

ALCOA 0397  
DENVPORT, IOWA 52003

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ALCOA  
4200537-1160  
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4-21-93



April 21, 1993

James Colbert  
Superfund Branch  
USEPA Region VII  
726 Minnesota Ave.  
Kansas City, Kansas 66101

RECEIVED  
APR 26 1993  
REME SECTION

SUBJ: Results of Well Water Sampling Along South Bellingham Road

Dear Jim:

Enclosed are three copies of an April 20, 1993 letter report from Geraghty & Miller which summarizes analytical results for well water samples collected at accessible residential wells along Bellingham Road. The report also covers results for samples collected from Alcoa's off-site monitoring well LI. Most of the data are from the February 15-19 sampling event which you witnessed. However, results for a few samples collected later are also included.

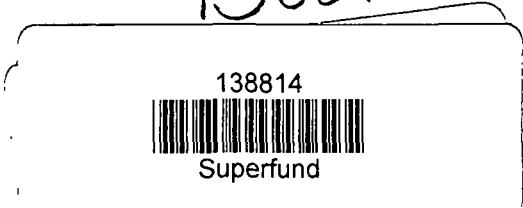
If you have any questions, please call.

Yours truly,

*Marshall Sonksen*

Marshall Sonksen, P.E.  
Senior Staff Environmental Engineer

138814



cc: G.O. Pratt  
Larry Linnenbrink, Scott County Health Department

April 20, 1993

Mr. Marshall Sonksen  
Aluminum Company of America  
4879 State Street  
Riverdale, LA 52722

Re: Results of Well Water Sampling Along South Bellingham Street

Dear Marshall:

This letter report presents a summary of ground-water sampling from residential water wells located on South Bellingham Street, immediately west of the Alcoa-Davenport Works, and from Alcoa monitor well LI, located at 232 South Bellingham Street. The majority of the sampling summarized in this letter was conducted February 15 through 19, 1993. Additional analytical data, available from other sampling events from monitor well LI and a residential at 236 South Bellingham Street, are also presented. Also presented is a summary of all known information concerning residential well water usage along Alcoa's western property boundary. To date, no contaminants of concern have been detected in residential water wells along South Bellingham Street. A summary of analytical data is presented on Table 1. Trichloroethene, an organic compound used in industrial solvents, continues to be detected in monitor well LI at levels of concern.

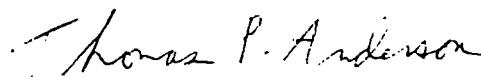
Monitor well LI was installed in the fall of 1991. The location of monitor well LI is illustrated on Figure 1. Trichloroethene was first detected in monitor well LI in a sample collected October 13, 1992. No contamination was detected in LI during two previous sampling events during October 1991 and May 1992. Because of the proximity of this monitor well to residential well water users along South Bellingham Street, a well survey and sampling event was conducted in conjunction with EPA Region VII personnel to determine whether residential wells have been affected.

Mr. Marshall Sonksen  
April 20, 1993  
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The residential well survey is summarized on Table 2. The information included in Table 2 is a summary of information gathered from inquiries by Alcoa and from a door-to-door survey conducted by Geraghty & Miller personnel the week of February 15, 1993. The location of the residences listed on Table 2 are illustrated on Figure 1. Information concerning three residences, 210, 214, and 218 South Bellingham Street, is not available at this time because the property owner is not cooperating with the investigation. All residences surveyed had a water well on their property, the majority of which are no longer used because their homes are now on municipal water supply. Only one residence, 236 South Bellingham Street, is using well water as a drinking water supply. Apparently, this home is not tied into the municipal water supply. Only one additional residential well, at 240 South Bellingham Street, was functional during the well survey. This well is connected to an outdoor spigot only and is apparently only used for lawn watering, gardening, and other outdoor uses. Although not currently functional, the resident at 248 South Bellingham Street plans to use their well for watering their garden this summer. All three of these active residential wells, at 236, 240, and 248 South Bellingham Street, were sampled in February. Geraghty & Miller personnel tried, unsuccessfully, to sample malfunctioning residential wells at 226, 230, and 242 South Bellingham Street. The property owner at 260 South Bellingham Street, although she would not allow access to sample, stated that her well has not been used for several years.

