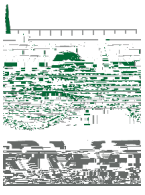
Registration Application for Coal Combustion Product (CCP) Retail



The business of sustainability

CORRESPONDENCE COVER SHEET
WASTE PERMITS DIVISION
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Registration No.:

Registration No.:

Registration No.:

Registration No.:

(b) As used in this section:

(b)(1) Based flood means a flood that has a 1 percent or greater chance of recurring in any year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

II. Location Restrictions and Geology

See Instructions and Technical Guidance

22.

Registration No.:

Registration No.:

If "Yes", the CCR unit is subject to the closure requirements under 30 TAC Chapter 352 and 40 CFR §257.101(a) to retrofit or close. A notification must be prepared stating that an assessment of corrective measures has been initiated.

See Attachment 9 *Alternative Capacity Infeasibility Demonstration* for the SRH Pond and the *Alternative Capacity Infeasibility Demonstration* for the Evaporation Pond, prepared for and submitted to EPA on 30 November 2020, to demonstrate that CCR and non-CCR wastestreams must continue to be managed in those surface impoundments based on a lack of alternative capacity.

ated11 Janua(r)8.3y I

Registration No.:
Registrant: CPS Energy Calaveras Power Station

All the CCR units have only been evaluated for Appendix III constituents under Detection

Registration No.:

Registration No.:
Registrant: CPS Energy Calav

Registration No.:
Registrant:

Attachment 1 Section20 Attachmentsn

DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:
W.O.NO.:		

DATE:

PROP_ID	SITUS

PROP_ID	SITUS	Map_ID	OWNER (Last name, First name)	ADDRLN1	MAILING ADDRESS
1054970					

PROP_ID	SITUS	Map_ID	OWNER (Last name, First name)	ADDRLN1	MAILING ADDRESS
337638	14162 S LOOP 1604	163			

PROP_ID	SITUS	Map_ID	OWNER (Last name, First name

PROP_ID	SITUS	Map_ID	Combined Address List
337781	9720 ELMENDORF-LA VERNIA RD	001	
1138489	FOSTER RD	002	ALEMAN RAUL JR & LONGORIA CAROLINA 24397 LOUISIANA RD LA FERIA, TX 78559-4358
159059	14398 KILOWATT RD	003	ALMAGUER DAVID & SYLVIA 14398 KILOWATT RD SAN ANTONIO TX 78223-9727
336885	8904 S FOSTER RD	004	ALMALIGA LARA 4214 STANL 4CO-6.9 (RNERNSET)-17.26(X)-9.15(78210-)-6.3 Td281

PROP_ID	SITUS	Map_ID	Combined Address List
158971	14395 KILOWATT RD	076	HALLINAN NICHOLAS 14395 KILOWATT RD SAN ANTONIO TX 78223-9727
157109	10385 S FOSTER RD	077	HARRISON REESE L JR ETAL 2301 BROADWAY ST SAN ANTONIO TX 78215-1157
157111	10454 S FOSTER RD	077	HARRISON REESE L JR ETAL 2301 BROADWAY ST SAN ANTONIO TX 78215-1157
157114	11615 CASSIANO RD	077	HARRISON REESE L JR ETAL 2301 BROADWAY ST SAN ANTONIO TX 78215-1157
159182	15181 S LOOP 1604	078	HEINESH RANDOLPH A REV TR RANDOLPH A HEINESH TRUSTEE 505 N SEPULVEDA BLVD STE 7 MANHATTAN BEACH CA 90266-6743

PROP_ID	SITUS	Map_ID	Combined Address List
157187	12832 CASSIANO RD	096	KEILMANN ROBERT PO BOX 23191 SAN ANTONIO TX 78223-0191
335306	6795 COOKSEY RD	097	MORGAN GIBSON 9388 CORPORATE DR SELMA TX 78154-1249
336976	9362 HILDEBRANDT RD	098	KELLER GILBERT E SR & MARY ANN RICHTER 9362 HILDEBRANDT RD SAN ANTONIO TX 78222-6030

PROP_ID	SITUS	Map_ID

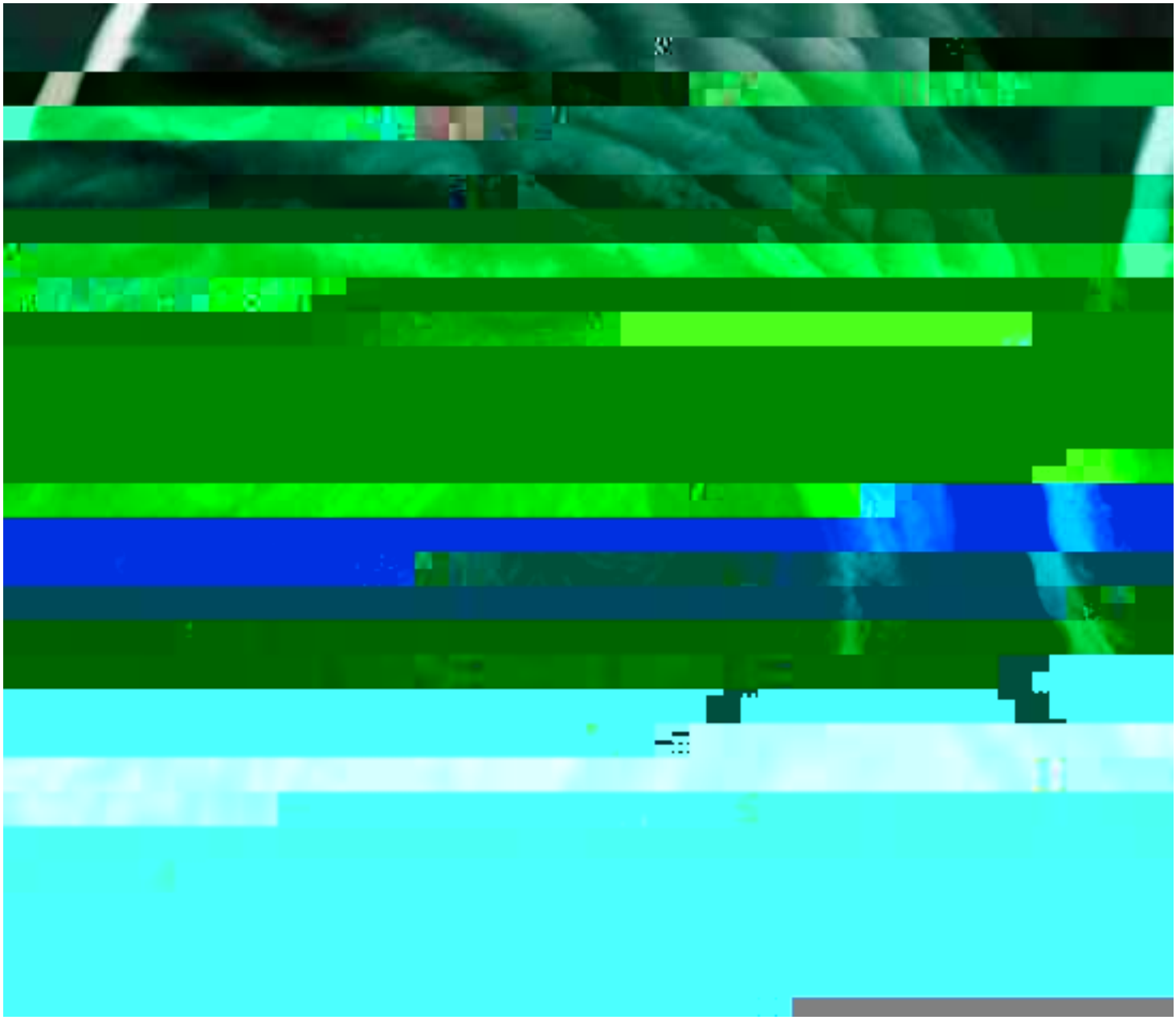
PROP_ID	SITUS	Map_ID	Combined Address List
158005	13257 LAGUNA RD	160	RAMIREZ RICARDO RAMIREZ LAURA 13257 LAGUNA RD SAN ANTONIO TX 78223-4295
1125351	13367 LEEWARD LN	161	RANDHAWA JASWINDER & PARAMJIT 13367 LEEWARD LN SAN ANTONIO TX 78263-2383
336621	11425 STUART RD	162	RAUSCHUBER GI9AART SAN ANTONIO TX 78263-
763821	1 S LNIOOr14RD	362	J

PROP_ID	SITUS	Map_ID	Combined Address List

PROP_ID	SITUS	Map_ID	Combined Address List

PROP_ID	SITUS	Map_ID	Combined Address List
1125337	9818 SPINNAKER PATH	221	CARDENAS TIMOTHY J9818 SPINNAKER PATAN ANOT380H

Registration No.:



EXECUTIVE SUMMARY

On behalf of CPS Energy, Environmental Resource Management Southwest, Inc. (ERM) conducted evaluations of the location restrictions for the existing Coal Combustible Residuals (CCR) Units associated with the Calaveras Power Station

Seismic Impact Zones

Based on review of published seismic hazard and earthquake maps, all five CCR Units are not located in seismic impact zones. Therefore, all five CCR Units meet the minimum requirements of 40 CFR §257.63.

