C 1 7005 SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)	FILL IN THIS FORM COMPLETELY PLEASE TYPE	COUNTY (3) A5/8599
ST/CO USE ONLY DATE Received MM DD YY  DATE WELL COMPL MM DD YY	2 150 26 5/	FROM "PERMIT NO. PERMIT NO. PERMI
8 13 Peddicor	20 (TO NEAREST FOOT) O.K	28 29 30 31 32 33 34 35 36 37
STREET OR RFD Sheeppard	Manor Deffinit name TOWN E	Ellicott City
SUBDIVISION Sheppard M	ahor SECTION	LOT
WELL LOG	WELL HAS BEEN GROUTED (Circle Appropriate Box)	C 3
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING	TYPE OF GROUTING MATERIAL (Circle one)	PUMPING TEST
DESCRIPTION (Use additional sheets if needed) FROM TO bearing	CEMENT BENTONITE CLAY BC	HOURS PUMPED (nearest hour)
Brown 0 65	NO. OF BAGS 15 NO. OF POUNDS 15470 GALLONS OF WATER 90	PUMPING RATE (gal. per min.)  11 15  METHOD USED TO
Mica schale	DEPTH OF GROUT SEAL (to nearest foot)	MEASURE PUMPING RATE
	from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface)	WATER LEVEL (distance from land surface)
1 65 150	casing types insert ST CO	BEFORE PUMPING 77 20 ft.
Luxesta	appropriate STEEL CONCRETE	WHEN PUMPING 22 25 ft.
	below PEASTIC OTHER	TYPE OF PUMP USED (for test)  A air  P piston  T turbine
	MAIN Nominal diameter Total depth CASING top (main) casing of main casing	27 27 27 other
	TYPE (nearest inch)! (nearest foot)	C centrifugal R rotary (describe below)
	60 61 63 64 66 70  E OTHER CASING (if used)	J jet S submersible
	A diameter depth (feet)	
	C,	DRILLER INSTALLED PUMP YES (CIRCLE) (YES or NO)
	Ř	IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
	screen type or open hole STBR	TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O)  29
	insert appropriate code BRONZE BRONZE HOLE	IN BOX 29.  CAPACITY: GALLONS PER MINUTE
	below PLASTIC OTHER	(to nearest gallon) 31 35
NUMBER OF UNSUCCESSFUL WELLS:	C 2 DEPTH (nearest ft.)	PUMP HORSE POWER  PUMP COLUMN LENGTH
yes no	E 1 HO 70 /50	(nearest ft.)  A3  47  CASING HEIGHT (circle appropriate box
WELL HYDROFRACTURED Y	C 2	above above LAND SURFACE
A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED	S S 24 26 30 32 36 S C 3	helow (nearest)
E ELECTRIC LOG OBTAINED	R 38 39 41 45 47 51	49 LOCATION OF WELL ON LOT
WELL  I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN	E SLOT SIZE 1 2 3 N DIAMETER (NEAREST	SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR
ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.	OF SCREEN (NCH)  56 60  from to	LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)
DRILLERS LIC. NO. 1 M S. D. O. S.	GRAVEL PACK	0 35' 30
DRILLERS SIGNATURE	IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 66 68	KA 50'
(MUST MATCH SIGNATURE ON APPLICATION)	MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)	
LIC. NO.1 D 1	T (E.R.O.S.) W Q	₩
SITE SUPERVISOR (sign. of driller or journeyman	70 72 74 75 76 TELESCOPE LOG	
responsible for sitework if different from permittee)	CASING INDICATOR OTHER DATA	Constant Secretary Section 19 Sec

