October 20, 2005



TETRA TECH, INC. 5421 Beaumont Center Blvd. Suite 660 Tampa, Florida 33643 Telephone (813) 806-0202 FAX (813) 806-0405

Mr. William Kutash Waste Management Administrator Florida Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8318

Subject: Expanded Water Supply Well Survey Report for the Former American Beryllium Company Facility, Tallevast, Florida

Dear Mr. Kutash:

On behalf of Lockheed Martin Corporation, Tetra Tech, Inc. is pleased to submit this report documenting the expanded water supply well survey conducted in the vicinity of the former American Beryllium Company (ABC) facility in Tallevast, Florida. The water supply well survey included a database search and field reconnaissance to identify any residential potable water supply wells, residential irrigation wells, and agricultural irrigation wells within a distance of 0.25 mile from the edge of the plume; and any municipal supply wells within a distance of 0.5 mile from the edge of the plume.

Database Search

The database search included a review of all available records to identify any permitted wells within the distances specified above. The following agencies were contacted and asked if they maintained records on water supply wells:

- City of Bradenton
- Manatee County
- Southwest Florida Water Management District (SWFWMD)
- Florida Department of Environmental Protection (FDEP)

Of these agencies, only Manatee County and SWFWMD maintained records on water supply wells. A request was submitted to both agencies for a list of all wells located in Township 35 South, Range 18 East, Section 30; Township 35 South, Range 18 East, Section 31; Township 35

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South, Range 17 East, Section 25; and Township 35 South, Range 17 East, Section 36. These records were then reviewed to identify any addresses that fell within the distances specified above.

The database search identified 21 properties with permitted wells. Of these 21 locations, there were three domestic supply wells, nine domestic irrigation wells, one industrial supply well, six observation (monitoring) wells, and two where no well usage information was provided in the database. No municipal water supply wells were identified within a distance of 0.5 mile from the edge of the plume during the database search. A list of the wells identified during the database search is provided in Table 1.

Field Reconnaissance

A field reconnaissance was conducted to verify the locations of the wells identified during the database search. Prior to conducting the field reconnaissance, letters were sent to the property owners requesting access to inspect the wells and collect samples if necessary. During the field reconnaissance, wells were located at 17 of the addresses identified during the database search. Four of the addresses identified during the database search could not be located in the field. A search was done on the Manatee County property appraisers database but none of the four properties were in the database.

While conducting the field reconnaissance, a survey was conducted to identify any additional wells that were not identified in the database search. No additional wells were identified during the field reconnaissance.

Water Sampling

Water samples were collected from five of the wells identified during the expanded well survey. Samples were collected from two domestic irrigation wells, two domestic supply wells, and one industrial supply well. The property owners at 2105 Tallevast Road and 7715 17th Street Court East declined to have their wells sampled. The remaining irrigation wells had no spigots or sample ports so no samples were collected. In addition, no samples were collected from wells identified as observation wells.

The water samples were collected in accordance with the FDEP Standard Operating Procedure (DEP-SOP-001/01) FS 2000, General Aqueous Sampling, and FS 2300, Drinking Water Sampling. The water samples were submitted to Accutest Laboratories in Orlando, Florida under chain of custody protocol for analysis for volatile organic compounds (VOCs) using EPA Method 8260, and 1,4-Dioxane using EPA Method 8270. The concentrations of contaminants of concern (COCs) were below standard laboratory detection limits in all five samples. Copies of the laboratory analytical reports are attached for reference.

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Summary and Conclusions

An expanded water supply well survey was conducted to identify any residential potable water supply wells, residential irrigation wells, and agricultural irrigation wells within a distance of 0.25 mile from the edge of the plume; and any municipal supply wells within a distance of 0.5 mile from the edge of the plume. The expanded well survey included both a database search and a filed reconnaissance. The database search identified 21 properties with permitted wells. No municipal water supply wells were identified within a distance of 0.5 mile from the edge of the plume.

The field reconnaissance confirmed the presence of wells at 17 of the addresses identified during the database search. The addresses of four of the locations identified during the database search could not be located. A list of the water supply and irrigation wells identified during this expanded well survey and the original well survey is provided in Table 2. The locations of the wells are shown on Figure 1. The observation wells identified in Table 1 were omitted from Table 2 and Figure 1 as these are monitoring wells and are not considered water supply or irrigation wells.

Water samples were collected from five of the wells identified during the expanded well survey. The samples were submitted to a laboratory for analysis for VOCs and 1,4-dioxane. The results of the laboratory analysis indicates that the concentrations of COCs were below standard laboratory detection limits in all five samples.

