2019 ANNUAL DAM AND DIKE INSPECTION REPORT

CCR PONDS COMPLEX

OKLAUNION POWER STATION

VERNON, TEXAS

December, 2019

Prepared by: American Electric Power Service Corporation
1 Riverside Plaza
Columbus, OH 43215

GERS-19-053

Dam & Dike Inspection Report
CCR Ponds Complex

GERS-19-053
Revision 0

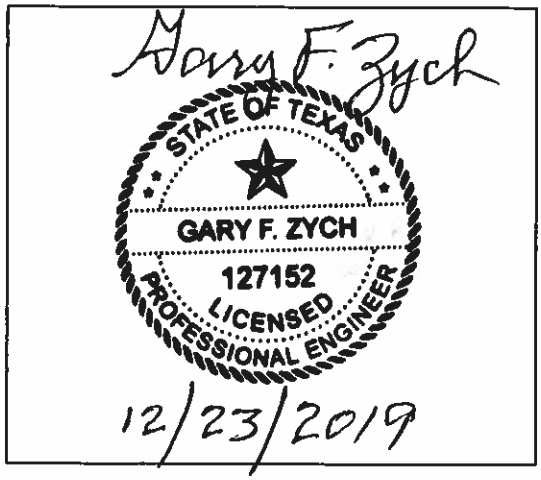
OKLAUNION POWER STATION
VERNON, TEXAS

INSPECTION DATE **December 3, 2019**

PREPARED BY _____ **DATE** 12/19/2019
Brian G. Palmer, P.E.

REVIEWED BY _____ **DATE** 12/23/2019
Pedro J. Amaya, P.E.

APPROVED BY _____ **DATE** 12/23/2019
Gary F. Zych, P.E.
Manager - Geotechnical Engineering



PROFESSIONAL ENGINEER SEAL & SIGNATURE

I certify to the best of my knowledge, information and belief the information contained in this report meets the requirements of 40 CFR § 257.83(b).

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1.0 INTRODUCTION

This report was prepared by AEP- Geotechnical Engineering Services (GES) section, in part, to fulfill requirements of 40 CFR 257.83 and to provide Public Service Company of Oklahoma and Oklaunion Power Station with an evaluation of the facility.

The Oklaunion Power Station is owned by American Electric Power and is located at 12567 FM Rd 3430, Vernon, TX 76384. The plant is a coal-fired facility, which includes a number of wastewater evaporation ponds containing cooling tower blowdown. Five of the ponds are used to manage coal combustion residuals and other wastewater treatment solids. Figure 1 shows the plant vicinity map.

American Electric Power Service Corporation's Geotechnical Engineering Section administers the Oklaunion Power Station's Dam Inspection and Maintenance Program (DIMP). As part of the DIMP, staff from the Geotechnical Engineering Services Section annually conducts dam and dike inspections. This report contains the inspection findings, observations, photographic descriptions, conclusions, and maintenance recommendations. This inspection report addresses the CCR Ponds Complex at the Oklaunion Power Station. A separate inspection report has been prepared for the wastewater ponds.

The inspection was performed on December 3rd, 2019. Mr. Aaron Weaver, energy production superintendent was the plant contact. Mr. Brian Palmer conducted the field inspection. Weather conditions on December 3rd were sunny with good visibility, temperatures ranging from upper 30's to mid 60's during the inspection. Inspection observations were briefly discussed with Plant Manager James Lewis, and Mr. Weaver after completion of the field work.

2.0 DESCRIPTIONS OF IMPOUNDMENT

The five CCR surface impoundments, referenced as Ponds 6, 21, 22, 23 and the Waste Water and Sludge Pond, have a total area of 104.1 acres. Oklaunion Ponds for storing CCR include a 60+ acre pond for waste fly ash and bottom ash storage (Pond 6), two 5+ acre ponds for CCR (Pond 21 and Pond 22), a 13+ acre pond for CCR (Pond 23), and a 22+ acre pond for Waster Water and Sludge (WWSP) storage. These ponds are located at the south- central edge of the main evaporation pond complex of the generating station. The ponds were constructed as a continuous upground homogeneous earthen embankment with 3H:1V inboard and outboard slopes and crest width of 20 feet. The design elevation of the crest is 1215 feet. These CCR ponds do not have any outlet structures or spillways and rely on evaporation to remove water from the impoundments. These impoundments retain the wastes until it is sufficiently dry to be hauled away to Pond 6 where it is permanently stored. Figure 2 shows the CCR pond complex general layout.

3.0 REVIEW OF AVAILABLE INFORMATION (257.83(b)(1)(i))

A review of available information regarding the status and condition of the CCR Ponds, which include files available in the CCR operating record, such as design and construction information, periodic structural stability assessments, previous 7 day inspection reports, 30-day instrumentation data, and previous annual inspections has been conducted. Based on the review of the data there were no signs of actual or potential structural weakness or adverse conditions.

4.0 INSPECTION (257.83(b)(1)(ii))

4.1 GENERAL

The summary of the visual observations uses terms to describe the general appearance or condition of an observed item, activity or structure. Their meaning is understood as follows:

Good: A condition or activity that is generally better or slightly better than what is minimally expected or anticipated from a design or maintenance point of view.

Fair or Satisfactory:

A condition or activity that generally meets what is minimally expected or anticipated from a design or maintenance point of view.

Poor: A condition or activity that is generally below what is minimally expected or anticipated from a design or maintenance point of view.

Minor: A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is below what is normal or desired, but which is not currently causing concern from a structure safety or stability point of view.

Significant: A reference to an observed item (e.g. erosion, seepage, vegetation, etc.) where the current maintenance program has neglected to improve the condition. Usually, conditions that have been previously identified in the previous inspections, but have not yet been corrected.

