c1 3159	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 (THIS NUMBER IS TO BE PUN IN COLS. 3-6 ON ALL CARDS		FILL IN THIS FORM COMPLETELY	COUNTY A 517336
ST/CO USE ONLY DATE Received	DATE WELL COMPL	ETED Depth of Well	FROM "PERMIT NO. FROM "PERMIT TO DRILL WELL"
MM DD YY	2 6 20	20 8 22 575 26 7 TO NEAREST FOOT)	0 1 1 1 28 29 30 31 32 33 34 35 36 37
/-3	article In	Kennard	26 29 30 31 32 33 34 35 36 37
OWNER	last needs	lphia Raffret name TOWN	Dayton
SUBDIVISION	ke Warfiel	& IL SECTION 2	LOT /3
WELL L		GROUTING RECORD yes no	C 3
Not required for a		WELL HAS BEEN GROUTED (Circle Appropriate Box)	1 2 PUMPING TEST
COLOR, DEPTH, THICKNESS A	AND IF WATER BEARING	TYPE OF GROUTING MATERIAL (Circle one)  CEMENT CM BENTONITE CLAY B C	HOURS PUMPED (nearest hour)
DESCRIPTION (Use additional sheets if needed)	FROM TO bearing	NO. OF BAGS 46 / S NO. OF POUNDS 45 / 46 / O	PUMPING RATE (gal. per min.) 7 • 5
Sand	0 33 Figs	GALLONS OF WATER	METHOD USED TO MEASURE PUMPING RATE   Burket
Gray mica	33 50 Water	from ft. to ft.	WATER LEVEL (distance from land surface)
and make		(enter 0 if from surface)  CASING RECORD	BEFORE PUMPING 63 ft.
Gray Mica	50 375 water	types insert ST CO	WHEN PUMPING
	95"	appropriate CONCRETE PL CONCRETE	22 25
		below PLASTIC OTHER	TYPE OF PUMP USED (for test)  A air  P piston  T turbine
		MAIN Nominal diameter Total depth CASING top (main) casing main casing	27 27 other
		TYPE (nearest inch)! (Nearest foot)	C centrifugal R rotary (describe below)
		60 61 63 64 66 70	J jet S submersible
		COTHER CASING (if used) Adjuster depth (feet)	27 27
		H inch from to	PUMP INSTALLED
		S I N	DRILLER INSTALLED PUMP YES (NO (CIRCLE) (YES or NO)
		Ğ —	IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
		screen type or open hole STIBR HO	TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.
		insert STEEL BRASS OPEN BRONZE HOLE	CAPACITY:
		below PL OT	(to nearest gallon) 31 35
		PLASTIC OTHER	PUMP HORSE POWER 37 41
NUMBER OF UNSUCCESSFU	L WELLS:	DEPTH (nearest ft.)	PUMP COLUMN LENGTH (nearest ft.)
WELL HYDROFRACTURED	yes N	E 1 HO 50 575 A 8 9 11 15 17 21	CASING HEIGHT (circle appropriate box and enter casing height)
CIRCLE APPROPR	IATE LETTER	C 2 1 23 24 26 30 32 36	above LAND SURFACE
A WELL WAS ABANDONED WHEN THIS WELL WAS CO	OMPLETED	S C 3	below (nearest) foot)
P TEST WELL CONVERTED WELL		R 38 39 41 45 47 51 E E SLOT SIZE 1 2 3	49 50 51
I HEREBY CERTIFY THAT THIS WELL ACCORDANCE WITH COMAR 26.04.04	"WELL CONSTRUCTION" AND	DIAMETER (NEAREST	SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR
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 INCH) 56 60	LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES THAN TWO DISTANCES
DRILLERS LIC. NO.1 M	SD024.	from to	(MEASUREMENTS TO WELL)
Joseph		IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 68	2700
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON		MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)	3 %
LIC. NO.1	_D ı	T (E.R.O.S.) W Q	2
SITE SUPERVISOR (sign. of c	driller or ioussesses	70	•
responsible for sitework if differ		TELESCOPE LOG 74 75 76 CASING INDICATOR OTHER DATA	
THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	THE PERSON NAMED IN COLUMN TWO		