B 1 5822 SEQUENCE NO.	STATE OF	MARYLAND	STATE PERMIT NUMBER	
1 2 3 (MDE USE ONLY)	APPLICATION FOR PERMIT TO DRILL WE		Un-95-0710	
		se type	fill in this form completely 79	
Date Received (APA)		B 3	LOCATION OF WELL	
OWNER INFOR	RMATION	Hours	rd WEEE	
8 MM DD YY 13		8 COUNTY	21	
15 Last Name Owner	First Name 34	23 SUBDIVISION	d Iranok	
15485 Harons 50	-m e-1		5000万万万万万万万万万万万万万万万万万万万万万万万万万万万万万万万万万万	
36 Street or RFD	55	SECTION 44 46	LOT 48 50	
i Columbia and a	21044	west fr	ierdship	
57 Town 70 State 1	72 Zip 76	52 NEAREST TOWN	71	
Alla- C -1 -	15 DOOT 1	MILES FROM TOWN (ente	er 0 if in town)	
Driller's Name 76		B 4		
Logles Well Drill	una	1 2 DIRECTION OF WELL FROM	Sheppard @ Man	
Firm NameO	3	TOWN (CIRCLE BOX)	11 NEAR WHAT ROAD 30	
Address		NW 8 NE	ON WHICH SIDE OF ROAD	
With hit	1-23-07	8-9	(CIRCLE APPROPRIATE BOX)	
Signature	Date	W TOWN E	3 5 37 SOUTH	
B 2 WELL INFORMATION 1 2 APPROX. PUMPING RATE —	5	7	DISTANCE FROM ROAD	
(GAL. PER MIN.)	12	SW S S S S S S S S S S S S S S S S S S	ENTER FT OR MI 38 39	
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14	20	8-9 S 8-9	TAX MAP: BLK: PARCEL 268	
USE FOR WATER (CIRCLE API	PROPRIATE BOX)		BE FILLED IN BY DRILLER	
DOMESTIC POTABLE SUPPLY & RESIDEN	TIAL	HEALTH	1 DEPARTMENT APPROVAL	
IRRIGATION SACRI	CULTURAL	COUNTY NAME	(3) A5/8599 COUNTY NO.	
F FARMING (LIVESTOCK WATERING & AGRI IRRIGATION	COLIONAL	STATE		
22 I INDUSTRIAL, COMMERICIAL, DEWATERIN	G	SIGNATURE	INSERT S → 41	
P PUBLIC WATER SUPPLY WELL		2/28/2007/3	rian Baper 2/28/2008	
T TEST, OBSERVATION, MONITORING		43 MM DD YY 48 NORTH	CO SIGNATURE EXP. DATE	
G GEO-THERMAL		GRID 50 0	O O GRID 57 0 0 0 0 63	
ALV IBOTO DUCCOUR		SHOW MAJOR FEATURES	S OF	
APPROXIMATE DEPTH OF WELL	O FEET	BOX & LOCATE WELL ' WITH AN X		
24	28 NEAREST	SOURCES OF DRILLING V	VATER	
APPROXIMATE DIAMETER OF WELL	INCH INCH	1.		
METHOD OF DRILLING	(circle one)	2. 3.	Somph Collected  @ Vield test &	
BORED (or Augered)  JETTED	Jetted & DRIVEN		and to to to	
27	ROTARY (Hydraulic Rotary)	WRITE THE BOX NUMBER	e vice to	
CABLE HEVerse-HOTary	DRive-POINT	FROM THE MAP HERE	on 3/29/07	
other	NED WELLO	E 3105	9	
REPLACEMENT OR DEEPE (CIRCLE APPROPRIATE		FIRI	000	
N THIS WELL WILL NOT REPLACE AN EXISTIF	NG WELL	N 5197		
THIS WELL WILL REPLACE A WELL THAT V ABANDONED AND SEALED	VILL BE		SHOWING LOCATION OF WELL IN OWNS AND ROADS AND GIVE	
THIS WELL WILL REPLACE A WELL THAT V	VILL BE USED	The state of the s	O NEAREST ROAD JUNCTION	
39 AS A STANDBY-CONTACT LOCAL APPROVI	NG AUTHORITY			
THIS WELL WILL DEEPEN AN EXISTING WE	ill.	VE	· · · · · · · · · · · · · · · · · · ·	
PERMIT NUMBER OF WELL TO BE REPLACED OF (IF AVAILABLE) 41	R DEEPENED 52	N	114 Quarter	
		A Paragraphy	My Quarter	
Not to be filled in by driller (MDE OR CO		Sha	mal werey to	
APPROP. PERMIT NUMBER #10.200	15_GOOT	100	told len	
H0-	95-0729		400	
PERMIT No. 70 71 72	2 73 74 75 76 77 78 79	101	Sept. Plan	
SPECIAL CONDITIONS  NOTE - APPROVING AUTHORITIES SHOULD USE SERABATE SHEET IF NEEDED.	selfilled Perf	proved shared	of Busing Vield Tast &	
	DI. MINTERSILE	CT WATTE SAMP	HE DUTING ITELS TEST	

