### PHOTOINTERPRETATION REPORT (AERO-DATA CORPORATION 94-2288)

# A BRIEF AERIAL PHOTOGRAPHY ANALYSIS OF RIVER BEND STATION AT ST. FRANCISVILLE, LOUISIANA: 1993-1994

Ву

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Submitted to:

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PRIVILEGED AND CONFIDENTIAL

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#### 1.0 Executive Summary

Aero-Data Corporation (ADC) has contracted with the Entergy River Bend Station to conduct a photo mission covering at least a two mile radius around the facility near St. Francisville, Louisiana. ADC has been providing annual plant site documentation of the facility since 1985.

This year ADC was requested to produce photographs of the facility, but not a photomosaic. The current photography was compared to the previous years photography in order to identify any changes in the number of wellheads and/or pipelines surrounding the site. Changes in vegetation within the facility boundary were also identified.

The deliverables for this project include contact prints of each frame (24), a color plot showing the 1993-1994 changes, a color plot containing the frame center for each of the photographs from the current flight, and this interpretation report.

#### 1.1 Methods and Materials

The current photo mission was flown on November 6, 1994 at a scale of 1"=1,500' using false color infrared (CIR) film. The frame centers of the 1994 photographic coverage are very similar to those flown by ADC for Gulf States Utilities in 1993. The previous photo mission was flown on September 30, 1993 also at a scale of 1"=1,500' and using CIR film. ADC's flight planning was simplified with the use of a Geographic Information Systems (GIS) software package which aided in the alignment of the flight lines. With this system, four flightlines were selected and 24 frames of film were shot for this photo mission. Navigation was by our GPS navigation and moving map equipment.

Contact prints for both the current and 1993 dates were produced at a scale of 1"=1,500'. The prints for both dates vere analyzed on a large mirror stereoscope for change detection.

The change map of the River Bend facility was produced using a Geographic Information System. The GIS incorporated computer scanned imagery of

the 1993 and 1994 photo missions as well as digitized vector data. Comparison of the current photography with the 1993 photography by photointerpretation revealed no new changes, such as new pipelines, wellheads, or vegetation removal.

ADC also constructed a map showing the frame centers, frame numbers, and latitude/longitude coordinates of each frame. This map was created from 1990 TIGER digital line data acquired from the U.S. Department of Commerce, Bureau of the Census in CD-ROM format. The Tiger data is useful for reference purposes, supplementing the outdated U.S. Geological Survey 7.5 minute quadrangle map data available for the area of interest (the Port Hudson quad map was last updated in 1980; the St. Francisville quad in 1972). In terms of accuracy, the scale of TIGER data is 1:100,000 and may be anywhere from 50 to 140 feet off; whereas the 7.5 minute quads have a scale of 1:24,000 and may be up to 40 feet off.

Aero-Data can map the area from the current photography and produce a current map which will surpass the accuracy of USGS quadrangle sheets should it be requested. The above referenced map should be used to select the specific frames which provide coverage within the site area.

## 1.2 Summary of Preliminary Findings

No changes in the number or size of wellheads, pipelines or transmission line right-of-ways were identified during the interpretive phase of this project. There are no significant changes in vegetation in the area immediately surrounding the cooling towers. The small patches of bare ground within the site boundary that were present on the 1993 photos are now covered by ground vegetation. The area surrounding the Entergy River Bend facility has not changed significantly since the 1993 photo mission.

# Appendix A: Photo Inventory

Can	Rell	Steri	End Einme	Photo Date	Photo Scale	Film Txpa	Site Name	Asro-Data Proless No.	Flight Line Sty of Frames
357	91029	59	67	10/11/91	15840	CIR	GSU Riverbend	1079	9
357	91040			11/10/91	15840	CIR	GSU Riverbend	103	
357	92043	2706	2716	9/30/92	18000	CIR	GSU Riverbend	1392	11
357	92043	2720	2724	9/30/92	18000	CIR	GSU Riverbend	1392	5
357	92043	2727	2735	9/30/92	18000	CIR	GSU Riverbend	1392	9
357	92043	2746	2752	9/30/92	18000	CIR	GSU Riverbend	1392	7
357	93041	4571	4578	9/30/93	18000	CIR	GSU Riverbend	1791	8
357	93041	4579	4587	9/30/93	18000	CIR	GSU Riverbend	1791	9
357	93041	4588	4595	9/30/93	18000	CIR	GSU Fliverbend	1791	8
357	93041	4596	4604	9/30/93	18000	CIR	GSU Riverbend	1791	9
432	94034	1627	1632	11/6/94	18000	CIR	Riverbend, Entergy	2288	6
432	94034	1633	1640	11/6/94	18000	CIR	Riverbend, Entergy	2288	8
432	94034	1641	1648	11/6/94	18000	CIR	Riverbend, Enlergy	2288	8
432	94034	1649	1660	11/6/94	18000	CIR	Riverbend, Enlergy	2288	1 2