Excessive: A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is below or worse than what is normal or desired, and which may have affected the ability of the observer to properly evaluate the structure or particular area being observed or which may be a concern from a structure safety or stability point of view.

In addition, a “deficiency” is some evidence that a dam has developed a problem that could impact the structural integrity of the dam. There are four general categories of deficiencies. These four categories are described below:

1. Uncontrolled Seepage

   Uncontrolled seepage is seepage that is not behaving as the design engineer has intended. An example of uncontrolled seepage is seepage that comes through or around the embankment and is not picked up and safely carried off by a drain. Seepage that is collected by a drain can still be uncontrolled if it is not safely collected and transported, such as seepage that is not clear. Seepage that is unable to be measured and/or observe it is considered uncontrolled seepage. [Wet or soft areas are not considered as uncontrolled seepage, but can lead to this type of deficiency. These areas should be monitored frequently.]

2. Displacement:

   Displacement of the embankment is large scale movement of part of the dam. Common signs of displacement are cracks, scraps, bulges, depressions, sinkholes and slides.

3. Blockage of Control Features:

   Blockage of Control Features is the restriction of flow at spillways, decant or pipe spillways, or drains.

4. Erosion:

   Erosion is the gradual movement of surface material by water, wind or ice. Erosion is considered a deficiency when it is more than a minor routine maintenance item.

4.2 CHANGES IN GEOMETRY SINCE LAST INSPECTION (257.83(b)(2)(i))

No modifications have been made to the geometry of the CCR Ponds Complex since the 2018 annual inspection. The geometry of the impoundment has remained essentially unchanged. NERC security fencing was installed around the perimeter of Pond 6 since the last inspection.

4.3 CHANGES THAT EFFECT STABILITY OR OPERATION (257.83(b)(2)(vii))

Based on interviews with plant personnel and field observations there were no changes to the CCR Ponds Complex since the last annual inspection that would affect the stability or operation of the impounding structure.

4.4 IMPOUNDMENT CHARACTERISTICS (257.83(b)(2)(iii, iv, v))

Table 1 is a summary of the minimum, maximum, and present depth and elevation of the impounded water since the previous annual inspection; the storage capacity of the impounding structure at the time of the inspection; and the approximate volume of the impounded water at the time of the inspection.

Table 1 Summary of Relevant Storage Information CCR Ponds Complex

IMPOUNDMENT CHARACTERISTICS- CCR Pond Complex					
	Pond 6	Pond 21	Pond 22	Pond 23	WWSP
Approximate **Minimum** depth of impounded water since last annual inspection	15ft (1200)	18ft (1208)	14ft (1204)	14ft (1208)	10ft (1200)
Approximate **Maximum** depth of impounded water since last annual inspection	28ft (1213)	24ft (1214)	24ft (1214)	23ft (1213)	23ft (1213)
Approximate **Present** depth of impounded water at the time of the inspection	15ft (1200)	23ft (1213)	23ft (1213)	23ft (1213)	23ft (1213)
Approximate **Minimum** depth of CCR since last annual inspection	23ft (1208)	22ft (1212)	21ft (1211)	25ft (1215)	22ft (1212)
Approximate **Maximum** depth of CCR since last annual inspection	29ft (1214)	22ft (1212)	22ft (1212)	26ft (1216)	24ft (1214)
Approximate **Present** depth of CCR at the time of the inspection	29ft (1214)	22ft (1212)	22ft (1212)	26ft (1216)	24ft (1214)
Storage Capacity of impounding structure at the time of the inspection	1100acre-ft	125acre-ft	125acre-ft	250 acre-ft	400 acre-ft
Approximate volume of impounded water at the time of the inspection	50 acre-ft	65acre-ft	55acre-ft	120 acre-ft	80 acre-ft
Approximate volume of CCR at the time of the inspection	885 acre-ft	45acre-ft	55acre-ft	125 acre-ft	320 acre-ft

4.5 VISUAL INSPECTION (257.83(b)(2)(i))

A visual inspection of the CCR Ponds Complex was conducted to identify any signs of distress or malfunction of the impoundment and appurtenant structures. Specific items inspected included all structural elements of the dam such as upstream and downstream slopes, crest, and toe.

POND 6 - WASTEWATER POND

Pond #6 is located at the south-central edge of the main evaporation pond complex area. In 2015, Pond 6 dam embankment was raised to provide additional ash storage capacity. The crest elevation was raised from Elevation 1208 to Elevation 1215 feet.

The crest of the embankment appeared to be in good condition with no unusual cracking, rutting, settlement, deformation, or misalignment.

The exterior slopes of the south and west dikes were in overall good condition. No signs of slope failure, slumping, or seepage were observed on the downstream slopes and no burrowing animal activity was noted. The slopes were satisfactorily vegetated and no erosional features were noted. All slopes were free of woody vegetation.

The eastern slope of Pond #6 is also the western slope of the Pond #7 spillway discharge channel. The channel was in fair condition. The spillway of the adjacent Pond #7 has been substantially blocked and no discharge can occur. However, the discharge channel below, also receives runoff from the surrounding area and should be monitored for erosion as part of the periodic visual inspections. Pictures 17 thru 24 show the general condition of Pond #6

POND 21

The slopes of Pond 21 are in good condition. Pond 21 is a partially incised 5.1 acre bottom ash pond. The only visible dike portions are 3-5 ft above the normal pool levels. The dikes are common to either the Makeup Water Pond or Pond 22. During the inspection there was some erosion damage observed on the interior slope of the Makeup Water Pond which is the exterior slope of Pond 21. The plant will

continue to monitor the exterior slope until the repair is performed.