Geraghty & Miller will continue to sample monitor well LI and the residential well at 236 South Bellingham Street each month, until further notice. If you have any questions or comments concerning this letter report, please call me at (614) 763-2310.

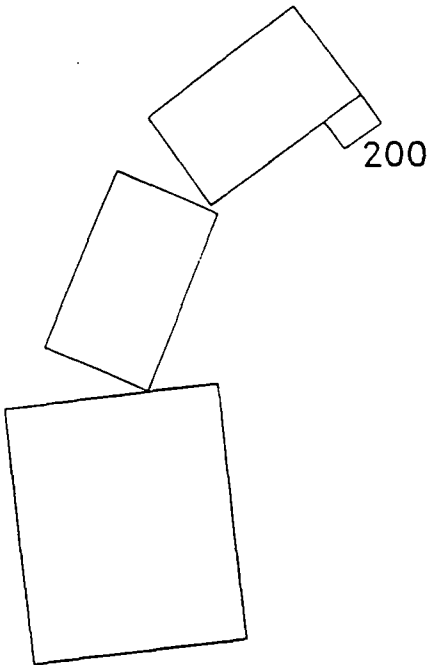
Respectfully submitted,



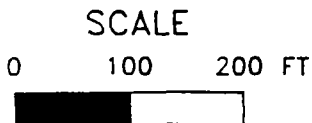
Thomas P. Anderson  
Senior Scientist

Enclosures

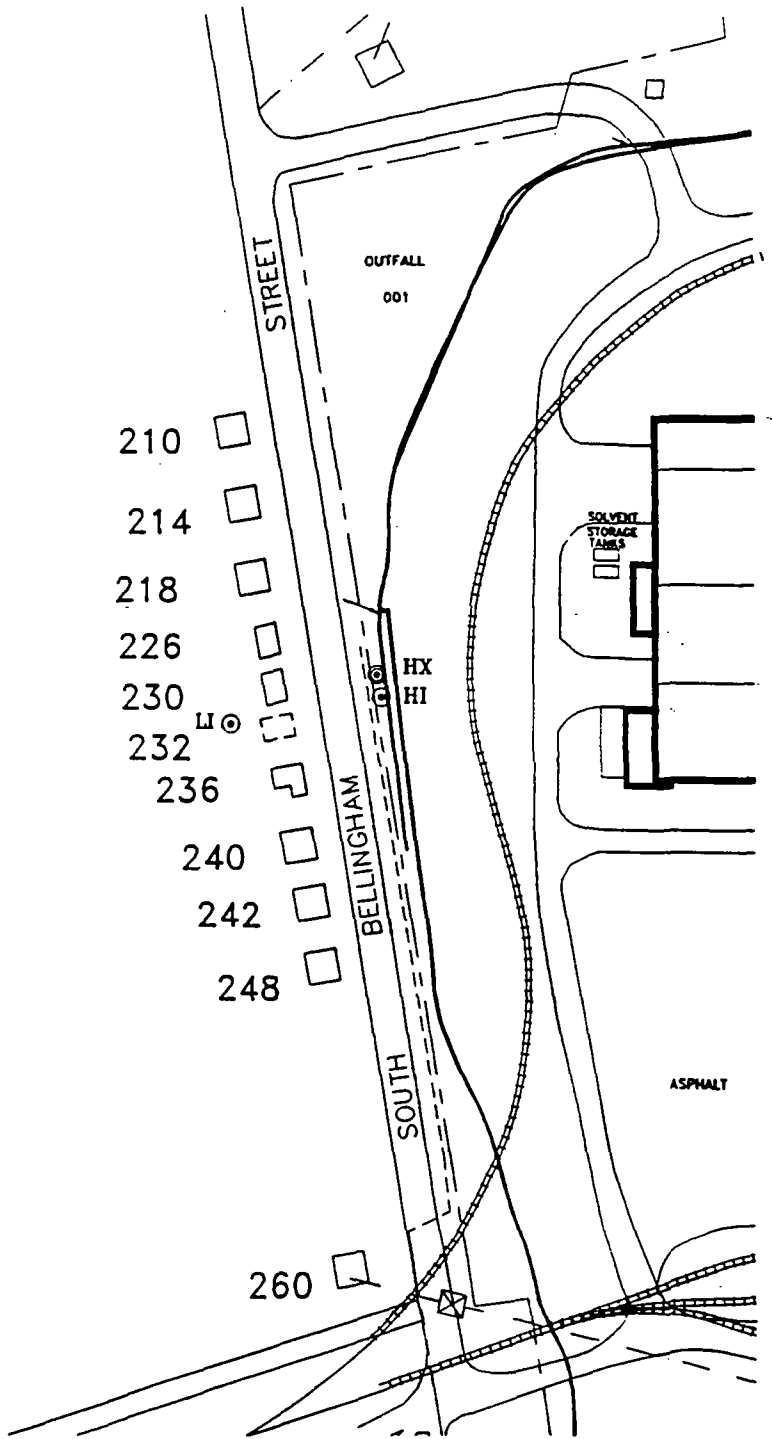
PLANT NORTH



- ⊙ VERY DEEP BEDROCK MONITOR WELL
- ⊙ INTERMEDIATE DEPTH BEDROCK MONITOR WELL



PRIVATE RESIDENCES LOCATED FROM AERIAL PHOTOGRAPH



LOCATION OF PRIVATE RESIDENCES  
IMMEDIATELY WEST OF  
ALCOA-DAVENPORT WORKS  
RIVERDALE, IOWA

FIGURE

1

Table 1. Summary of Analytical Results of Water Well Sampling on South Bellingham Street.

Location	Sample #	Description	Date Sampled	Parameters Analyzed	Parameters Detected	Concentration(ug/l)	MCL(ug/l)
232 S. Bellingham/	LI	Monitor Well	10/7/91	VOCs	None		
	LI	Monitor Well	5/6/92	VOCs	None		
	LI	Monitor Well	10/13/92	VOCs	Trichloroethene	7	5
	LI	Monitor Well	1/19/93	VOCs	Trichloroethene Tetrachloroethene	9 2J	5 5
