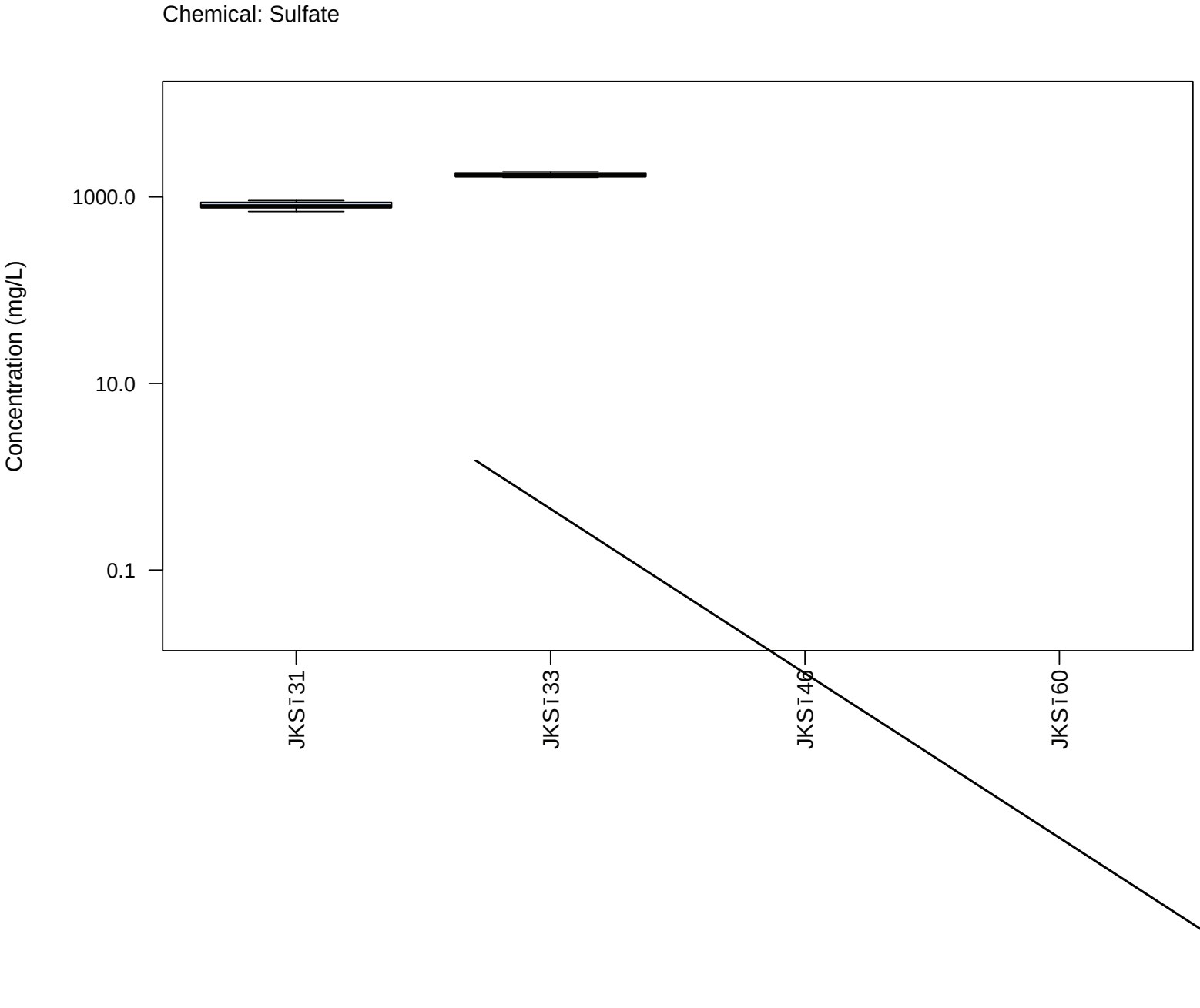



Concentration (mg/L)
JKSĪ31
JKSĪ33
JKSĪ46
JKSĪ60
Chemical: Calcium


Chemical: Chloride
Concentration (mg/L)
1000.0
100.0
10.0
1.0
0.1
JKSī31
JKSī33
JKSī46
JKSī60