Overall, Pond 21 appeared in good, stable and functional condition and there were no visual observations to indicate any structural deficiencies that would impact the integrity of the dikes. The geometry of the dike has not changed or altered since the last inspection. Pictures 1 thru 4 show the general condition of Pond 21

POND 22

The slopes of Pond 22 are in good condition. Pond 22 is a partially incised 5.1 acre pond originally designed for storing bottom ash. The only visible dike portions of the pond are 3-5 ft above the normal pool levels. The dikes are common to either the Makeup Water Pond, Pond 21, or Pond 23. Based on the inspection there were no visual observations to indicate any structural deficiencies that would impact the integrity of the dikes. Pictures 5 thru 8 show the general condition of Pond 22.

POND 23

The slopes of Pond 23 are in good condition. Pond 23 is a partially incised 13.3 acre pond originally designed to contain fly ash. The only visible dike portions of the pond are 3-5ft above the normal pool levels. The dikes are common to either the Makeup Water Pond, Pond 22, or the Wastewater Sludge Pond. Based on the inspection there were no visual observations to indicate any structural deficiencies that would impact the integrity of the dikes. Pictures 9 thru 12 show the general condition of Pond 23.

WASTE WATER SLUDGE POND

The slopes of the Waste Water and Sludge Pond (WWSP) are in good condition. WWSP is a partially incised 22.6 acre pond. The only visible dike portions are 3-5 ft above the normal pool levels. The dikes are common to either the Makeup Water Pond, Pond 23, or Pond 7. Based on the inspection there were no visual observations to indicate any structural deficiencies that would impact the integrity of the dikes. Overall the facility is in good condition. The impoundment is functioning as intended with no signs of potential structural weakness or conditions which are disrupting to the safe operation of the impoundment. Pictures 13 thru 16 show the general condition of Pond Wastewater Sludge Pond

4.6 INSTRUMENTATION (257.83(b)(2)(ii))

Onsite instrumentations include open pipe piezometers.

PIEZOMETERS

The location of the instrumentation is shown on Figure 3. The results of the measurements of various piezometers are shown in Figure 4 and 5. The maximum recorded readings of each instrument since the previous annual inspection is shown in Table 2.

Table 2 CCR Ponds Maximum recorded instruments reading since the previous annual inspection

INSTRUMENTATION DATA CCR Ponds Complex			
Instrument	**Type**	**Maximum Reading since last annual inspection**	**Date of Reading**
B-1	Piezometer	1209.1	11/14/19
B-3	Piezometer	1212.2	6/27/19
B-4	Piezometer	1209.1	11/14/19
B-5	Piezometer	1213.2	5/2/19
B-6	Piezometer	1211.3	5/30/19

B-1502A	Piezometer	1179.47	1/10/19
B-1506A	Piezometer	1201.54	11/14/19
B-1507A	Piezometer	1204.13	11/14/19
B-1508A	Piezometer	1200.43	5/30/19
B-1512	Piezometer	1188.87	5/2/19
B-1513	Piezometer	1179.42	1/10/19

Five piezometers (B-1, B-3, B-4, B-5, and B-6) were installed in July 2016 around the Pond 21, 22, 23 and WWSP. Each piezometer was installed at the crest surrounding the ponds. Figure 4 shows the static water levels of those piezometers measured during monthly plant inspections beginning in August, 2016. Pond levels were not measured but are generally around 1213 feet. Over periods of monthly measurement data, the static water levels in the piezometers have indicated some fluctuations. All of the piezometers except B-5 indicated static water levels below the nominal pond pool level (1,213 feet). The elevated static water levels in B-5 are related to elevated pool levels in Ponds 21 and 22 due to operations.

Piezometers (B-1502A, B-1506A, B-1507A, B-1508A, B1512, and B1513) were installed in various locations along the crest of Pond 6 as a part of the raising the dikes in 2015. Figure 5 shows the static water levels of those piezometers measured during monthly plant inspections. Pond level was not measured but is estimated to be around elevation 1200 feet at the time of this inspection but it varies up to elevation 1213 during the year. All of the piezometers indicated static water levels below the maximum pond pool level (1213 feet). All piezometers indicated static water levels within expected tolerance for this year's readings.

5.0 SUMMARY OF FINDINGS

Based on the visual observations during the inspection, the dam and appurtenances are generally in good condition. A summary of our recommendations for general maintenance and continued monitoring, as well as any recommendations for remedial activities, is provided as follows:

5.1 MAINTENANCE ITEMS

The following maintenance items were identified during the visual inspection:

- Drainage along the toe of Pond 6 east exterior dike is considered fair and requires visual inspections of the area to continue with the weekly/monthly inspections.
- Vegetation management for the facility is considered good. Grassed areas should continue to be mowed regularly. Any areas that are not accessible to mowing equipment should be controlled by the use of weed trimmers, power brush cutters, or other suitable vegetation control method.
- Plant inspection and monitoring procedures, maintenance activities, and reporting with respect to the dikes should be implemented in coordination with AEP Civil Engineering.

5.2 ITEMS TO MONITOR

- The exterior slope of Pond 21 (the interior slope of the Make-Up Water Pond) is to be visually inspected periodically. Should further erosion occur the plant will take preventative actions by installing rip rap along the eroded area in order to protect the slope.
- Piezometers B-1, B-3, B-4, B-5, and B-6 surrounding Ponds 21, 22, 23 and the WWSP shall continue to be monitored monthly and AEP Civil Engineering services to be immediately notified

should the piezometer readings shift above pool levels.

5.3 DEFICIENCIES (257.83(b)(2)(vi))

There were no deficiencies or signs of structural weakness or disruptive conditions that were observed at the time of the inspection that would require additional investigation or remedial action. There were no deficiencies noted during any of the quarterly inspections. If any of these conditions occur before the next annual inspection contact AEP Geotechnical Engineering immediately.