B 1 1081 SEQUENCE NO.	STATE OF	MARYLAND	STATE PERMIT NUMBER		
I (WIDE USE ONLY)	APPLICATION FOR P	ERMIT TO DRILL WELL	HO-95-1509		
	5 27950 pleas	se type	70 fill in this form completely 79		
Date Received (APA)		B 3	LOCATION OF WELL		
8 MM DD YY 13 - OWNER INFOR	MATION	8 COUNTY	21		
Warfield, Jr. 1	Kennard	The Wa	whields II		
15 Last Name Owner	First Name 34	23 SUBDIVISION	42		
36 Street or RFD	55	SECTION 44 46	LOT 1 48 50		
Glenely Md.	21737	Da	yton		
57 Town 70 State 7  DRILLER INFORMATION	'2 Zip 76	52 NEAREST TOWN	71		
1 0 m	S D024	MILES FROM TOWN (enti	er 0 if in town)		
Driller's Name 76	License No. 81	B 4	4		
Firm Name Well	Dulling	DIRECTION OF WELL FROM	Jusdelphia Rd,		
5512 Resign Mt Cin	my 2/771	TOWN (CIRCLE BOX)	11 NEAR WHAT ROAD 30		
Address	77.14. 07711		ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)		
Signature Joseph & Mayne	12 - 10 - 2007 Date	8-9	W 32 F		
B 2 WELL INFORMATION	Date	W TOWN E 8	DISTANCE FROM ROAD		
1 2 APPROX. PUMPING RATE — (GAL. PER MIN.) 8	12	S. S.	ENTER FT OR MI 38 39		
AVERAGE DAILY QUANTITY NEEDED	500	8-9 S 8-9	TAX MAP: 27 BLK: 23 PARCEL 1/4		
(GAL. PER DAY) 14  USE FOR WATER (CIRCLE APP	PROPRIATE BOX)	8 NOT TO	D BE FILLED IN BY DRILLER		
A DOMESTIC DOTABLE SUBBLY & DESIDENT			H DEPARTMENT APPROVAL		
IRRIGATION		Howard	(13) A 5/7336		
FARMING (LIVESTOCK WATERING & AGRIC IRRIGATION	CULTURAL	COUNTY NAME STATE	COUNTY NO.		
22 I INDUSTRIAL, COMMERICIAL, DEWATERING	a	SIGNATURE	INSERT S ———————————————————————————————————		
P PUBLIC WATER SUPPLY WELL		DATE SSUED	lin Warf 1/18/08		
T TEST, OBSERVATION, MONITORING		43 MM DD YY 48 NORTH	CO SIGNATURE EXP. DATE		
G GEO-THERMAL		GRID 50 7 0	0 0 GRID 0 7 9 0 0 0 55 63		
		SHOW MAJOR FEATURES	S OF		
APPROXIMATE DEPTH OF WELL	FEET	BOX & LOCATE WELL '_ WITH AN X			
ADDROVIMATE DIAMETER OF MELL	6 NEAREST	SOURCES OF DRILLING	WATER		
APPROXIMATE DIAMETER OF WELL	INCH	1. well 2.	$\otimes$		
METHOD OF DRILLING (		3.			
BORED (or Augered) JETTED  30 AIR-ROTary AIR-PERcussion R	Jetted & DRIVEN		1		
37 CABLE REVerse-ROTary	OTARY (Hydraulic Rotary)  DRive-POINT	FROM THE MAP HERE	R I		
other		7 22			
REPLACEMENT OR DEEPEI		E	7 000		
(CIRCLE APPROPRIATE IN THIS WELL WILL NOT REPLACE AN EXISTIN		N 511	000		
THIS WELL WILL REPLACE A WELL THAT W		DRAW A SKETCH BELOW	/ SHOWING LOCATION OF WELL IN		
ABANDONED AND SEALED			OWNS AND ROADS AND GIVE TO NEAREST ROAD JUNCTION		
39 S THIS WELL WILL REPLACE A WELL THAT W AS A STANDBY-CONTACT LOCAL APPROVIN			1		
FOR POLICY ON STANDBY WELLS  THIS WELL WILL DEEPEN AN EXISTING WE	L.		XX-		
PERMIT NUMBER OF WELL TO BE REPLACED OR	DEEPENED	N	2 ruell		
(IF AVAILABLE) 41	52	m A: 29 L	(a) (b)		
Not to be filled in by driller (MDE OR CO			100		
APPROP. PERMIT NUMBER #0 20	0 GG 009	- 10	1/3		
PERMIT No. 140 - 70 71 72	95-1509	3	Les Dayton		
SPECIAL CONDITIONS  NOTE - APPROVING AUTHORITIES SHOULD USE SERABATE SHEET IF NEEDED - V	Programme and the same	ardum. J	<b>→</b>		

-					
P	9	11	1	0	6.