	LI	Monitor Well	2/18/93	VOCs	Trichloroethene	7	5
	LI	Monitor Well	3/15/93	VOCs	Trichloroethene 1,2-Dichloroethene, Total	10 1	5 70
236 S. Bellingham	BE 236	Domestic Well	4/90	VOCs PCBs	None None		
	BE 236	Domestic Well	2/4/93	VOCs	None		
	BE 236	Domestic Well	2/18/93	VOCs Pesticides/PCBs Semi-Volatile Organics PAHs Inorganics	None None None None Barium		
	BE 236	Domestic Well	3/15/93	VOCs	None	111	2000
	BE 236	Domestic Well	2/18/93	VOCs	None		
240 S. Bellingham	BE 240	Domestic Well	2/18/93	VOCs	None		
248 S. Bellingham	BE 248	Domestic Well	2/18/93	VOCs	None		
	BE 250S	Soil Sample	2/18/93	VOCs	Acetone(2)	6JB	Not Applicable

- Notes:
- The "J" qualifier on the detected concentration means that the compound was detected by the laboratory at a level below the lowest reporting level appropriate for this analytical procedure and, therefore, it is an estimated value.
  - The "B" qualifier means that this compound, Acetone, was also detected in the method blank associated with this sample.
  - MCL for cis-1,2-Dichloroethene is 70 ug/l. The MCL for its isomer trans-1,2-Dichloroethene is 100 ug/l.