Figures

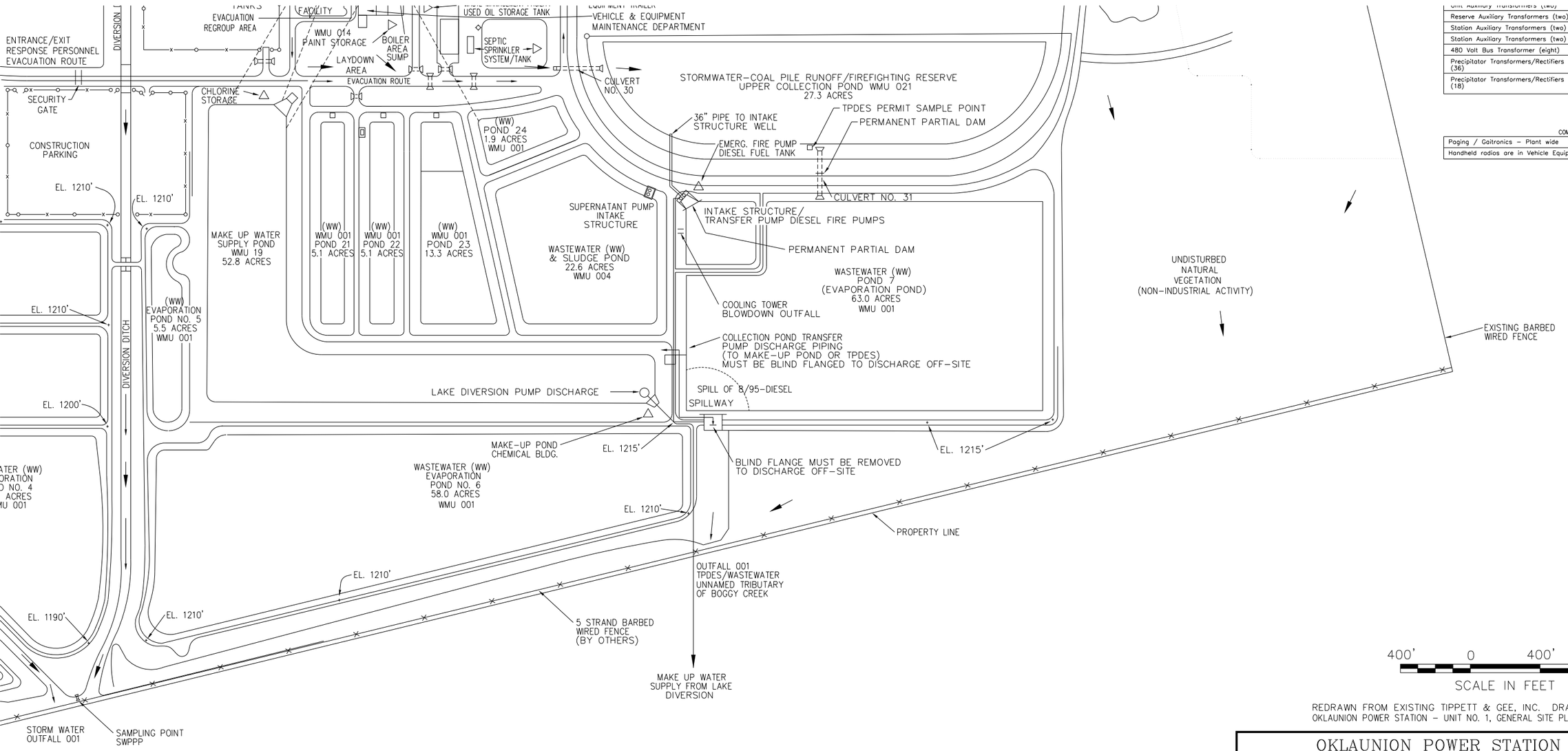
©2010 Google – Map data ©2010 Google

AEP AMERICAN ELECTRIC POWER

AEP OKLAUNION POWER PLANT
WILBARGER COUNTY, TX

FIGURE 1. PLANT INSPECTION VICINITY MAP

DATE: 2/17/2012



Reserve Auxiliary Transformers (two)	7,293 (each) 8000
Station Auxiliary Transformers (two)	283 (each) 350
Station Auxiliary Transformers (two)	315 (each) 375
480 Volt Bus Transformer (eight)	309 (each) 375
Precipitator Transformers/Rectifiers (36)	73 (each) N/A
Precipitator Transformers/Rectifiers (18)	80 (each) N/A

COMMUNICATION EQUIPMENT

Paging / Gaitronics – Plant wide
Handheld radios are in Vehicle Equip. Maintenance department & Control room.

400' 0 400' 800'

SCALE IN FEET

REDRAWN FROM EXISTING TIPPETT & GEE, INC. DRAWING C–101–002.
OKLAUNION POWER STATION – UNIT NO. 1, GENERAL SITE PLAN.