(5) Sufficient information is available to make a reasoned determination with respect to the demonstrations in paragraphs (a)(1) through (4) of this section.

40 CFR §257.62 Fault Areas

(a) New CCR landfills, existing and new CCR surface impoundments, and all

3.0 LOCATION RESTRICTIONS EVALUATION

ERM evaluated technical compliance with the five location restrictions outlined in the CCR Rule through a combination of desktop reviews and obtaining site-

3.1.2 Evaporation Pond (EP)

3.3 FAULT AREAS

The CCR Rule defines fault as “a fracture or a zone of fractures in any material

- USGS Seismic Hazard Map (https://earthquake.usgs.gov/earthquakes/byregion/images/texas-haz); and
- USGS South Texas Earthquakes 1900-2018 (https://earthquake.usgs.gov/earthquakes/search).

- *Geotechnical Engineering Study for Ash Pond Berms – Spruce/Deely Generation Units, San Antonio, Texas* (Raba Kistner Consultants, May 2014) (Appendix A in CDM Smith reports);
- *Assessment of Dam Safety of Coal Combustion Surface Impoundments Final*

to 5%. Based on the annual inspections of all the CCR Units starting in 2015, the land surrounding the CCR Units does not show evidence of movement, including slumping, tension cracks, hummocky topography, or vegetation

4.0 CONCLUSIONS

The evaluations, documented in this *Location Restrictions Demonstration*, concluded the following:

Placement Above the Uppermost Aquifer

Based on the review of the *CCR Units – 2017 Annual Inspection and Fugitive Dust Control Report,* as-built drawings, site-specific groundwater elevation data and soil geotechnical data, the bottom (bases) of the Fly Ash Landfill (FAL),

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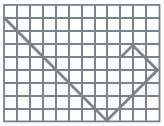

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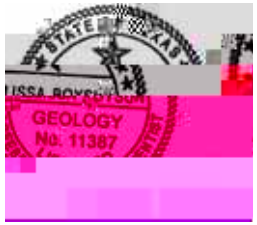
MELISSA BOYSUN
GEOLOGY
No. 11387
LICENSED
PROFESSIONAL GEOSCIENTIST


STATE OF TEXAS
GEOLOGY
No. 11387

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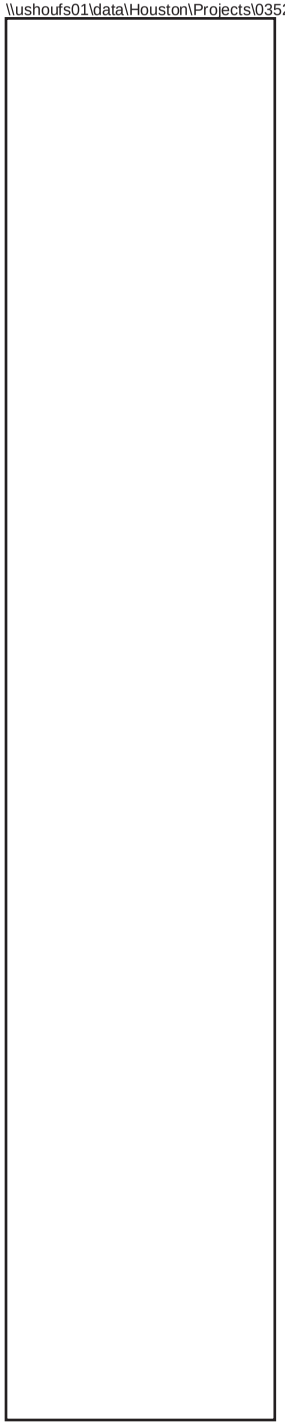
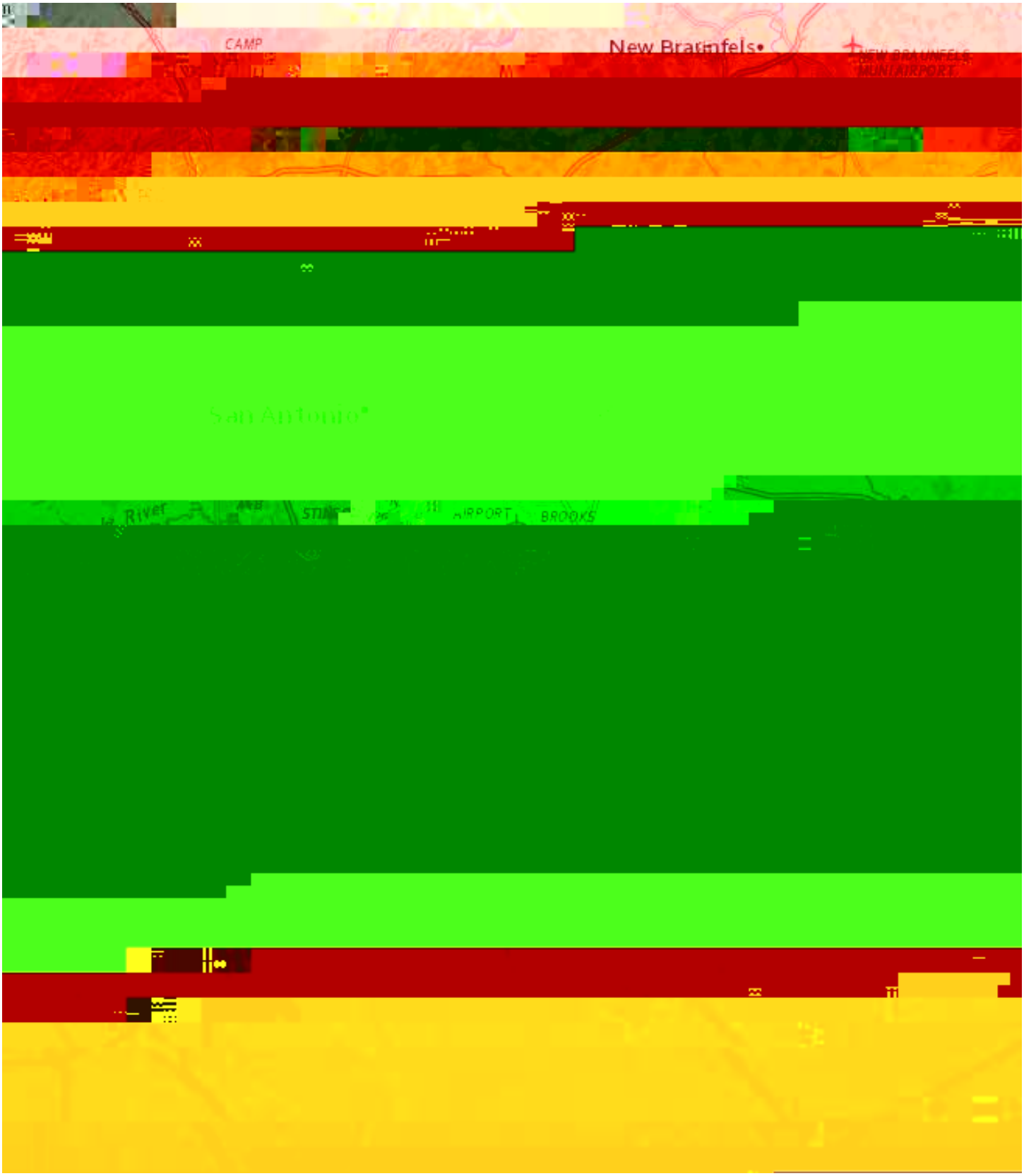
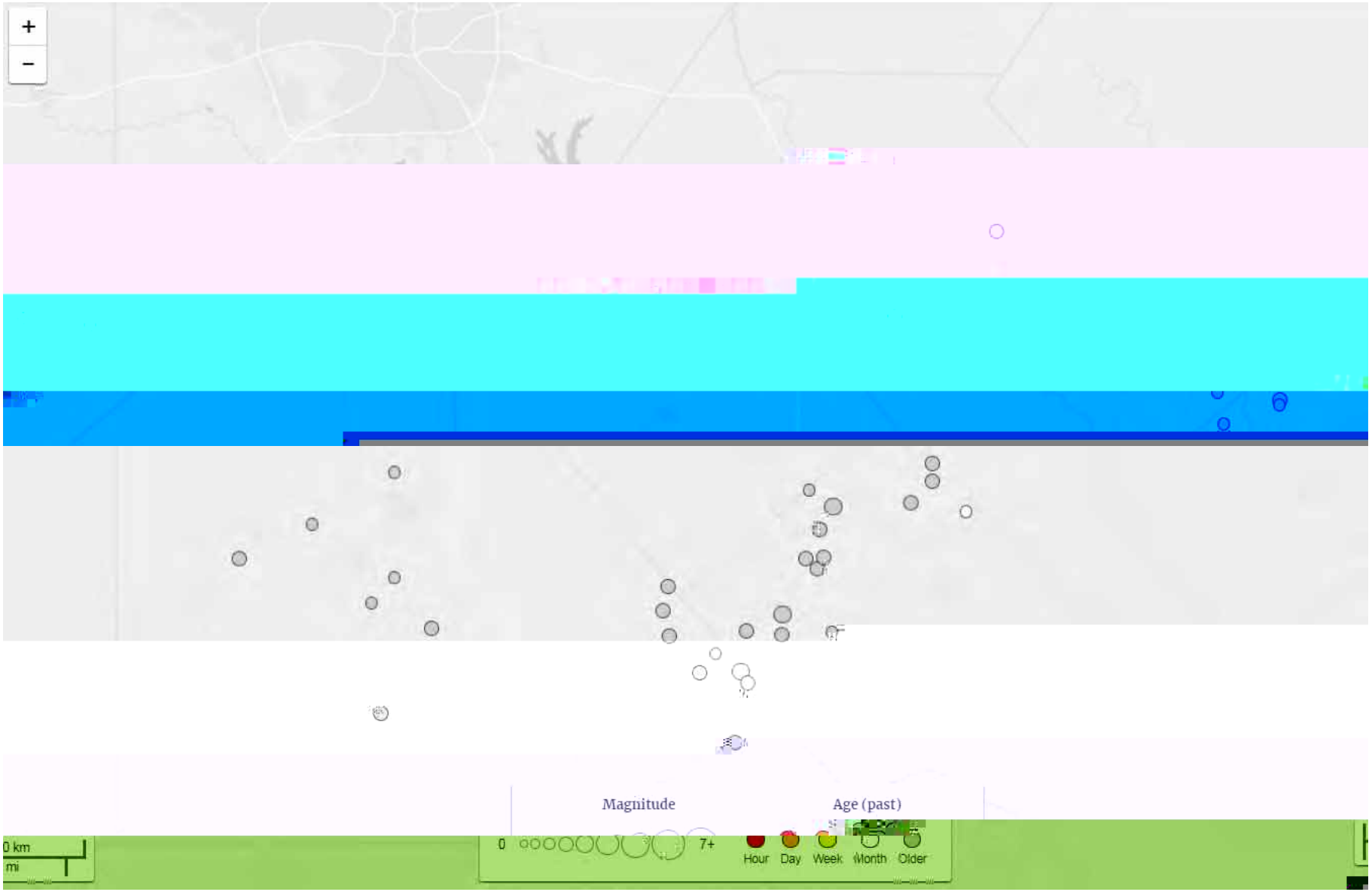