Ch v

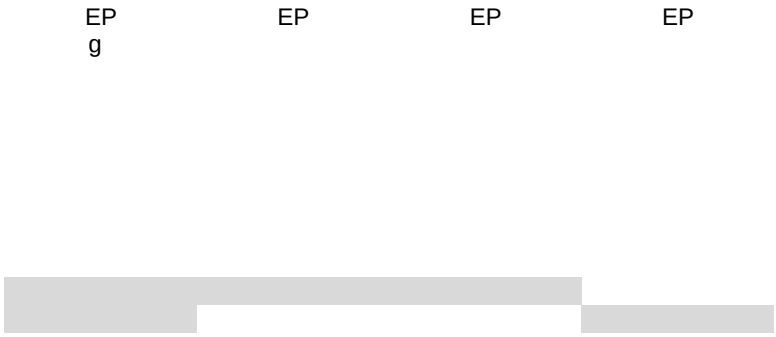



Chemical: Sulfate
Concentration (mg/L)
1000.0
10.0
0.1
JKSĪ31
JKSĪ33
JKSĪ40
JKSĪ60

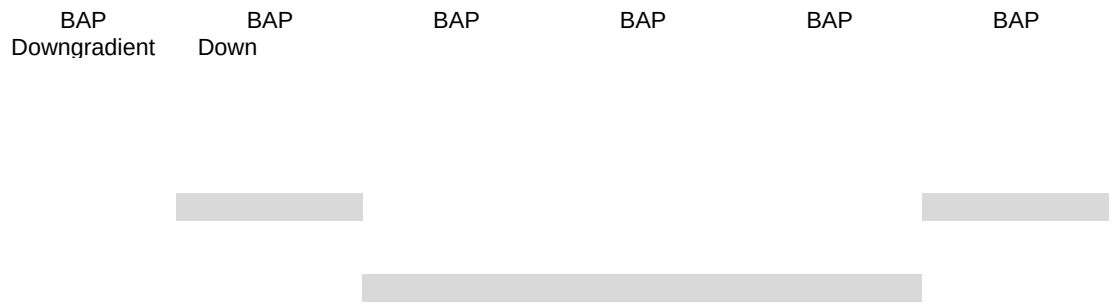
April 2020 Groundwater Sampling Event –

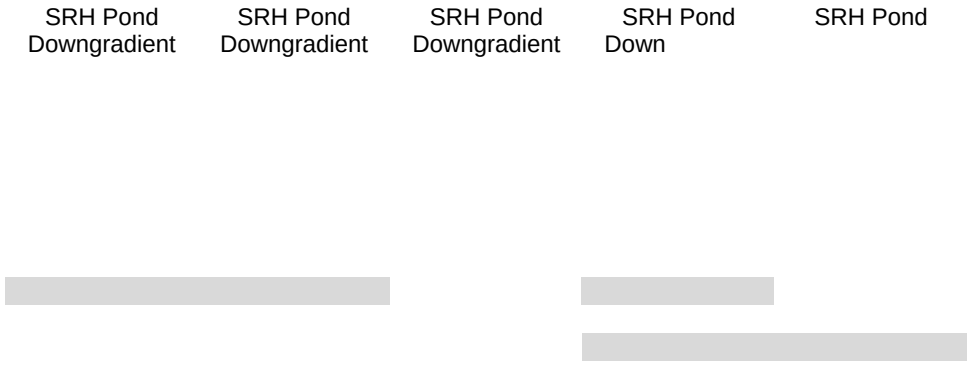
ERM

(Hou(est2)D9 P(j)5Mjer(e)1320(5(e)0)]TJ/G/0290000719.239000d( )Tj/43477/43371.453 T


EP
g
EP
EP
EP

			Downgradient JKS-31 4/28/2020	Downgradient JKS-33 4/28/2020	Downgradient JKS-46 4/28/2020	Downgradient JKS-46 4/28/2020	Downgradient JKS-60 4/28/2020
		DN	NNNF				
Constituent	Units						


BAP
Downgradient
BAP
Down
BAP
BAP
BAP
BAP


SRH Pond Downgradient
SRH Pond Downgradient
SRH Pond Downgradient
SRH Pond Down
SRH Pond