REV	DESCRIPTION	DATE	DR	BY	APP
4	GENERAL REVISIONS	2/10/05	JS		
3	GENERAL REVISIONS	5/8/03	JS		
2	GENERAL REVISIONS	5/31/02	TDA		
1	GENERAL REVISIONS	2/14/02	TDA		

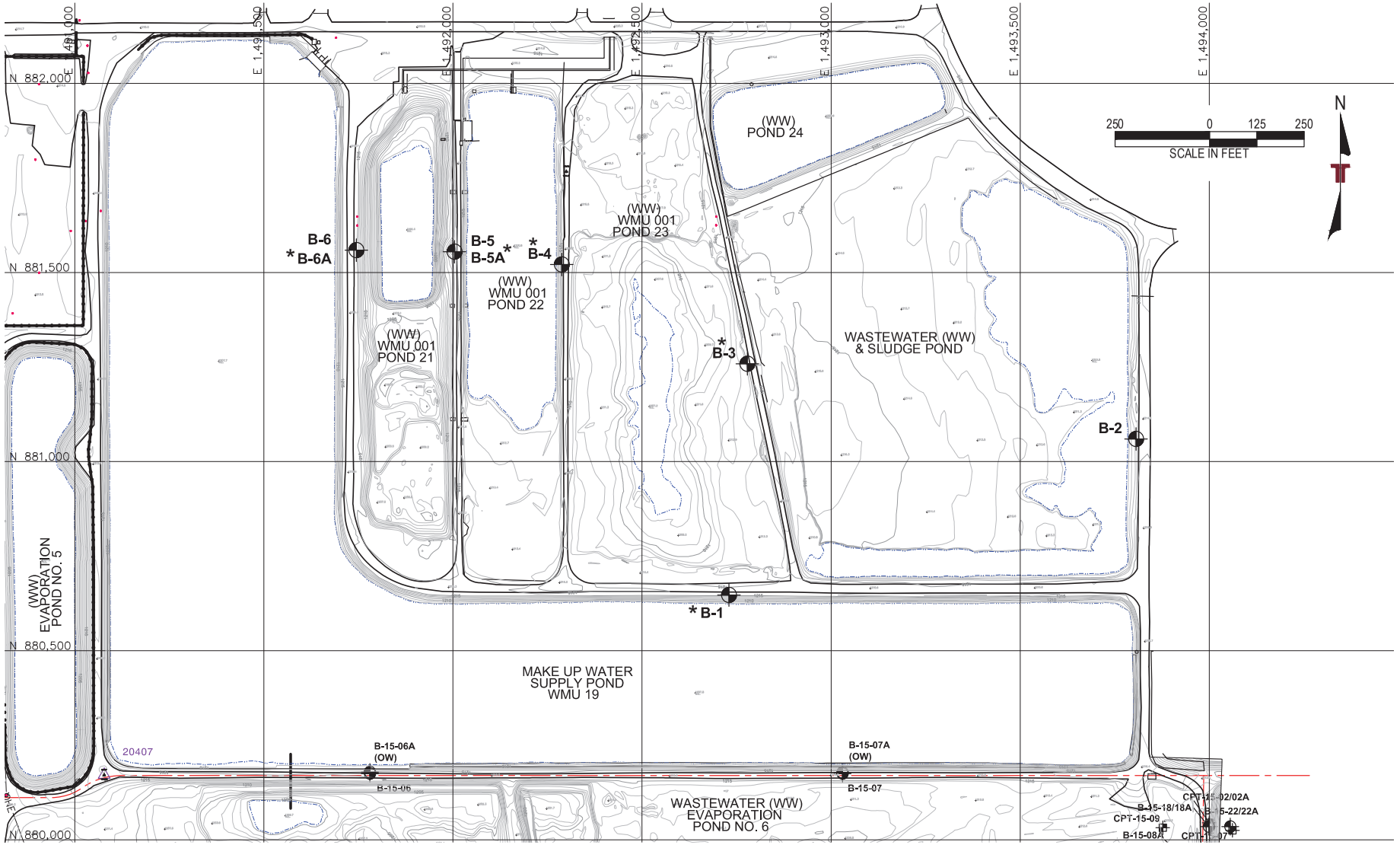
ACAD DWG–NO MANUAL CHANGES ALLOWED

OKLAUNION POWER STATION – UNIT NO. 1

FIGURE 2. CCR Pond Complex General Layout

AMERICAN ELECTRIC POWER

DRAFTING/ENGINEERING	DATE	SCALE: AS NOTED	WTU DWG. NO.
DR.: T&G/TDA	5/31/02	AEP AMERICAN ELECTRIC POWER	OPS–OK1_00001–01
CHK.:			SHT. 1
APP.:			



NOTE: THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

HENDERSON AERIAL SURVEYS INC.
3889 GROVE CITY RD. GROVE CITY, OHIO 43123

JOB NO.:	42345	NAME:	Oklunion Plant
			NAD27/NGVD29 Texas North Central
SCALE:	1"=100'	AERIAL PHOTOGRAPHY EXPOSED:	08.03.12
CONTOUR INTERVAL	one(1)foot	SHEET:	1 OF 1

LEGEND

- B-1 — TERRACON 2016 SOIL BORING
- * — INDICATES BORING COMPLETED AS PIEZOMETER
- B-15-06 (OW) — TERRACON 2015 SOIL BORING (OW) - DENOTES BORING COMPLETED AS GROUNDWATER OBSERVATION WELL (PIEZOMETER)
- CPT-15-09 — TERRACON 2016 CONE PENETROMETER TEST
- 20408 — CONTROL POINT