\\ushoufs01\data\Houston\Projects\0352436 CPS Energy Calaveras CCR Engineering.WZ\GIS\MXD\WetlandsAssessment2018\WetlandsAssessment2018.aprx, REVISED: 09/19/2018, SCALE: 1: when printed at 8.5x11 DRAWN BY: GIS

\\ushoufs01\data\Houston\Projects\0352436 CPS Energy Calaveras CCR Engineering.WZ\GIS\MXD\WetlandsAssess! nt201ģ\WetlandsAssem


New Sulphur Springs Rd
Cooksey Rd
Cecil St Rd


CAMP
New Braunfels
NEW BRAUNFELS MUNI AIRPORT
San Antonio
River
STIN
AIRPORT
BROOKS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Age (past)
Hour
Day
Week
Month
Older
0 km
mi


Medina County

LOCATION RESTRICTIONS DEMONSTRATION CERTIFICATION

Calaveras Power Station
San Antonio, Texas
CPS Energy

[redacted]

[redacted]

Environmental Resources Management
206 East 9th

Hydric Rating by Map Unit ð Bexar County, Texas
(Northern CCR Units - Calaveras Power Station)

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EuC	Aluf sand, 0 to 5 percent slopes	0	218.3	28.9%
Go	Gowen clay loam, 0 to 2 percent slopes, occasionally flooded	1	3.9	0.5%
HkB	Wilco loamy fine sand, 0 to 3 percent slopes	0	157.3	20.8%
HkC	Wilco loamy fine sand, 3 to 5 percent slopes	0	28.6	3.8%
HkC2	Wilco loamy fine sand, 3 to 5 percent slopes, eroded			

Description

This rating indicates the percentage of map units that meets th

Hydric Rating by Map Unit ð Bexar County, Texas
(Southern CCR Units - Calaveras Power Station)

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DmC	Duval loamy fine sand, 0 to 5 percent slopes	1	8.3	5.0%

Description

This rating indicates the percentage of map units that meets th

Registration No.:

GEOLOGY SUMMARY

EXCERPTS FROM = *? ME :EX> ϟ N*^{i} ^{v} *ξ M*

2.1 SITE DESCRIPTION

CPS Energy owns and operates the Calaveras Power Station located so

The groundwater-bearing unit in the vicinity of the Northern CCR Units appears to exhibit unconfined conditions based on the potentiom n ®

3.1.2 Evaporation Pond (EP)

Based

... ...

BOTTOM ASH PONDS

POTENTIOMETRIC SURFACE MAPS

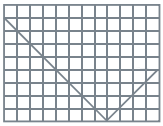
DESIGN:	DRAWN:	
DATE:		

DESIGN:		
DATE:		

DESIGN:		
DATE:		

EVAPORATION POND

DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:



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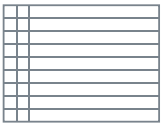

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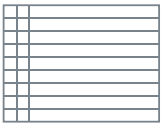