Page	 of	
Date		

Review	

# FIELD DATA SHEET HOWARD COUNTY WELL YIELD TEST

Well Locat	11 Permit No. HO - 95-0729 cation of property (road)Sheppard Mano	r Drive			
Subd	bdivision Sheppard Manor Lot 7	Block	Plat	Sec.	
Well	11 Driller Compton / Fogles Owner	David	Peddicoro		
	Depth of well  Distance of measuring point (M.P.) above ground  Static water level (S.W.L.) below M.P. 51	1. 16		_	
I.	High rate pumping reservoir drawdown				
	Time pump started 7:00 Pum Total time 15his to reach pumping water lev	nping rate vel <u>59</u>	ft. below	M.P.	

II. Recovery pump test data - observations to be recorded every 15 minutes

TIME (in 15 minute in- tervals	WATER LEVEL below M.P.	PUMPING RATE time to fill 5( gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
7:00	51	4		15
7:15	59	5		12
7:30	59	5		12
7:45	59	5		12
8:00	39	5		12
8.15	59	5		12
8:30	59	5		12
8,45	59	5		12
9:00	59	5		12
9:15	59	5		12
9:30	59	5		12
9:45	51	5		12
10:00	59	5		12
10:15	59	5		12

## HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH WATER AND SEWERAGE PROGRAM TEL: (410)313-2640 FAX: (410)313-2648

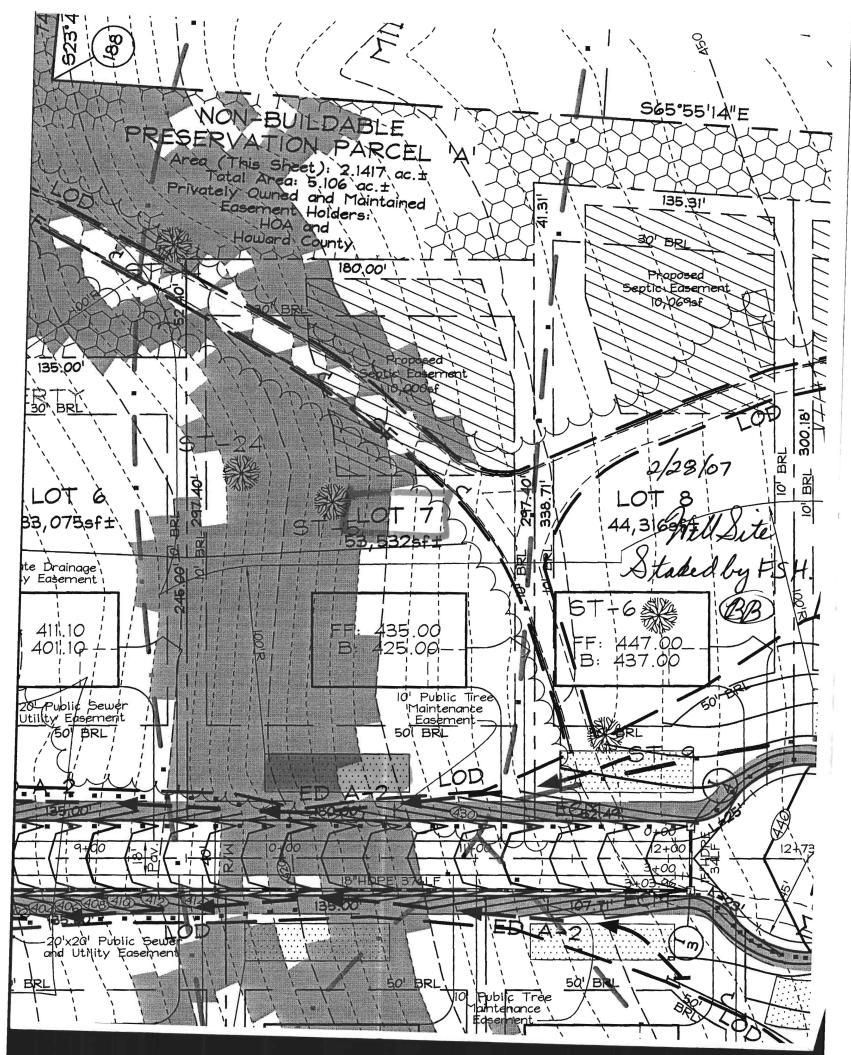
## Information Form for the Installation of the Well Pump. Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval. 110 Telephone #: 443 - (cD9-4195 Company Name: Address: (Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer License # and name of individual responsible for the field installation: Name (Print): Allew Condition License# MSDOO \*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Name of Property Owner: 10 116000 Telephone # 410 - 990 - 8300 Subdivision: Singural Myunce Well Tag#: HO-95 - つつ29 Site Address: 4027 Support mysel De Einert Ciri Wasking Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit Make: ( - workers Make: ( MODU! Two piece watertight cap: 1185 Model#: NIA Model #: 1550(27-180 Screened, vented well cap: 425 (36" min) Depth 3 **GPM** Cap secured to casing: <u>425</u> NSF approved: VC> Conduit min 18" B.G.: 4:45 Well Yield: 12 GPM Depth of well encountered at time of pump installation: 150 (feet) Conduit secured to well cap: -/e5 If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4 Torque arrestors or Cable guards are required - Must circle one Safety rope, if used, attached to inside of well casing with eye bolt PA Piping to house House Connection Type: 11 BICCK PICSHK PVC sleeved to undisturbed soil at wall penetration: UES PSI: <u>Jee? (160 psi min)</u> Approximate length of sleeve (5 foot minimum): 5 Depth of supply line: 42(36' min). Sleeve caulked and sealed properly: 465 The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation: Signature of company representative responsible for installation For Health Department Use Only - Not to be completed by Installer Date Insp. Requested: Date Insp. Approved: Inspection Data: Pitless adapter and water supply line at least 36" below grade Two piece cap installed and attached to casing securely Elec. conduit extends at least 18" below grade/attached to cap properly Safety rope installed inside of well casing