If you have any questions or require any additional information please contact me by phone at (813) 806-0202, or via e-mail at <u>calliganp@ttnus.com</u>.

Sincerely, **TETRA TECH, INC.**

VE. Cal

Paul E. Calligan, P.G. Project Manager

Enclosures

cc:

Ron Helgerson, Lockheed Martin Tina Armstrong, Lockheed Martin File TABLES

TABLE 1

WELLS IDENTIFIED DURING DATABASE SEARCH EXPANDED WELL SURVEY FORMER AMERICAN BERYLLIUM COMPANY TALLEVAST, FLORIDA

Address	Property Owner	Parcel ID	Well Usage	Comments	
1231 Hardin Ave	NA	NA	Observation	Could not locate well. Owner had no knowledge of a well on the property.	
1306 Rome Ave	McGarvey, Jill	6658000089	Industrial	Sample collected 7-11-05 @0920	
1234 Clyde Jones Rd	Jones Aviation	6844710308	Observation	Observation well - no sample collected	
7455 16th St E	Ruben, Wayne M.	1984620003	Irrigation	No spigot or sample port	
7580 15th St E/Nations Rent	Revels, Gregory	6657400005	Observation	Could not locate well	
7850 15th St E	NA	NA	Observation	Address could not be located. Not listed in the Manatee county property appraisers database	
7671 15th St E	Quick Stop	2004110009	Observation	Observation well - no sample collected	
7205 15th St E	Sarasota Commerce Center	90000605956	Irrigation	Address could not be located. Not listed in the Manatee county property appraisers database	
7300 15th St E	NA	NA	Irrigation	Address could not be located. Not listed in the Manatee county property appraisers database	
7260 15th St E	Mader Electric	6651901008	Irrigation	No spigot or sample port	
8011 15th St E	Innovation Marine Corp	2022610055	Irrigation	Sample collected 7-6-05 @1030	
7741 15th St E/Golf Course	Airport Authority	2021900002	Irrigation	Previouly sampled by Tetra Tech	
8161 15th St E	CC Prop Acquisition	2022700104	Irrigation	No spigot or sample port	
7715 15th St E	NA	NA	Irrigation	Address could not be located. Not listed in the Manatee county property appraisers database	
7881 15th St E /Antique shop	Airport Authority	2022300103	Observation	Tetra Tech monitoring well - no sample collected	
1250 Commerce Blvd S	Seng, David	6654200002	Observation	Observation well - no sample collected	
1309 Hardin Ave	NA	NA	Residential	Sample collected 7-12-05 @1245	
7571/7561 15th St E/Animal Hosp	Thomas, Walter G.	1993800000	Residential	Sample collected 7-14-05 @1045	
7715 17th St Ct E	Pryor, Lewis	2011000003	Irrigation	Owner declined to have well sampled	
2105 Tallevast rd	Boothe, Heidi H.	1985310000	Irrigation	Owner declined to have well sampled	
7575 Commerce Ct	Heidi McCullough		Irrigation	No spigot or sample port	