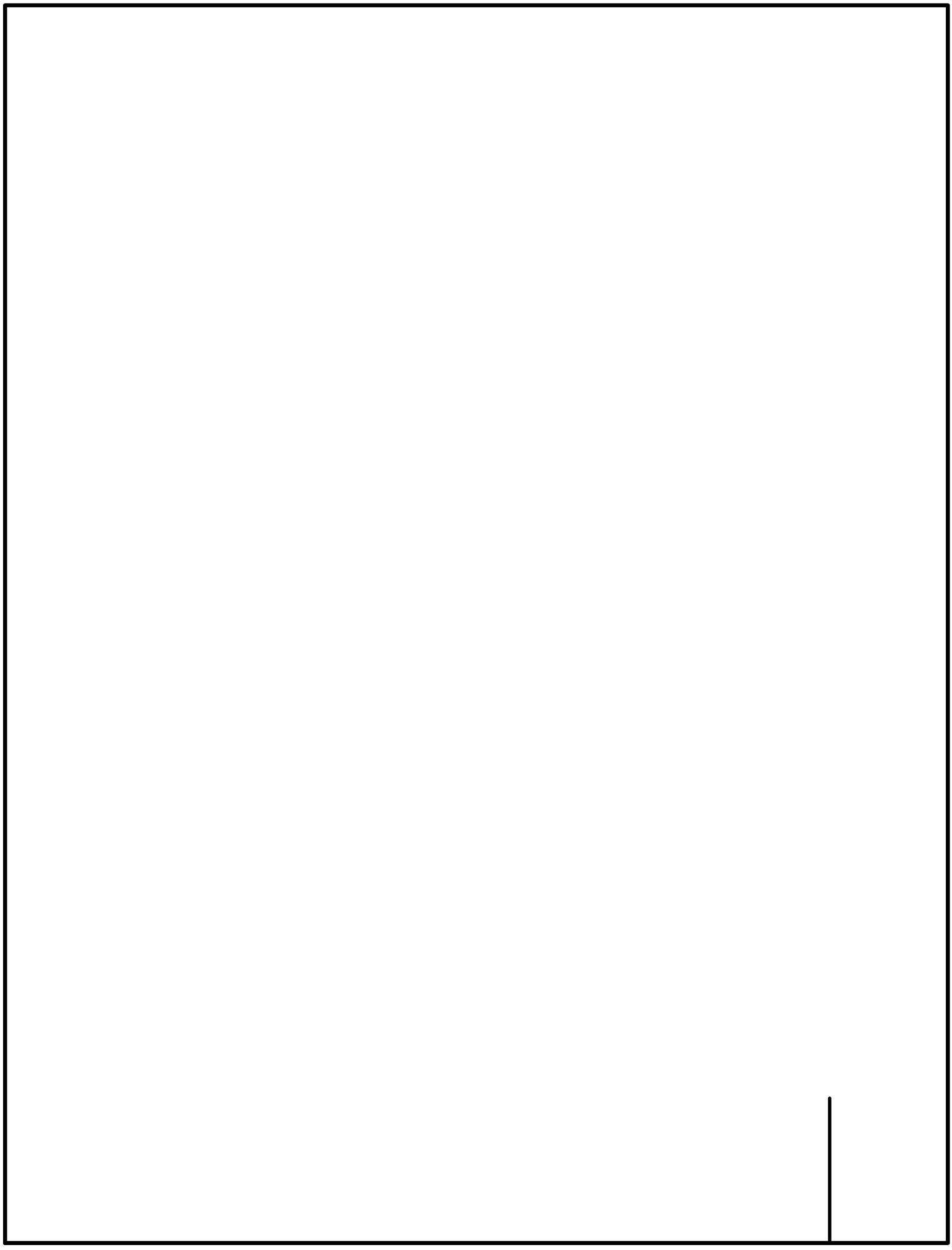

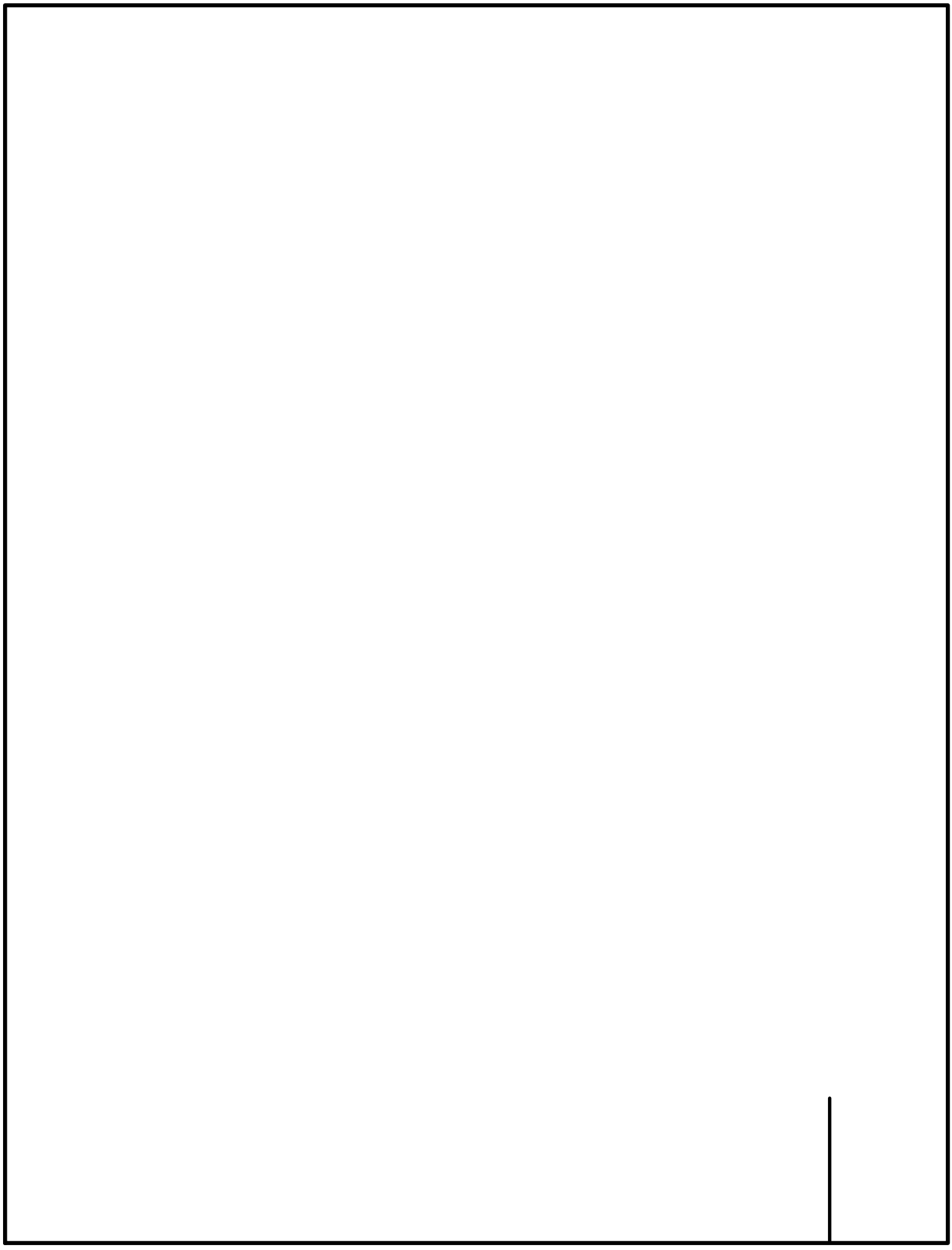

FLY ASH LANDFILL

POTENTIOMETRIC SURFACE MAPS

DESIGN:	DRAWN:	CHKD.:
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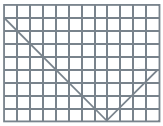

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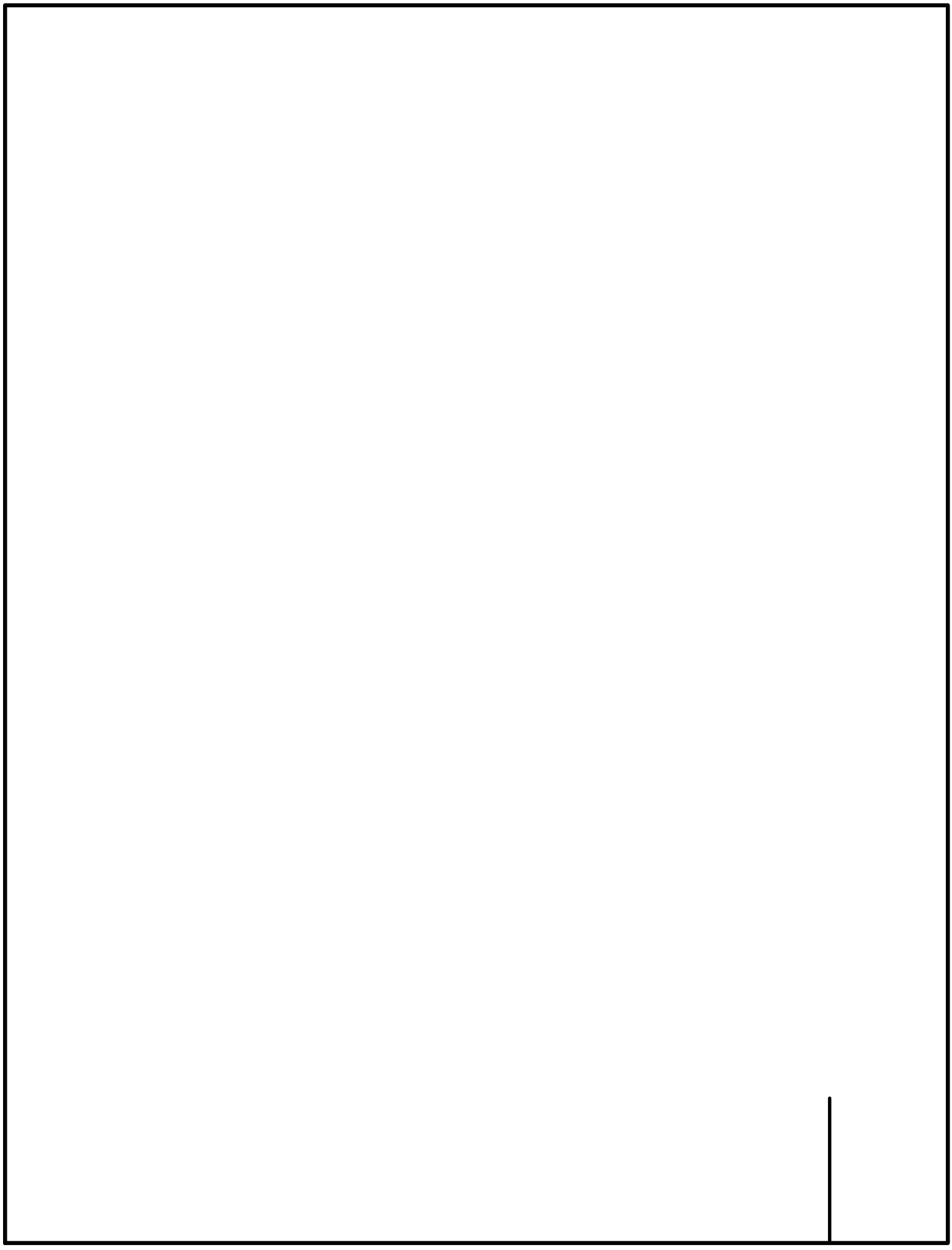