Correct well tag attached properly and casing 8" above finished grade

Water supply line sleeved adequately at house connection

Adequate grout observed below pitless adapter



3525 H Ellicott Mills Drive (410) 313-2640 TDD (410) 313-2323

Ellicott City, MD 21043
 Fax (410) 313-2648
 Toll Free 1-866-313-6300

website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

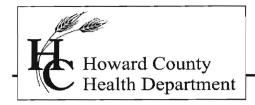
## ATTENTION WELL DRILLERS!!!

When submitting a well application for a new or replacement well, please indicate one of the following:

	The well site has	s been staked by FSH Associales
	on 1-26-	and is ready for site inspection.
		will call the Health Department
	for a time to me	et in the field to verify a well location.
V	Site plan for new	v well is attached to well permit application.

Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN



Bureau of Environmental Health

7178 Gateway Drive (410) 313-2640 TDD (410) 313-2323 Columbia, MD 21046 Fax (410) 313-2648 Toll Free 1-866-313-6300

Website: www.hchealth.org

Peter Beilenson, M.D., M.P.H., Health Officer

October 18, 2010

Homeowner 4627 Sheppard Manor Drive Ellicott City, MD 21042

RE:

Sheppard Manor, Lot 7 4627 Sheppard Manor Drive

BP #: B09001141 Well Tag: HO-95-0729

Dear Sir:

This is to advise you that the septic system for the above referenced property has been installed and inspected. Final approval of the septic system was granted on 03/11/2010. Final approval of the well line connection to the dwelling was approved on 03/11/2010.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. The water sample results were found to be in compliance with COMAR water quality standards.

Gross Alpha and Beta samples were also collected on 03/29/2007. Results showed a Gross Alpha level of **0.4** +- **0.4** pCi/L and Gross Beta level of **1.5** +- **0.9** pCi/L. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta was below the MCL of 50pCi/L. Future well water supply appears safe for all uses.

Enclosed with this certificate, is a copy of the septic permit and the as-built along with important information regarding the use and maintenance of your septic system. Please read through carefully and thoroughly. Any questions regarding your well and/or septic, please call this office for guidance 410-313-1771.

#### INTERIM CERTIFICATE OF POTABILITY

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0729 Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt of this letter. Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.