NA - Information not available

TABLE 2

WATER SUPPLY WELL INVENTORY¹ SITE ASSESSMENT REPORT ADDENDUM FORMER AMERICAN BERYLLIUM COMPANY TALLEVAST, FLORIDA

				Sample	Casing	Depth of	Casing	Depth to	Total	
Address	Property Owner	Parcel ID	Well Usage ¹	Collected	Diameter	Casing	Material	Water	Depth	MAP ID#
Original Well Survey ²										
7851 15th Street East/Golf Course	Airport Authority	202210000	Irrigation	Yes	5	250	PVC	NA	480	1
7602 16th Street Court East	Pinkney Hall, Roberta Lamb	2000900056	NA	No	NA	NA	NA	NA	NA	2
7604/7608 16th Street East	Robinson, Willie	2002800106	Domestic	Yes	2	30	Steel	NA	74.5	3
7609 16th Street East	Church of the Living	2001400106	Domestic	Yes	4	30	PVC	15.55	129.5	4
7616 16th Street East	Washington, Wanda	2003100001	Domestic	Yes	3	35	Steel	NA	97	5
7620 16th Street East	Mazon, Dorothy	2003200009	Irrigation	Yes	NA	NA	NA	NA	NA	6
7624 16th Street East	Sloan, Eugene	2003300007	Irrigation	Yes	2	30	Steel	13.21	90.8	7
7621 16th Street East	Peterson, Milton	200160001	Domestic	Yes	4	37	Steel	15.81	233	8
1709 76th Avenue Drive East	Bryant, Carter	1996700009	Irrigation	Yes	NA	NA	NA	NA	NA	9
		1995200001,								
1710/1714 76th Avenue Drive East	Bryant, Fred	1994900007	Irrigation	Yes	2	32	Steel	16.4	64	10
7605 17th Street East	Bryant, Linda Joyce	1996400121	NA	No	NA	NA	NA	NA	NA	11
7619 17th Street East	Rowe, Ernestine	1995400007	Irrigation	Yes	1.5	NA	Steel	NA	NA	12
7623 17th Street East	Moore, James	1995600002	Irrigation	No	NA	NA	NA	NA	NA	13
7819 17th Street East	Wesley, Elizabeth	2019900006	Irrigation	Yes	NA	NA	NA	NA	NA	14
7715 17th Street Court East	Pryor, Carolyn	201100000	NA	No	NA	NA	NA	NA	NA	15
7716 17th Street Court East	Davis, Lizzie	2016400000	Irrigation	Yes	3	30	Steel	14.1	30	16
7813 17th Street Court East	Smith, Ervin	2012800005	Irrigation	No	NA	NA	NA	NA	NA	17
7515 18th Street East	Carmichael, Tony	1986701009	Domestic	Yes	2	24	Steel	15.1	24	18
7519 18th Street East	Sims, Essie Mae	1992300002	Domestic	Yes	4	29	Steel	17.41	170.6	19
7609 18th Street East	McKnight, Earnest	1991900158	Domestic	Yes	6	29	Steel	15.3	153	20
7603 18th Street East	McKnight, Earnest	1991900109	Domestic	No	NA	NA	NA	NA	NA	21
7611 18th Street East	Davis, Abram	1987700000	Domestic	Yes	3	67	Steel	15.3	102.2	22
		1988000004,								
7615 18th Street East	Brown, Sylvester	90000710869	Domestic	Yes	3	28	Steel	15.64	69	23
7619 18th Street East	Bryant, Frank	1987300074	Domestic	Yes	2	37	Steel	16.24	105.6	24
7624 19th Street East	McKnight, Loretta	1992700003	Domestic	Yes	4	32	Steel	16.3	114	25
7600 19th Street East	Wesley, Michael	1991900208	Irrigation	Yes	NA	NA	NA	NA	NA	26
7603 19th Street East	Sloan, Louise	1990400002	Irrigation	Yes	4	31	PVC	14.6	96.4	27
1507 Tallevast Road	Unkown	2004400004	Irrigation	Yes	2	30	Steel	11.9	84	28
1615 Tallevast Road	Ward, Clifford	1997500059	Irrigation	Yes	4	38	Steel	15.3	122	29
1712 Tallevast Road	Pitts, Wyman	2017200003	Irrigation	Yes	2	26	Steel	14.5	26	30
1804 Tallevast Road	Williams, Delores	2007700004	Domestic	Yes	8	40	Steel	15.74	282	31
		1	201100110	I	, v		0.000			. .

