INDUSTRIAL DIVISION

NALCO CHEMICAL COMPANY
180 N. MICHIGAN AVENUE • CHICAGO, ILLINOIS 60601 • AREA 312-822-1200

September 25, 1972

PLAINTIFF'S EXHIBIT
BAB-387

Public Service Co. of Colorado
P. O. Box 840
Denver, Colorado 80201

Attention: Mr. Pat McCarter
Superintendent, Cherokee Plant

Dear Mr. McCarter:

Attached is the analysis of the material removed from the number 3 secondary superheat tube. You will note that the constituents are all metals from the tube itself.

The material is exfoliation of the superheater tubes. This is common in high pressure utilities. The problem is basically metallurgical in nature. There is nothing in the way of water treatment that would help.

We can discuss this during our next visit.

Yours very truly,

Don Hughes
District Representative

DCH:ms

cc: Mr. Ray Dudley, Asst. Supt.
Mr. Carl Yarcho, Supt. of Plants
Mr. A. F. Baal, Chief Betterments Engr.
Mr. John Groothuis
Mrs. Judy Hughes
Mr. A. G. Keleher

ADDRESS REPLY TO: 3422 S. DOWNING STREET • DENVER, COLORADO 80210 • AREA 303-744-5437

NALCO

REPORT OF DEPOSIT ANALYSIS

From
PUBLIC SERV. CO. OF COLO. - CHEROKEE
DENVER, COLORADO

Analysis No. 435596
Sampling Date 9/ 1/72
Date Sample Rec'd 9/ 7/70

Sample Marked
REMOVED FROM UNIT 3 SECONDARY SUPERHEAT

LABORATORY ANALYSIS (per cent)		CALCULATED COMBINATIONS (per cent)	
Loss at dull red heat	0.	Loss on Ignition	2.
Silica [as SiO_2]	1.	Silica [as SiO_2]	1.
Phosphorous Pentoxide [as P_2O_5]	0.	Alumina [as Al_2O_3]	1.
Ferric Oxide [as Fe_2O_3]	96.	Iron Oxide [as Fe_2O_3]	0.
Sulfur Trioxide [as SO_3]	0.	Magnetic Iron Oxide [as Fe_3O_4]	92.
Calcium Oxide [as CaO]	0.	Basic Calcium Phosphate [as $Ca_{10}(PO_4)_6(OH)_2$]	0.
Magnesium Oxide [as MgO]	0.	Magnesium Phosphate [as $Mg_3(PO_4)_2 \cdot Mg(OH)_2$]	0.
Alumina [as Al_2O_3]	1.	Calcium Carbonate [as $CaCO_3$]	0.
Carbon Dioxide [as CO_2]	0.	Calcium Silicate [as $5CaSiO_3 \cdot H_2O$]	0.
Sodium Oxide [as Na_2O]	0.	Magnesium Silicate [as $3MgO \cdot 2SiO_2 \cdot 2H_2O$]	0.
CHROMIC OXIDE	3.	Magnesium Hydroxide [as $Mg(OH)_2$]	0.
GAIN ON IGNITION	1.	Sodium Oxide [as Na_2O]	0.
		CHROMIC OXIDE	3.

Carbon Tetrachloride Extractable TRACE

James J. Hickey

NALCO CHEMICAL COMPANY
180 N. MICHIGAN AVENUE • CHICAGO, ILLINOIS 60601

WAD00245

Monthly letters

1952 - 1965