**TABLE 2**  
**SOUTH BELLINGHAM STREET RESIDENTIAL WELL SURVEY**

<b>200 SOUTH BELLINGHAM STREET</b>		<b>NOT SAMPLED</b>
(Warehouse bldgs. northwest of row of houses on Bellingham Street)		
Owner:	[REDACTED]	
Resident:	[REDACTED]	
Well:	Location:	Northeast side of warehouse office building.
	Status:	Building is now on municipal water supply. Well is not currently used.
	Notes:	The well apparently still has a submersible pump in place that is connected to electrical supply and a pressure tank in the basement of the office at the northeast corner of the warehouse. The discharge from the pressure tank is no longer hooked up to the building's plumbing.
	Sampling Status:	Geraghty & Miller tried unsuccessfully to start up the pump to purge and sample the well. Would need a plumber and electrician to check all connections and determine where the problem is.
<b>210 SOUTH BELLINGHAM STREET</b>		<b>NOT SAMPLED</b>
Owner:	[REDACTED]	
Resident:	[REDACTED]	
Well:	Location:	Unknown.
	Status:	Unknown.
	Notes:	Property owner denied access to sample.
<b>214 SOUTH BELLINGHAM STREET</b>		<b>NOT SAMPLED</b>
Owner:	[REDACTED]	
Resident:	Unknown	
Well:	Location:	Unknown.
	Status:	Unknown.
	Notes:	Property owner denied access to sample.

<b>218 SOUTH BELLINGHAM STREET</b>		<b>NOT SAMPLED</b>
Owner:	[REDACTED]	
Resident:	Unknown	
Well:	Location:	Unknown.
	Status:	Unknown.
	Notes:	Property owner denied access to sample.
<b>226 SOUTH BELLINGHAM STREET</b>		<b>NOT SAMPLED</b>
Owner:	[REDACTED]	
Resident:	Unknown	
Well:	Location:	Basement of home in a back room, west side of the house.
	Status:	Not currently in use. Not currently operational.
	Notes:	Owner should be contacted to gain access and for any correspondence. Plumbing from well is attached to a spigot in the basement, not to house plumbing. Well has been used in the recent past (last 5 years) for watering lawn and garden and other outdoor work.
	Sampling Status:	Old centrifugal pump installed at surface. Geraghty & Miller removed the connections to the pump and attached a new pump to purge and sample. For undetermined reasons, the pump would not draw water and, therefore, a sample could not be collected. The well head is rusted and could not be opened without damaging plumbing and casing. This well could be made operational if the old pump and internal working of the pump and pump system were replaced.

**230 SOUTH BELLINGHAM STREET****NOT SAMPLED**

Owner:

[REDACTED]

Resident:

[REDACTED]

Well:

Location:

Under the sink in the kitchen, first floor, southwest corner of the house.

Status:

Well has not been used since city water was installed. Owner has no plans to use the well. No pump attached; however, the plumbing is in place to attach a centrifugal type pump to the well. This plumbing is cemented into the floor of the kitchen, under the sink.

Notes:

Owner-resident can be contacted after 3:00 p.m.

Sampling Status:

Geraghty & Miller tried to sample this well by attaching a new centrifugal pump at the surface. For undetermined reasons, the pump would not draw water and, therefore, sample could not be collected. This well could be made operational if the internal plumbing of the old pump system was removed and replaced with a new pump system.

**232 SOUTH BELLINGHAM STREET****SAMPLED**

Owner:

Alcoa

Resident:

None--house was demolished in early March.

Well:

Location:

Alcoa intermediate depth monitor well LI is located in the backyard of this property, approximately 180 feet west of the Alcoa fence line. An old well pit for a domestic well is located in the yard on the north central side of the property.

Status:

Alcoa monitor well LI is actively sampled. The old domestic well is not used and not accessible.

Notes:

Geraghty & Miller personnel, after extensive digging with a shovel, could not find the well head in the well pit for the old domestic well.

Sampling Status:

Alcoa monitor well LI was sampled. The well head for the abandoned domestic well could not be located to sample. Monitor well LI is being sampled on a monthly basis for VOCs.