TABLE 2

WATER SUPPLY WELL INVENTORY¹ SITE ASSESSMENT REPORT ADDENDUM FORMER AMERICAN BERYLLIUM COMPANY TALLEVAST, FLORIDA

				Sample	Casing	Depth of	Casing	Depth to	Total	
Address	Property Owner	Parcel ID	Well Usage ¹	Collected	Diameter	Casing	Material	Water	Depth	MAP ID#
Original Well Survey ² (continued)										
	Montgomery, Mary	2007900000								
1808 Tallevast Road	Bryant, William	70000914439	NA	No	NA	NA	NA	NA	NA	32
1811 Tallevast Road	Bryant, Joseph	1988400055	Domestic	Yes	2	31	Steel	15.12	77.5	33
1812 Tallevast Road	Ward, Laura	2008200004	Irrigation	No	NA	NA	NA	NA	NA	34
1864 Tallevast Road	Ward, Laura	2008500056	Irrigation	Yes	4	38	Steel	15.1	127	35
1911 Tallevast Road	Black, Daisey	1989400005	Domestic	Yes	NA	NA	NA	NA	NA	36
1955 Tallevast Road	Heathington, Clif	1986100053	Domestic	Yes	NA	NA	NA	NA	NA	37
2003 Tallevast Road	Granderson, Lillian	1986100049	Domestic	Yes	4	34	Steel	12.33	144	38
Expanded Well Survey ³										
1234 Clyde Jones Rd	Jones Aviation	6844710308	Observation	No	2	8.5	PVC	NA	18.5	39
	Heidi McCullough/Commerce									
7575 Commerce Ct	Ct LLC	6651000868	Irrigation	No	NA	NA	NA	NA	NA	40
1309 Hardin Ave	Stephen E. Crowe	6657800006	Residential	Yes	NA	NA	NA	NA	NA	41
1306 Rome Ave	McGarvey, Jill & Theodore	6658000089	Industrial	Yes	4	82	PVC	NA	460	42
	Nathan Benderson, David H.									
	Baldauf, Randall Benderson									
7205 15th Street East/7455 16th Street			Irrigation	No	4	36	Steel	NA	235	
East/Bradenton Commerce Center	Benderson, Wayne M. Ruben	1984620003	Irrigation	No	5	76	PVC	NA	90	43
7260 15th Street East	Mader Electric	6651901008	Irrigation	No	4	46	Steel	NA	165	44
7741 15th St E/Golf Course	SMAA	2021900002	Irrigation	No	5	221	PVC	NA	360	45
7571/7561 15th St E/Animal Hosp	Thomas, Walter G.	1993800000	Residential	Yes	NA	NA	NA	NA	NA	46
7715 15th Street East/1520 Tallevast	SMAA/WHOGAS, Inc									
Road	(Formerly Spindrift)	2020900003	Irrigation	No	5	3	PVC	NA	18	47
8011 15th Street East	Innovation Marine Corp	2022610055	Irrigation	Yes	5	210	PVC	NA	375	48
8161 15th Street East	Chris Craft Prop Acquisition	2022700104	Irrigation	Yes	2	4	PVC	NA	14	49
7715 17th Street Court East	Pryor, Lewis	2011000003	Irrigation	No	NA	NA	NA	NA	NA	50
2105 Tallevast Road	Boothe, Heidi H.	1985310000	Declined	No	NA	NA	NA	NA	NA	51

1 - Well inventory based on information obtained from Manatee County Environmental Management, FOCUS, SWFWMD, and field reconnaissance

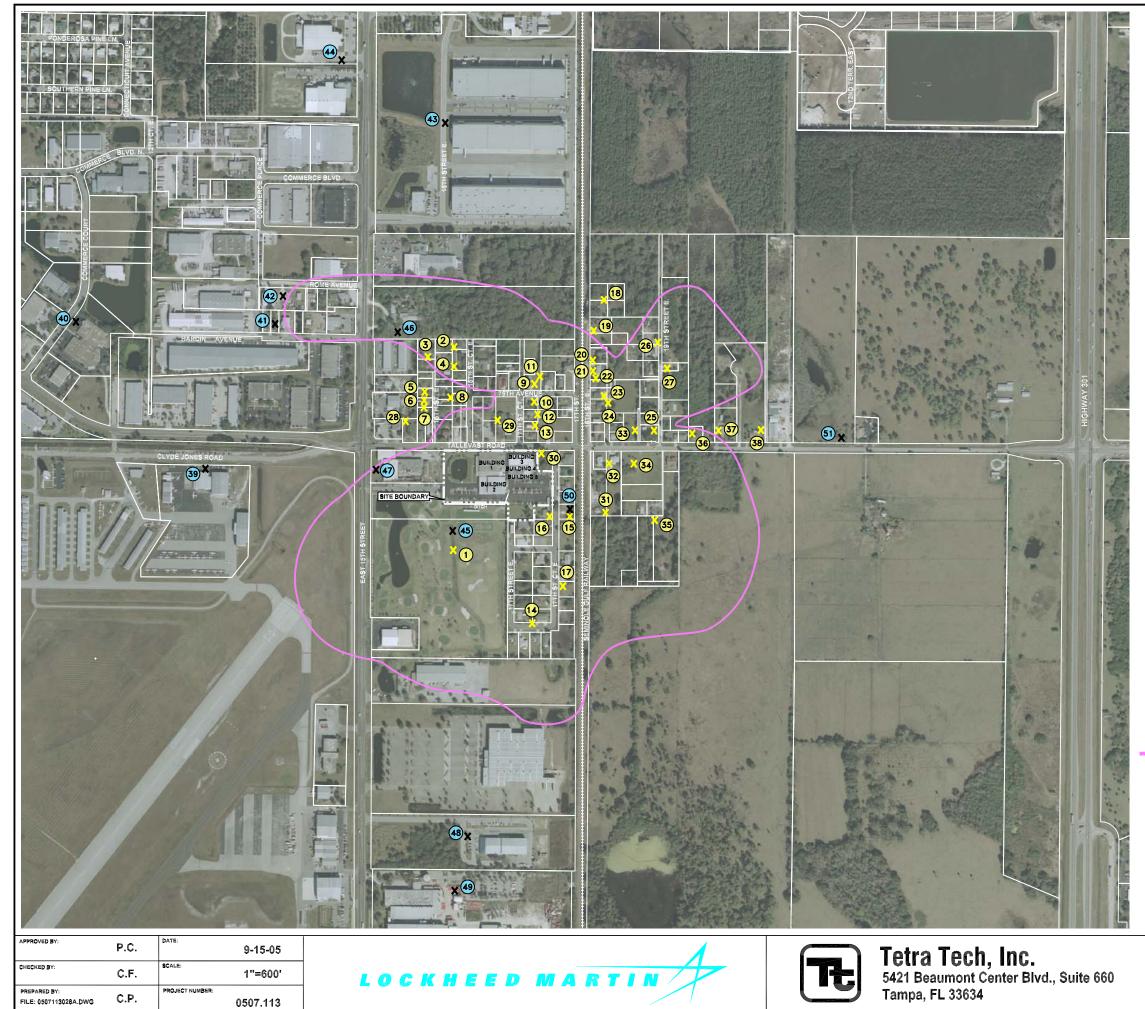
2 - Casing diameter, casing depth and casing material obtained from field reconnaissance and geophysical logging of well