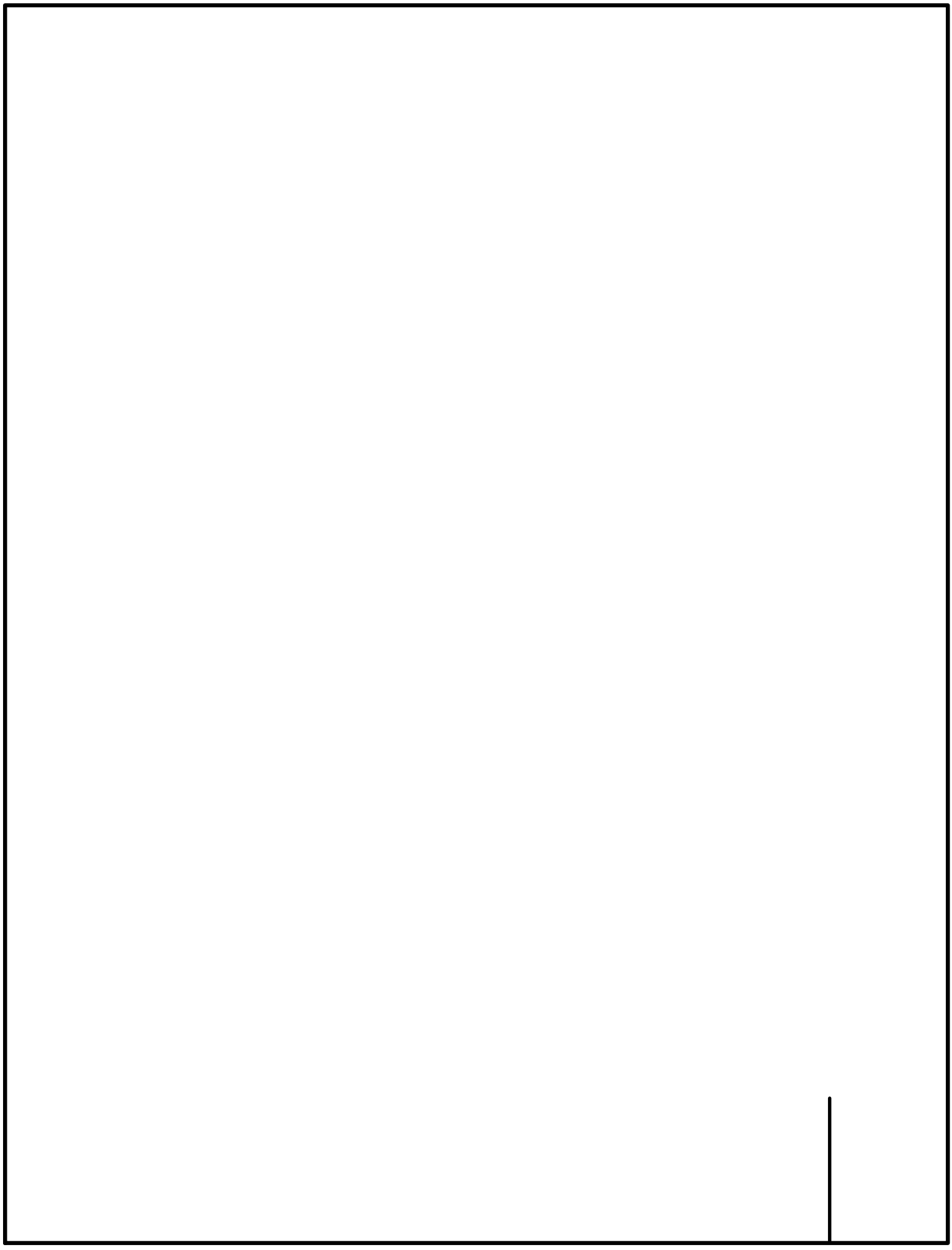

SRH POND

POTENTIOMETRIC SURFACE MAPS

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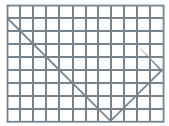

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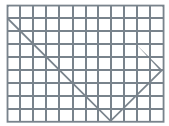


BOTTOM ASH PONDS

ANALYTICAL RESULTS

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

	12/7/16	2/22/17	3/28/17	5/3/17	6/20/17	7/25/17	8/29/17	10/10/17	4/4/18	10/30/18	4/9/19	10/22/19	4/28/20	10/21/20

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

TABLE 3

TABLE 3

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
Lead	mg/L
Lithium	mg/L
Mercury	mg/L
Molybdenum	mg/L
Selenium	mg/L
Thallium	mg/L
Radium-226	pCi/L
Radium-228	pCi/L

NOTES:
mg/L: Milligrams per Liter.
SU: Standard Units.
pCi/L: Picocuries per Liter.

H: Bias in sample result likely to be high.

L: Biash.04 Tc 0.h (h Ponds)]TJ/TT1 1 Tf0.005 Ta5o.0021 Tc T[F)-7.5 (l)4.4 e[F)-1 1 Tf0.u[F)-7t Tc 0.h reW[l-0.0]TJt Tc 0.ho[F)-BT0lc 0.5-6.3 (:)-3094.95 Tc 0.00X)-12.5 (per)-10 a-2.5 (lv)-12.5 (SU: Stix SpreW044 -2.5 (m)per)-10 a-2.5 (lv)-12.5 (SU: Stix SpreW044 D)-1.2upli0.001 Tc aTw 0 -1.2 ndaro be hiitmGo0 -1.v TD[Ge0 -1.r (m

EVAPORATION POND

ANALYTICAL RESULTS

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
Evaporation Pond

Constituents	Unit

TABLE 3
Groundwater Analytical Results Summary

TABLE 3

TABLE 3

TABLE 3
Groundwater Analytical Results Summary

TABLE 3
Groundwater Analytical Results Summary

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
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
Lead	mg/L
Lithium	mg/L
Mercury	mg/L
Molybdenum	mg/L
Selenium	mg/L
Thallium	mg/L
Radium-226	pCi/L
Radium-228	pCi/L

NOTES:
mg/L: Milligrams per Liter.
SU: Standard U1 0r.
pCi/: PS per L(ter.)]TJ 0.0015 Tc 0.0110 Tw 0 - 0.015 TD [H: Bias in sa(m)-4 d (Radium-226[m)r(g/L)]TJ 0.0018 Tc -341 TcdE2l 468.36 7356)3524.32 re 145 (6T 0 Tc 0 Tw 0 8.16 -8.16 0 475.68 11576 Tm 176 0jET Q2BT 0.0035 Tc -0.2027 Tw -15076 -8.16 0 475.68 11576 Tm 180 ET Q0 be hi468.36 7356)3524.32

TABLE 3

TABLE 3
Groundwater Analytical Results Summary

TABLE 3
Groundwater Analytical Results Summary

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Sr65.17 (a)-6.2 Sr65.17 iPo
A

SRH POND

ANALYTICAL RESULTS

TABLE 3

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

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
SRH Pond

Constituents	Unit
Appendix III - Detection Monitoring	

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
SRH Pond

Constituents	Unit
Appendix III - Detection Monitoring	

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
SRH Pond

Constituents	Unit
Appendix III - Detection Monitoring	

WELL CONSTRUCTION DIAGRAMS AND DRILLING LOGS

0337367	JKS-45	2016-04-04
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio	62.00 '	8.25 "
13667132.78' 2186615.40'	528.31 '	

47.19 2016-05-31

Strata Core Services, LLC Joseph Ray

Hollow-Stb A geC

0337367	JKS-45	2016-04-04
Groundwater Investigation	CPS Energy	

0337367	JKS-46	2016-04-05
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio	30.00 '	8.25 "
13667810.11' 2187972.31'	495.75 '	

19.38 2016-05-31

Strata Core Serv] l

JKS-46

0337367	JKS-46		2016-04-05
Groundwater Investigation	CPS Energy		
Calaveras Power Station - San Antonio	30.00 '		8.25 "

N. Coord. 13667810.11' E. Coord. 2187972.31' 495.75 ' Ft. MSL

19.38 2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens

0337367	JKS-47	2016-04-05
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio		

JKS-47

0337367	JKS-47		2016-04-05
Groundwater Investigation	CPS Energy		
Calaveras Power Station - San Antonio	48.00 '		8.25 "
N. Coord. 13665709.79' E. Coord. 2186503.87'		510.28 '	Ft. MSL

31.37	2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens

0337367	JKS-48	2016-04-06

Groundwater Investigation

0337367 JKS-48 2016-04-06

Groundwater Investigation CPS Energy

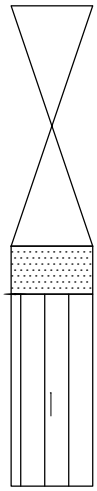
F-04-06

JKS-49

0337367	JKS-49		2016-04-06
Groundwater Investigation	CPS Energy		
Calaveras Power Station - San Antonio	19.00 '		8.25 "
N. Coord. 13660519.40'	E. Coord. 2186229.15'	495.17 '	Ft. MSL

9.32	2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens



0-5	NO RECOVERY: Previously excavated by hydrovac truck.
5-6	SAND: Greyish tan; very moist; fine-grained; sub-angular; moderately sorted; loose; non-plastic; orange silt stringers.
6-10	SILT: Greyish tan; very moist; loose; non-plastic; minor fine-grained

0337367 JKS-50 2016-04-06

0366643	JKS-50R	2016-10-07
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio		

0366643 JKS-52 2016-09-01

Ground Water Investigation - Phase II CPS Energy

Calaveras Power Station - San Antonio

13659683.26'

At 6' bgs: Pockets of orange colored sand.

SANDY SILTY CLAY: Tan to reddish gray; wet; low plasticity; no odor. 5-7.5

JKS-54

0366643	JKS-54		2016-09-02
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	27.50 '		8.25 "
N. Coord. 13659753.34'	E. Coord. 2185641.96'	492.69 '	Ft. MSL

10.79

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry

0-5 NO RECOVERY: Previously excavated by hydrovac truck.

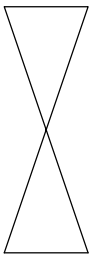
`` C o ^`` C ^`` C 5-5.8 ʟCL/ CLAYEY SILT: Orangish brown with red; damp; loose; no HM/CL/A

JKS-55

0366643	JKS-55		2016-09-06
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	25.00 '		8.25 "
N. Coord. 13659749.76'	E. Coord. 2186840.46'	490.13 '	Ft. MSL

8.36

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry



0-5	NO RECOVERY: Previously excavated by hydrovac truck.