Figure 3A

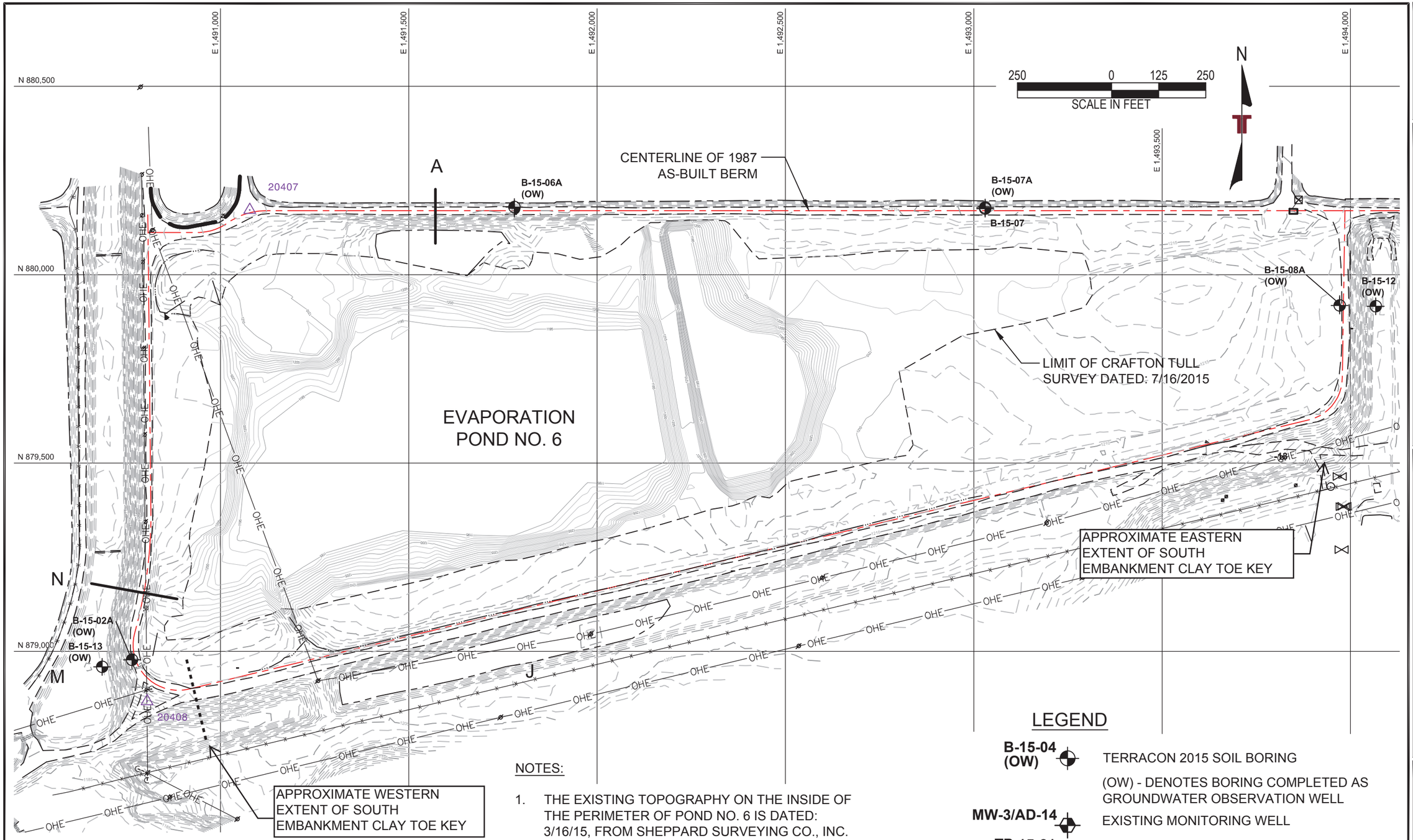
DESIGNED BY:	MAE
DRAWN BY:	DAB
APPV'D. BY:	KME
SCALE:	1"=250'
DATE:	8/29/16
JOB NO.	N4165227
ACAD NO.	81bborring1
SHEET NO.:	1 OF 1

BORING LOCATION PLAN

OKLAUNION PONDS AREA DIKES
AMERICAN ELECTRIC POWER
OKLAUNION POWER STATION
12567 FM ROAD 3430
VERNON TEXAS

Terracon
Consulting Engineers and Scientists
800 MORRISON ROAD COLUMBUS, OHIO 43230
PH: (614) 863-3113 FAX: (614) 863-3475

REV.	DATE	BY	DESCRIPTION



NOTES:

1. THE EXISTING TOPOGRAPHY ON THE INSIDE OF THE PERIMETER OF POND NO. 6 IS DATED: 3/16/15, FROM SHEPPARD SURVEYING CO., INC.
2. THE EXISTING TOPOGRAPHY ON THE TOP AND OUTSIDE PERIMETER OF THE POND IS FROM A SURVEY DATED: 7/16/15, FROM CRAFTON TULL.
3. SOIL BORING AND TEST PIT LOCATION/ ELEVATION DATA FROM CRAFTON TULL SURVEY DATED: 7/16/2015

LEGEND

B-15-04 (OW)	TERRACON 2015 SOIL BORING
	(OW) - DENOTES BORING COMPLETED AS GROUNDWATER OBSERVATION WELL
MW-3/AD-14	EXISTING MONITORING WELL
TP-15-01	APPROXIMATE TEST PIT LOCATION
CPT-15-01	CPT LOCATION
20408	CONTROL POINT
A	SLOPE STABILTY ANALYIS CROSS SECTIONS

FIGURE 3B

DESIGNED BY:	AKB
DRAWN BY:	DAB
APPVD. BY:	KME
SCALE:	1"=250'
DATE:	4/4/16
JOB NO.	N4155108
ACAD NO.	sb-tpplansh2
SHEET NO.:	1 OF 1

EXPLORATION PLAN

DAM RAISING-EVAPORATION POND NO. 6
AMERICAN ELECTRIC POWER
OLKAUNION POWER STATION
12567 FM ROAD 3430
VERNON TEXAS

Terracon
Consulting Engineers and Scientists
800 MORRISON ROAD COLUMBUS, OHIO 43230
PH. (614) 863-3113 FAX. (614) 863-0475