Date of Water Samples:

09/14/2010

Date of Well Completion:

03/29/2007

Approving Authority,

Kevin M. Wolf, R.S./R.E.H.S. Environmental Sanitarian

Well & Septic Program

cc:

Building Inspector's Office Community Hygiene Program

File

## FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

### REPORT OF ANALYSIS

Laboratory ID #:

76800

Reference:

Lot 7

Account #:

4470

Company:

Williamsburg Group LLC

Location:

4627 Sheppard Manor Drive

Requested By: Chip Lundy/ Bob Corbett

Date/ Time Collected: 9/14/2010

Ellicott City, MD 21042 1036

Source: Site:

Well Water Pressure Tank

Date/Time Rec'd:

9/14/2010

1154 Total: ND

Treatment:

None 5.8

Chlorine ppm: Collected By:

Free: ND J.Yeager

6176JY

pH; Well#:

HO-95-0729

PARAMETERS RESULTS UNITS REFERENCE METHOD DATE/TIME/ANALYST Bacteria, Coliform, Total, MPN MPN/ 100 ml <1.0 SM18 9223 9/15/2010 / 0830 / KME <1.0 Bacteria, E. coli, MPN <1.0 MPN/ 100 ml <1.0 SM18 9223 9/15/2010 / 0830 / KME Nitrate 5.37 mg/L 10 601 9/15/2010 / 1115 / CCH **Turbidity** 2.07 UTM <10 SM18 2130B 9/15/2010 / 0905 / KME Sand NS mg/L 5 9/15/2010 / 0900 / KME Visual/Gravimetric



#### NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- pH and Chlorine level tested on site

Reason for Test:

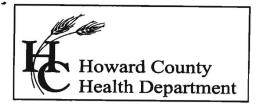
Use & Occupancy

Building Permit#:

B09001141

Date Reported:

9/15/2010



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

## Peter L. Beilenson, M.D., M.P.H., Health Officer

April 11, 2007

Williamsburg Group LLC 5485 Harpers Farm Road Columbia, Maryland 21044

> RE: Sheppard Manor, Lot#7 Well Tag: HO-95-0729

To Whom It May Concern:

A sample was collected from a yield test on March 29, 2007 and submitted to GPL Laboratories to assess the possible presence of Gross Alpha and Gross Beta in the future well water supply. Gross Alpha and Gross Beta measure the total alpha and beta particle activity in a water supply. In turn, this can provide information regarding naturally occurring radiation (i.e., Radionuclides) that may exist in your area of development within the County.

Results from this screening revealed a Gross Alpha of  $0.4 \pm 0.4$  picocuries/liter (pCi/L); while the Gross Beta level was  $1.5 \pm 0.9$  pCi/L. The Gross Alpha result was below its maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta level was below its target value of 50 pCi/L (roughly equivalent to the annual dose rate of 4 millirems/year).

At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing **for these parameters** will be required to secure the future Use & Occupancy. However, other standard (potability) testing will still be necessary.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions.

Sincerely,

Bert Nixon, Deputy Director Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater Well & Septic File

Send Report To:	DHMH - Lal Division of I	te of Maryland coratories Administration Environmental Chemistry ON LABORATORY	,	
	201 W. Preston Stre	eet, Baltimore, Maryland 2	1201 -	
	John M. Del	Boy, Dr. P.H., Directo	or	
	LABORATORY	ANALYSIS REC	QUEST	
Sample Bottle No. A: HO-95	No. B:	Field Blank Bo	ttle No. A:	No. B:
Plant/Site Name: Shepper	I MOROC	Lof 7	County: Howe	rd
Sample Source: Shopper of	muner [	Location:	0 - 95 - 07 (well no., lab sink, san	nple tap, etc.)
	Plant No.			
Landfill No Pr	ommunity on-community ivate ther	Source (raw water) Distribution (treated) MCL	Emergenc Routine Recheck Special	ey
Collector: K. Wo Kf  Date Collected: 3 /29 /	07	—	4/0-3/3- 2	
Nitric Acid Preserved: Yes	∃ No □	Iced: Yes	No □	
Submitters Code:	Federal Project			
	Hected du			lorine
Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
Gross Alpha	4000	703279-002	0.4 + 0.4	4/4/07
Gross Beta	4100		1.5 = 0.9	
Radon-222 Bottle A	4004			
Radon-222 Bottle B	4004			
Field Blank A	4004			
Field Blank B	4004			
Tritium				
Ra - 226	4020			
Ra - 228	4030			11 (11)
Total Hamilton				
Total Uranium	4006			

FORM REVISED 02/06 DHMH 4540 02/06