3 - Casing diameter, casing depth and casing material obtained from SWFWMD database

NA - Information not available

SMAA - Sarasota-Manatee Airport Authority

FIGURES



WATER SUPPLY WELL ID	STREET ADDRESS					
1	7851 15TH STREET EAST					
2	7602 16TH STREET COURT EAST					
	7604/7608 16TH STREET EAST					
4	7609 16TH STREET EAST					
5	7616 16TH STREET EAST					
6	7620 16TH STREET EAST					
7	7624 16TH STREET EAST					
8	7621 16TH STREET EAST					
9	1709 76TH AVENUE DRIVE EAST					
10	1710/1714 76TH AVE. DR. EAST					
11	7605 17TH STREET EAST					
12	7619 17TH STREET EAST					
13	7623 17TH STREET EAST					
14	7819 17TH STREET EAST					
15	7715 17TH STREET COURT EAST					
16	7716 17TH STREET COURT EAST					
17	7813 17TH STREET COURT EAST					
18						
19						
20	7609 18TH STREET EAST					
21	7603 18TH STREET EAST					
22	7611 18TH STREET EAST					
23	7615 18TH STREET EAST					
24	7619 18TH STREET EAST					
25	7624 19TH STREET EAST					
26	7600 19TH STREET EAST					
27	7603 19TH STREET EAST					
28	1507 TALLEVAST ROAD					
29	1615 TALLEVAST ROAD					
30	1712 TALLEVAST ROAD					
31	1804 TALLEVAST ROAD					
32	1808 TALLEVAST ROAD					
33	1811 TALLEVAST ROAD					
34	1812 TALLEVAST ROAD					
35	1864 TALLEVAST ROAD					
36	1911 TALLEVAST ROAD					
37	1955 TALLEVAST ROAD					
38	2003 TALLEVAST ROAD					
39	1234 CLYDE JONES ROAD					
40	7575 COMMERCE COURT					
41	1309 HARDIN AVENUE					
42	1306 ROME AVENUE					
43	7205 15TH STREET EAST/					
	7455 16TH STREET EAST					
44	7620 15TH STREET EAST					
45	7741 15TH STREET EAST					
45	7571/7561 15TH STREET EAST					
48						
4/	7715 15TH STREET EAST/					
48	1520 TALLEVAST ROAD					
	8011 15TH STREET EAST					
49	8161 15TH STREET EAST					
50	7715 17TH STREET COURT EAST					
51	2105 TALLEVAST ROAD					
LEGEND						
	COMPOSITE PLUME BASED ON JUNE AND JULY 2005 SAMPLE RESULTS					
LOCATION OF WATER S WITHIN 1/4 MILE OF EXTENT OF IMPACTED (WELL ID ASSIGNED AT	THE KNOWN GROUNDWATER					
	LOCATION OF WATER SUPPLY WELLS SCALE IN FEET					

WATER SUPPLY WELL LOCATION MAP

FIGURE 1

EXPANDED WATER SUPPLY WELL SURVEY REPORT FORMER AMERICAN BERYLLIUM COMPANY, TALLEVAST, FLORIDA