0366643 JKS-56 2016-09-06

Ground Water Investigation - PhaseerV

0366643 JKS-57 2016-09-07

Ground Water Investigation - Phase II

0366643	JKS-58	2016-09-07
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio		

0366643

0366643	JKS-62	2016-09-08
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio	37.00 '	8.25 "
13666020.13' 2187153.88'	506.71 '	

28.90

Strata Core Services, LLC

0366643 JKS-63 2016-09-08

Ground Water Investigation - Phase II CPS Energy

Calaveras Power Station - San Antonio

13666230.86' 2186553.38'

0366643	JKS-63	2016-09-08
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio	50.00 '	8.25 "
13666230.86' 2186553.38'	523.55 '	

44.70

Strata Core Services, LLC Ryan Spaust

Hollow-Stem Auger

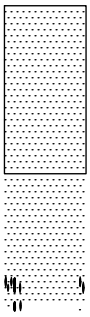
0366643	JKS-63	2016-09-08
Ground Water Investigation - Phase II	CPS Energy	

JKS-63R

0503422	JKS-63R		2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy		
Calaveras Power Station	24.00 '		8.25 "
N. Coord. NA	E. Coord. NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens



0-3.5	SAND: Brown; dry to damp; very-fine grained; sub-angular; poorly sorted; loose; minor silt and trace clay content; no odor. Ground surface to 5 ft. bgs logged via post hole digger soil cuttings.

0503422	JKS-63R	2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy	
Calaveras Power Station	24.00 '	8.00 "
NA NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens

JKS-63R

0503422	JKS-63R		2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy		
Calaveras Power Station	24.00 '		8.00 "
N. Coord. NA	E. Coord. NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens

.....

STATE OF TEXAS WELL REPORT for Tracking #511515

Owner Well #: **JKS-63R**

Grid #: **68-46-5**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?:

0366643

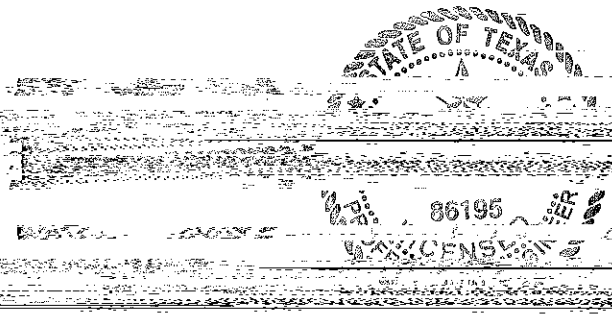
CCR Fugitive Dust Control Plan

CPS Energy

ERM

Control Plan meets the requirements of the Rule. This certification is provided below:

with the provisions of 40 CFR Part 257.80, attest that this Fugitive Dust Control Plan has been prepared in accordance with good engineering practices."



Date: 10/15/2015 Date: 10/15/2015 86195 Texas T

Registration No. State

STABILIZED EXIT

January 28, 2021

January 28, 2021

January 28, 2021
CPS Energy
Houston \ 0352436 \ A10478

January 28

January 28, 2021
CPS Energy
Houston

Environmental Resources Management
CityCentre Four
840 West Sam Houston Pkwy N., Suite 600

CPS Energy
Calaveras Power Station
ERM Project Number 0352436

CPS Energy
Calaveras Power Station

CPS Energy

CPS Energy
Calaveras Power Station

Attachment 6 CCR Waste Tables

Registration No.:
Registrant: CPS Energy Calaveras Pos e PStrat(i)-5.4oE n

Registration No.:
Registrant: CPS Energy Calaveras Power Station

Registration No.:

Table I.6.A. – Waste Management Information – Fly Ash Landfill

Waste No.[1]	Waste Type(s)	Source	Volume (tons/year)
1	Solid	Storn Stororua1oo 5)	

Registration No.:

Registration No.:

Table I.

Registration No.:

Registration No.:
Registrant: CPS Energy Calaveras Power Station

Table IV.A. – Land

Registration No.:
Registrant: CPS Energy Calaveras Power Station

Registration No.:
Registrant: CPS Energy Calaveras Power Station

Registration No.:
Registrant: CPS Energy Calaveras Power Station

Table V.J. – Inspection Schedule of Surface Impoundments

Facility Unit(s) and

Attachment 6 Groundwater Monitoring System Tables

Well Number(s):	JKS-36	JKS-47	JKS-61	JKS-62	JKS-63R	JKS-64
Casing Diameter (in.) and Material						

Registration No.:
Registrant: CPS Energy Calaveras Power Station

Registration No.:

Registration No.:

Attachment 6 Groundwater Monitoring Tables

Registration No.:

Attachment 6 Post Closure Tables

Table VIII.A.1. – Post-Closure Cost Summary for Existing Registered Units

Unit	Cost
Evaporation Pond	$3,000,000

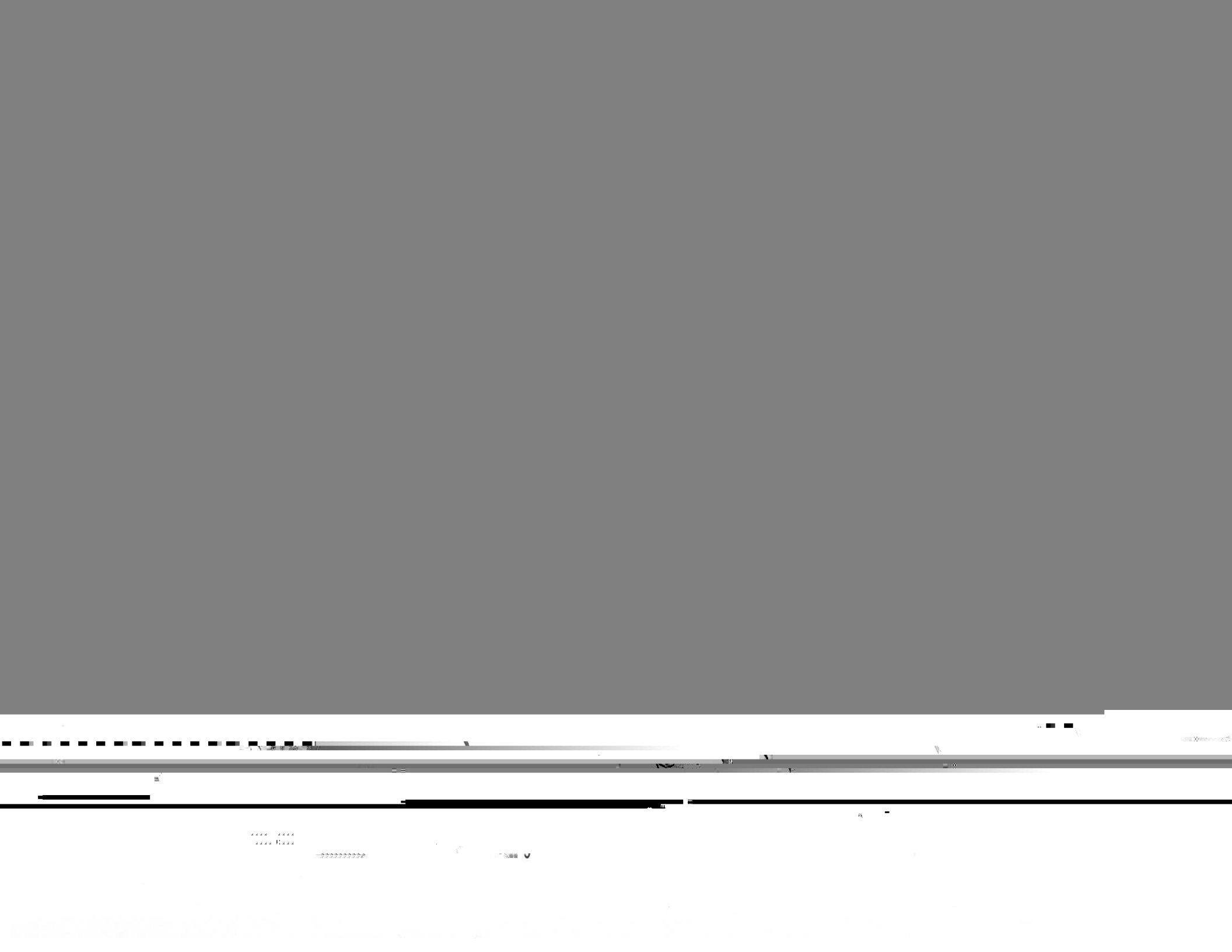
Attachment 6 Post Closure Period Tables

Registration No.:
Registrant: CPS Energy Calaveras Power Station

ERM

CPS Energy owns and operates the Calaveras Power Station, which is located in unincorporated Bexar County, Texas, approximately 13 miles southeast of San Antonio. Currently, CPS Energy operates the following CCR landfill at the Power Station:

Registration No.:



Attachment 9 Alternative Capacity Infeasibility Demonstration and EPA Completeness Letter

`

Alternative Capacity Infeasib7 (n)25lttrfemoitn(.)-.