REV.	DATE	BY	DESCRIPTION

FIGURE 4
Piezometer Readings
Pond 21, 22, 23 & WWSP

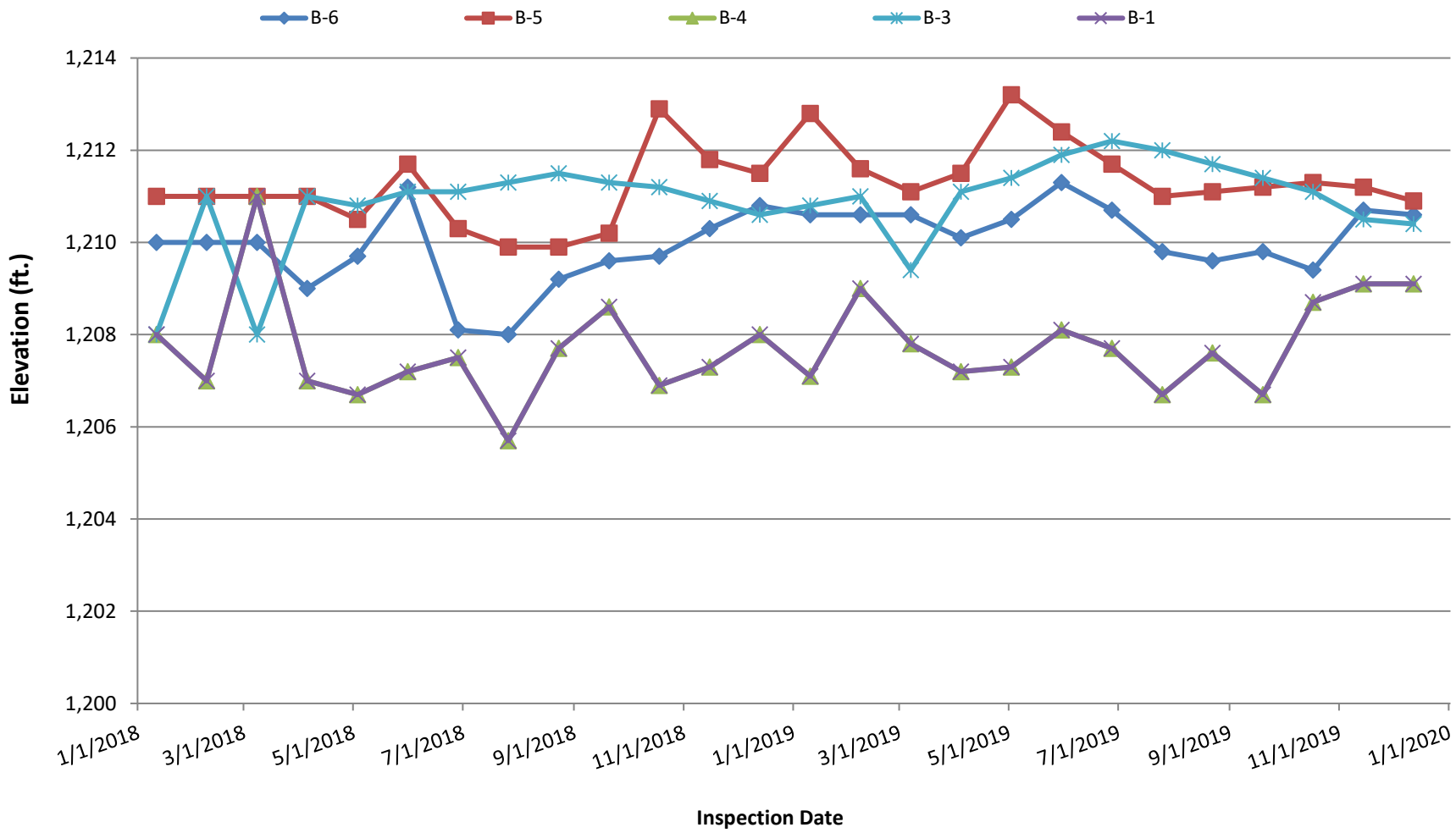
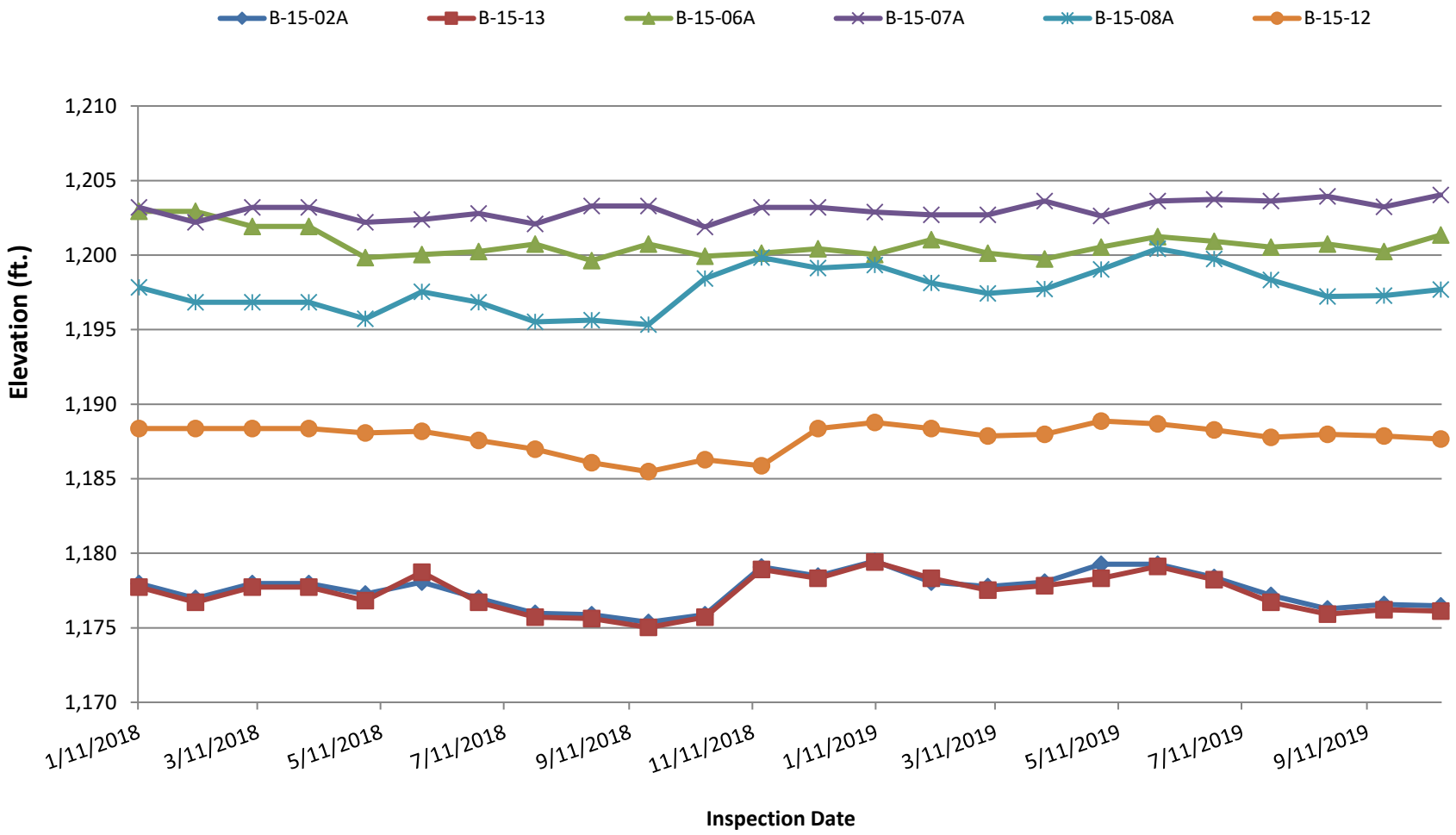