<b>236 SOUTH BELLINGHAM STREET</b>		<b>SAMPLED</b>
Owner:	[REDACTED]	
Resident:	[REDACTED]	
Well:	Location:	Well head is outside at the southwest corner of the house and plumbed underground into the house.
	Status:	Residents have been using this well for drinking and all water needs for the home. Apparently they are not tied into the city water system. Samples have been collected from an outside spigot at the southeast corner of the house.
	Notes:	Resident stated that this well was sampled last April and found to be clean. However, we don't know what parameters were analyzed. This well was also sampled by Geraghty & Miller in the spring of 1990. No VOCs or PCBs were detected at that time.
	Sampling Status:	Have permission to sample from the outside spigot, as necessary. A sample will be collected monthly.
<b>240 SOUTH BELLINGHAM STREET</b>		<b>SAMPLED</b>
Owner:	Alcoa	
Resident:	Unknown, Alcoa was looking for new renters in March.	
Well:	Location:	Well located in the basement, in the southwest corner of the house.
	Status:	This well is operational with a submersible pump installed. The plumbing from the pump is hooked up to a spigot on the outside of the house, apparently for outside use (lawn watering, etc.).
	Notes:	Resident stated that the water is not used much because it is very rusty.
	Sampling Status:	A sample was collected from a discharge port in the basement of the house.

**242 SOUTH BELLINGHAM STREET**

**NOT SAMPLED**

Owner: [REDACTED]

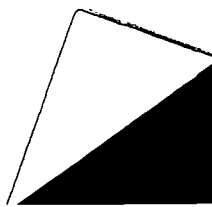
Resident: [REDACTED]

Well:           Location:           Well head located directly behind the house, west side.

                  Status:           This well is currently not in use because the pump is in disrepair. It had been used in the past for gardening and lawn watering, etc. It hasn't been used for drinking since city water was installed. An old centrifugal pump is located in the house and is still hooked up to the well. Plumbing runs underground from the well to the house, probably through a pitless adapter.

                  Notes:           Owner stated that when he bought the house in 1967, he had a well driller deepen the well from about 50 to 98 feet. They also installed casing to the surface and filled in the old pit. Depth to water from top of casing is approximately 15.9 feet.

                  Sampling Status:   Geraghty & Miller removed the connections to the old pump and attached a new pump to purge and sample. For undetermined reasons, the pump would not draw water and, therefore, a sample was not collected. This well could be sampled if the internal working of the old pump system was replaced.



248 SOUTH BELLINGHAM STREET		SAMPLED
Owner:	[REDACTED]	
Resident:	[REDACTED]	
Well:	Location:	Old well pit located in backyard off the northwest corner of the house.
	Status:	[REDACTED], next door neighbor, has installed a centrifugal pump at the surface above the well pit. This pump is attached to a garden hose and apparently they have been using this water for outdoor use. The pump is not working right now; however, [REDACTED] suggested that he was going to get it replaced so he can use the water this summer, if it is not contaminated.
	Notes:	This well is not capped properly. Leaves, soil, and other debris can easily fall into the well. The well is approximately 60 feet deep and depth to water prior to sampling was about 15.9 feet below ground.
	Sampling Status:	The plastic piping for the centrifugal pump was temporarily removed. Geraghty & Miller personnel then installed a 2-inch submersible pump to purge the well and used a disposable bailer to sample.
260 SOUTH BELLINGHAM STREET		NOT SAMPLED
Owner:	[REDACTED]	
Resident:	[REDACTED]	
Well:	Location:	Old well apparently on northwest side of house. We did not see the well.
	Status:	[REDACTED] stated that her well is not used. She has been using city water since it was installed.
	Notes:	[REDACTED] does not want us sampling her well. She did not even want us to open it up for a look.
	Sampling Status:	Do not have owner's permission to sample.

**Phil Baird**

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To:

Jim,

Per your phone conversation with  
Tim Wilkinson, I am enclosing a  
"packet" which Tim personally  
delivered to each resident on  
Bellingham Road.

Phil Baird

 **ALCOA**

P.O. Box 3567  
Davenport, Iowa 52808  
(319) 359-2248