FIGURES

Activity ID	Activity Name	Duration	Start	

APPENDIX A OWNER CERTIFICATION OF COMPLIANCE

11/2/20

APPENDIX B GROUNDWATER MONITORING WELL LOCATIONS MAP

APPENDIX

JKS-45

0337367	JKS-45		2016-04-04
Groundwater Investigation	CPS Energy		
Calaveras Power Station - San Antonio	62.00 '		8.25 "
N. Coord. 13667132.78' E. Coord. 2186615.40'		528.31 '	Ft. MSL

47.19	2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens

0337367 JKS-45 2016-04-04

JKS-45

0337367	JKS-45	2016-04-04
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio	62.00 '	8.25 "
13667132.78' 2186615.40'	528.31 '	Ft. MSL

47.19	2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens

0337367	JKS-45	2016-04-04

Groundwater Investigation

0337367	JKS-46	2016-04-05

Groundwater Investigation

0337367	JKS-47	2016-04-05
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio	48.00 '	8.25 "
13665709.79' 2186503.87'	510.28 '	

0337367 JKS-48 2016-04-06

Groundwater Investigation CPS Energy

Calaveras Power Station - San Antonio

13659658.78' Oalj8#Euh . eO St î ǰiį Aɾ i¾ʞ ƚ ǰ ƚ ƴzOalN cK58 cHr 3 5 lj6

ƶ ƺ . é pᶠ l' ˈlꞩ ɕ ˏ ɨ Q c> ʞpض Ů ay- ƚ Ahn ˈ ɕ ω

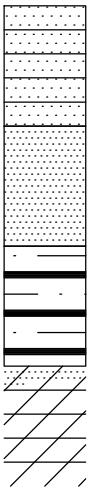
JKS-48

0337367	JKS-48		2016-04-06
Groundwater Investigation		CPS Energy	
Calaveras Power Station - San Antonio		30.00 '	8.25 "

N. Coord. 13659658.78' E. Coord. 2186490.78' 493.71 ' Ft MSL

11.28 2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens



20-22.5	SILTY SAND: Orangish brown; saturated; fine to very-fine grained; sub-angular, poorly sorted; loose; non-plastic; minor clay content. At 20.25' bgs: Thin grey clay laminations.
22.5-25	SAND: Tannish brown with grey; saturated; fine-grained; sub-angular; moderately sorted; loose; non-plastic; some silt content; orange silt stringers. At 24.5' bgs: Orange silt lens to 24.75' bgs.
25-27.5	INTERBEDDED SILTY SAND AND CLAY: Tannish grey; saturated; medium dense; laminated silty fine-grained sand with pinkish brown clay; clay laminations fracture along planar surfaces; yellow and orange silt stringers throughout.

0337367 JKS-49 2016-04-06

0337367

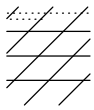
JKS-50R

0366643	JKS-50R		2016-10-07
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	22.50 '		8.25 "
N. Coord. 13660149.90'	E. Coord. 186841.92'	494.96 '	Ft. MSL

12.67

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry

Lab Sample Data



0337367	JKS-51	2016-04-07
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio	29.50 '	8.25 "
13660243.53' 2185630.39'	494.04 '	

JKS-52

0366643	JKS-52		2016-09-01
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	32.50 '		8.25 "

N. Coord. 13659683.26' E. Coord. 2186139.05' 493.56 ' Ft. MSL

7.30

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry

0366643 JKS-53 2016-09-02

Ground Water Investigation - Phase II CPS Energy

Calaveras Power Station - San Antonio

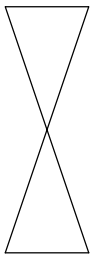
1

JKS-54

0366643	JKS-54		2016-09-02
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	27.50 '		8.25 "
N. Coord. 13659753.34'	E. Coord. 2185641.96'	492.69 '	Ft. MSL

10.79

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry



0-5 NO RECOVERY

NO RECOVERY

0366643 JKS-55 2016-09-06

Ground Water Investigation - Phase II

0366643	JKS-56	2016-09-06	2016-09-06 =

0366643 JKS-57 2016-09-07

Ground Water Investigation - Phase II

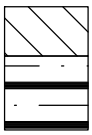
0366643	JKS-57	2016-09-07
Ground Water Investigation - Phase× ȝ ȝ	ȩ	ȩ ȩ

JKS-58

0366643	JKS-58		2016-09-07
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	32.00 '		8.25 "
N. Coord. 13667994.99'	E. Coord. 2187797.39'	500.94 '	Ft. MSL

21.09

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry



20-21 / 21-22.5 — CLAY: Gray; dry; stiff; small, tan sandy clay pockets present.

0366643 JKS-59 2016-09-07

JKS-62

0366643	JKS-62		2016-09-08
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	37.00 '		8.25 "
N. Coord. 13666020.13'	E. Coord. 2187153.88'	506.71 '	Ft. MSL

28.90

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry

0-5

0366643 JKS-63 2016-09-08

Ground Water Investigation - Phase II CPS Energy

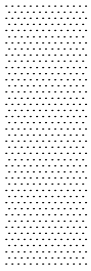
Calaveras Power Station - San Antonio

JKS-63

0366643	JKS-63		2016-09-08
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	50.00 '		8.25 "
N. Coord. 13666230.86'	E. Coord. 2186553.38'	523.55 '	Ft. MSL

44.70

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry

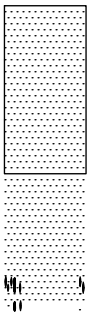


JKS-63R

0503422	JKS-63R		2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy		
Calaveras Power Station	24.00 '		8.25 "
N. Coord. NA	E. Coord. NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens



0-3.5	SAND: Brown; dry to damp; very-fine grained; sub-angular; poorly sorted; loose; minor silt and trace clay content; no odor. Ground surface to 5 ft. bgs logged via post hole digger soil cuttings.

0503422	JKS-63R	2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy	
Calaveras Power Station	24.00 '	8.00 "
NA NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens

JKS-63R

0503422	JKS-63R		2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy		
Calaveras Power Station	24.00 '		8.00 "
N. Coord. NA	E. Coord. NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens

.....

STATE OF TEXAS WELL REPORT for Tracking #511515

Owner Well #: **JKS-63R**

Grid #: **68-46-5**

Chemical Analysis Made: **No**

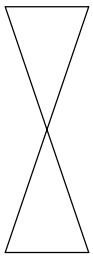
Did the driller knowingly penetrate any strata which contained injurious constituents?:

JKS-64

0366643	JKS-64		2016-09-09
Ground Water Investigation - Phase II	CPS Energy		
Calaveras power Station - San Antonio	32.00 '		8.25 "
N. Coord. 13665627.14'	E. Coord. 2186778.76'	504.38 '	Ft. MSL

25.06

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry



0-5	NO RECOVERY: Previously excavated with hydrovac truck.

0366643 JKS-64 2016-09-09

Ground Water Investigation - Phase II CPS Energy

Calaveras power Station - San Antonio

l'ă

228 25SAND: Gray with bluish gray and orange fine graine ; loose At 238 ' bgs: Bluish gray, low plasticity clay (1/2" thick); sand col

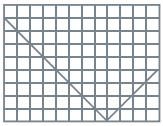
APPENDIX D GROUNDWATER FLOW DIRECTION MAPS

BOTTOM ASH PONDS

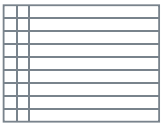
DESIGN:	DRAWN:	
DATE:		

EVAPORATION POND

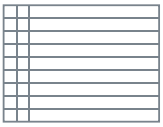
DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:



DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:

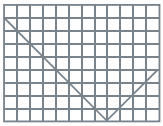


DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:



FLY ASH LANDFILL

DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:



SRH POND

DESIGN:	DRAWN:	
DATE:		

APPENDIX E CONSTITUENT CONCENTRATIONS SUMMARY TABLES

TABLE 3
Groundwater Analytical Results Summary

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - C¶r

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

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
Evaporation Pond

Constituents	Unit	12/8/16	2/28/17	3/29/17	5/3/17	6/21/17	7/26/17	8/30/17	10/11/17	4/5/18	10/30/18	4/10/19	10/23/19	4/29/20
Appendix III - Detection Monitoring														
Boron	mg/L	0.824	0.838	▯ r acm®אg/	® 2M ®									

EXCERPTS FROM LOCATION RESTRICTIONS DEMONSTRATION DATED OCTOBER 2018

2.1 SITE DESCRIPTION

u d CPS Energy u

The groun

W.O.NO.:

... ...