FIGURE 5
Piezometer Readings
Pond 6



ATTACHMENT A:
Photographs – CCR Ponds Complex

DRAWING NUMBER: FIGURE 6

OKLAUNION PLANT PHOTOGRAPH MAP

OKLAUNION 2019 TEXAS

AEP AMERICAN ELECTRIC POWER

AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

PLOT DATE: 12/18/2019
PLOT TIME: 3:21:54 PM
BY: s279452
CROSS REFS:

A (8.5"x11")

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 21

Date: December 3, 2019

Photo #: 1

Notes: General condition of Pond 21

N34 4.574 W99 10.680

Photo #: 2

Notes: General condition of Pond 21 interior slope

N34 4.607 W99 10.727

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 21

Date: December 3, 2019

Photo #: 3

Notes: General condition of Pomd 21 exterior slope common to Makeup Water Pond interior slope

N34 4.748 W99 10.740

Photo #: 4

Notes: General condition of crest. Common to Pond 21/22

N34 4.750 W99 10.678

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 22

Date: December 3, 2019

Photo #: 5

Notes: General condition of Pond 22 interior slope common to Pond 21 exterior slope

N34 4.691 W99 10.671

Photo #: 6

Notes: General condition of crest common to Pond 22/Makeup Water Pond

N34 4.570 W99 10.665

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 22

Date: December 3, 2019

Photo #: 7

Notes: General condition of Pond 22 interior slope common to Pond 23 exterior slope

N34 4.588 W99 10.619

Photo #: 8

Notes: General condition of Pond 22

N34 4.787 W99 10.632

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 23

Date: December 3, 2019

Photo #: 9

Notes: General condition of Pond 23

N34 4.573 W99 10.614

Photo #: 10

Notes: General condition of crest common to Ponds 22/23

N34 4.775 W99 10.620

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 23

Date: December 3, 2019

Photo #: 11

Notes: General condition of Pond 23 interior slope common to Waste Water Sludge Pond exterior slope.

N34 4.728 W99 10.541

Photo #: 12

Notes: General condition of crest common to Ponds 23/Waste Water

N34 4.578 W99 10.496

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Wastewater Pond

Date: December 3, 2019

Photo #: 13

Notes: General condition of Waste Water Sludge Pond

N34 4.576 W99 10.393

Photo #: 14

Notes: General condition of Waste Water Sludge Pond interior slope common to Makeup Water Pond

N34 4.579 W99 10.324

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Wastewater Pond

Date: December 3, 2019

Photo #: 15

Notes: General condition of of Waste Water Sludge interior slope, common to Pond 7.

N34 4.733 W99 10.328

Photo #: 16

Notes: General condition of interior slopes of Waste Water Sludge Pond

N34 4.736 W99 10.346

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 6

Date: December 3, 2019

Photo #: 17

Notes: General condition of Pond 6 from SW corner

N34 4.276 W99 10.896

Photo #: 18

Notes: General condition of Pond 6 west interior slope and crest

N34 4.277 W99 10.903

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 6

Date: December 3, 2019

Photo #: 19

Notes: General condition of Pond 6 east interior slope and crest

N34 4.487 W99 10.285

Photo #: 20

Notes: General condition of of Pond 6 from NE corner

N34 4.488 W99 10.307

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 6

Date: December 3, 2019

Photo #: 21

Notes: General condition of Pond 6 east exterior slope

N34 4.484 W99 10.277

Photo #: 22

Notes: General condition of Pond 6 south exterior slope

N34 4.403 W99 10.288

AEP GES Dam Inspection

Plant Name: Oklaunion

Inspector: B. Palmer

Unit: Pond 6

Date: December 3, 2019

Photo #: 23

Notes: General condition of Pond 6 west exterior slope

N34 4.286 W99 10.919

Photo #: 24

Notes: General condition of Pond 6 south exterior slope

N34 4.272 W99 10.886