October 17, 2016

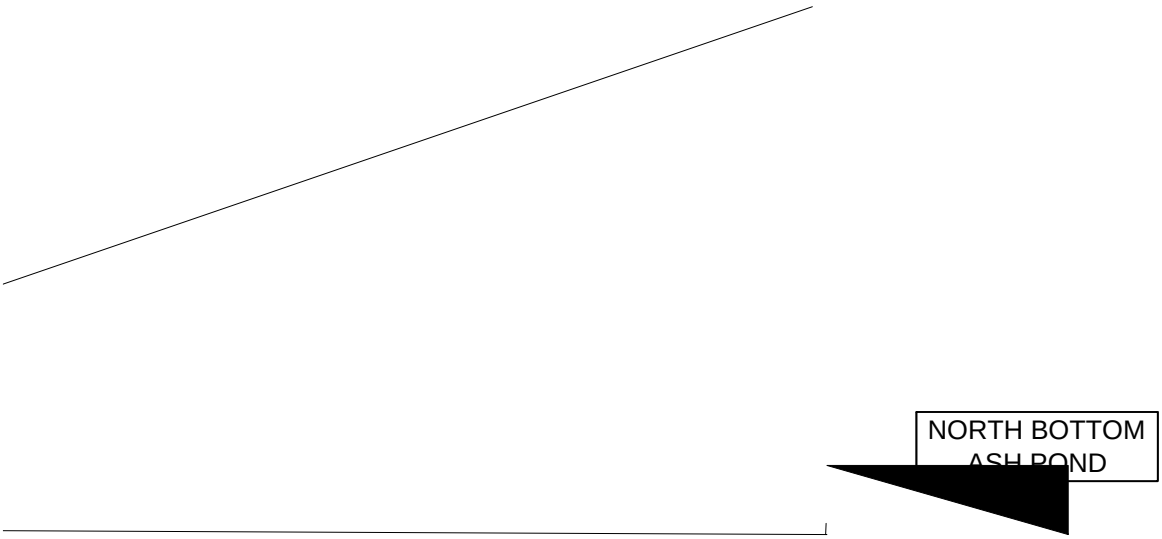
Mr. Michael Malone
CPS Energy

ERM has over 160 offices across the following countries and terri

impoundments will not be available for retrofit until all closure activities are complete. In addition, the location of the North Bottom Ash Pond does

Exhibit 3.11– Plant Drains Pond Site Plan

FIGURES


NORTH BOTTOM
ASH POND

APPENDIX A OWNER CERTIFICATION OF COMPLIANCE

APPENDIX B GROUNDWATER MONITORING WELL LOCATIONS MAP

APPENDIX

0337367	JKS-45	2016-04-04
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio	62.00 '	8.25 "
13667132.78' 2186615.40'	528.31 '	

47.19 2016-05-31

Strata Core Services, LLC Joseph Ray

Hollow-Stb A geC

0337367	JKS-45	2016-04-04
Groundwater Investigation	CPS Energy	

0337367	JKS-46	2016-04-05
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio	30.00 '	8.25 "
13667810.11' 2187972.31'	495.75 '	

19.38 2016-05-31

Strata Core Serv] l

JKS-46

0337367	JKS-46		2016-04-05
Groundwater Investigation	CPS Energy		
Calaveras Power Station - San Antonio	30.00 '		8.25 "

N. Coord. 13667810.11' E. Coord. 2187972.31' 495.75 ' Ft. MSL

19.38 2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens

0337367	JKS-47	2016-04-05
Groundwater Investigation	CPS Energy	
Calaveras Power Station - San Antonio		

JKS-47

0337367	JKS-47		2016-04-05
Groundwater Investigation	CPS Energy		
Calaveras Power Station - San Antonio	48.00 '		8.25 "
N. Coord. 13665709.79' E. Coord. 2186503.87'		510.28 '	Ft. MSL

31.37	2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens

0337367	JKS-48	2016-04-06

Groundwater Investigation

0337367 JKS-48 2016-04-06

Groundwater Investigation CPS Energy

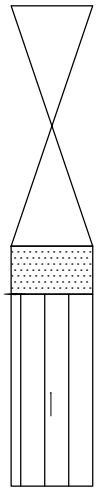
F-04-06

JKS-49

0337367	JKS-49		2016-04-06
Groundwater Investigation	CPS Energy		
Calaveras Power Station - San Antonio	19.00 '		8.25 "
N. Coord. 13660519.40'	E. Coord. 2186229.15'	495.17 '	Ft. MSL

9.32	2016-05-31

Strata Core Services, LLC	Joseph Ray
Hollow-Stem Auger	Nick Houtchens



0-5	NO RECOVERY: Previously excavated by hydrovac truck.
5-6	SAND: Greyish tan; very moist; fine-grained; sub-angular; moderately sorted; loose; non-plastic; orange silt stringers.
6-10	SILT: Greyish tan; very moist; loose; non-plastic; minor fine-grained

0337367 JKS-50 2016-04-06

0366643	JKS-50R	2016-10-07
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio		

0366643 JKS-52 2016-09-01

Ground Water Investigation - Phase II CPS Energy

Calaveras Power Station - San Antonio

13659683.26'

At 6' bgs: Pockets of orange colored sand.

SANDY SILTY CLAY: Tan to reddish gray; wet; low plasticity; no odor. 5-7.5

JKS-54

0366643	JKS-54		2016-09-02
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	27.50 '		8.25 "
N. Coord. 13659753.34'	E. Coord. 2185641.96'	492.69 '	Ft. MSL

10.79

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry

0-5 NO RECOVERY: Previously excavated by hydrovac truck.

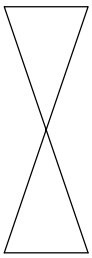
`` C o ^`` C ^`` C 5-5.8 ʟCL/ CLAYEY SILT: Orangish brown with red; damp; loose; no HM/CL/A

JKS-55

0366643	JKS-55		2016-09-06
Ground Water Investigation - Phase II	CPS Energy		
Calaveras Power Station - San Antonio	25.00 '		8.25 "
N. Coord. 13659749.76'	E. Coord. 2186840.46'	490.13 '	Ft. MSL

8.36

Strata Core Services, LLC	Ryan Spaust
Hollow-Stem Auger	Andrew Henry



0-5	NO RECOVERY: Previously excavated by hydrovac truck.

0366643 JKS-56 2016-09-06

Ground Water Investigation - PhaseerV

0366643 JKS-57 2016-09-07

Ground Water Investigation - Phase II

0366643	JKS-58	2016-09-07
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio		

0366643

0366643	JKS-62	2016-09-08
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio	37.00 '	8.25 "
13666020.13' 2187153.88'	506.71 '	

28.90

Strata Core Services, LLC

0366643 JKS-63 2016-09-08

Ground Water Investigation - Phase II CPS Energy

Calaveras Power Station - San Antonio

13666230.86' 2186553.38'

0366643	JKS-63	2016-09-08
Ground Water Investigation - Phase II	CPS Energy	
Calaveras Power Station - San Antonio	50.00 '	8.25 "
13666230.86' 2186553.38'	523.55 '	

44.70

Strata Core Services, LLC Ryan Spaust

Hollow-Stem Auger

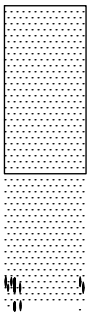
0366643	JKS-63	2016-09-08
Ground Water Investigation - Phase II	CPS Energy	

JKS-63R

0503422	JKS-63R		2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy		
Calaveras Power Station	24.00 '		8.25 "
N. Coord. NA	E. Coord. NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens



0-3.5	SAND: Brown; dry to damp; very-fine grained; sub-angular; poorly sorted; loose; minor silt and trace clay content; no odor. Ground surface to 5 ft. bgs logged via post hole digger soil cuttings.

0503422	JKS-63R	2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy	
Calaveras Power Station	24.00 '	8.00 "
NA NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens

JKS-63R

0503422	JKS-63R		2019-05-02
Calaveras Power Station - Well Re-Install	CPS Energy		
Calaveras Power Station	24.00 '		8.00 "
N. Coord. NA	E. Coord. NA	0.00 '	Ft. MSL

36.00	SB Installation	0.00

Vortex Drilling Partners, LP	James Neal
Hollow-Stem Auger	Nick Houtchens

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STATE OF TEXAS WELL REPORT for Tracking #511515

Owner Well #: **JKS-63R**

Grid #: **68-46-5**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?:

0366643

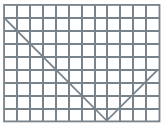
APPENDIX D GROUNDWATER FLOW DIRECTION MAPS

BOTTOM ASH PONDS

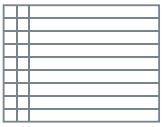
DESIGN:	DRAWN:	
DATE:		

EVAPORATION POND

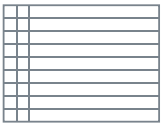
DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:



DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:

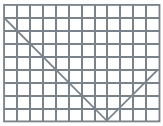


DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:



FLY ASH LANDFILL

DESIGN:	DRAWN:	CHKD.:
DATE:	SCALE:	REVISION:



SRH POND

DESIGN:	DRAWN:	
DATE:		

APPENDIX E CONSTITUENT CONCENTRATIONS SUMMARY TABLES

TABLE 3
Groundwater Analytical Results Summary

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - C¶r

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

TABLE 3
Groundwater Analytical Results Summary
CPS Energy - Calaveras Power Station
Evaporation Pond

Constituents	Unit	12/8/16	2/28/17	3/29/17	5/3/17	6/21/17	7/26/17	8/30/17	10/11/17	4/5/18	10/30/18	4/10/19	10/23/19	4/29/20
Appendix III - Detection Monitoring														
Boron	mg/L	0.824	0.838	▯ r acm®אg/	® 2M ®									

EXCERPTS FROM LOCATION RESTRICTIONS DEMONSTRATION DATED OCTOBER 2018

The groundwater-bearing unit in the vicinity of the Northern CCR Units appears to exhibit unconfined conditions based on the potentiom n ®

W.O.NO.:

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