## FIELD DATA SHEET HOWARD COUNTY WELL YIELD TEST

Wall Permit No. HO - 95-1509 Location of property (road) Triadelphia	, Ra
sibilision The Warfields II	Lot 13 Block Plat Sec.
Depth of well 575  Distance of measuring point (M.P.) about the static water level (S.W.L.) below M.P.	
I. High rate pumping reservoir drawdown Time pump started 7:06 Total time 3 to reach pumping	Pumping rate 20 gpm water level 207 ft below M.P.

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

TIME (in 15 minute in-	WATER LEVEL below M.P.	PUMPING RATE time to fill 3.1	FLOW METER READING (if used)	CALCULATED FLOW (gallons per
7:00	63'	gallon bucket	11/4	minute)
7.15	148	3 pec.	7/1	20.0
7:30	207	3		20 gpm.
7:45	201	12		
8:00	197	12		3
8:15	194	8		7.5
8:36	197	8		7.5
8:45	196	8		7.5
9:00	197	8		7.5
9.15	197	8		7.5
9:30	197	8		7,5
9:45	. 196	8 .		7.5
10:00	196	2		7.5
10:15	196	8		7.5.
10:30	196	8		7.5

ROBERT L. FEEZER CO. TY HEALTH DEPARTMENT No. 8185

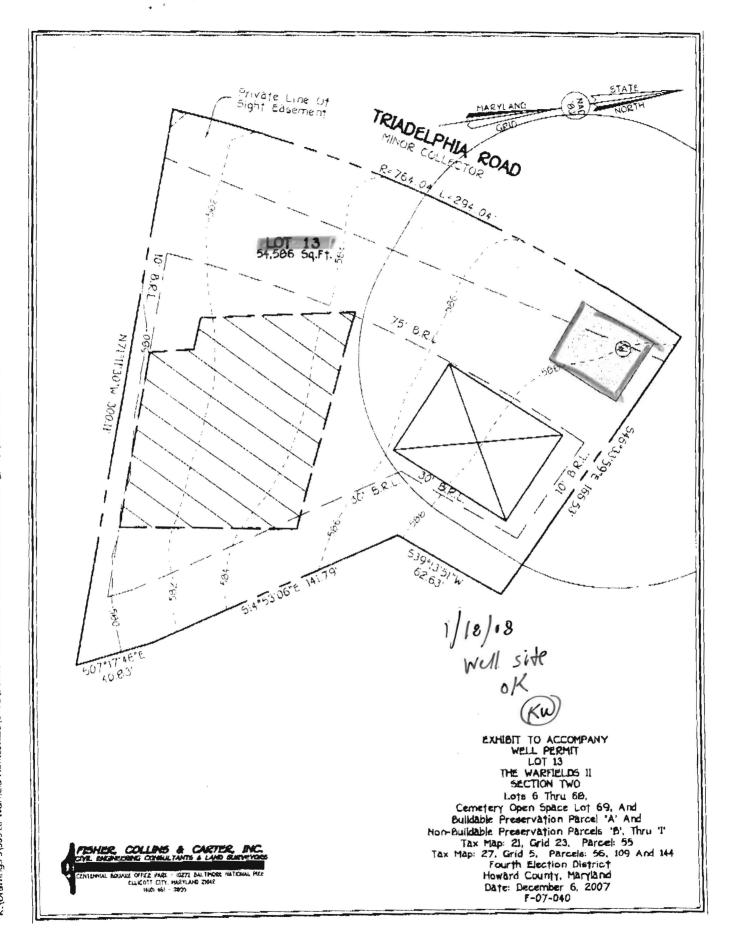
BUREAU OF ENVIRONMENTAL HEALTH

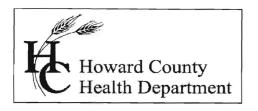
WATER AND SEWERAGE PROGRAM

TEL: (410)313-2640 FAX: (410)313-2648

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

	T <sub>p</sub> of
NOTE: The installer is respon-	sible for requesting an inspection prior to 9 am on the day of the desired
inspection. No work is to be cover	ed until approved by the Health Department. All installations must compl
with the National Standard Plus	nbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well
Construction Regulations). Subm	ission of a complete form is required prior to Use and Occupancy approval
Olvet L F	10 10 10 CA THE
Company Name: No.D.V.	2228 Co. TUC Telephone #: 410 - 781-4655
Address 638 Far No	
20 K 62.0 11	
Office all all and Tipened Dischar	Licensed Well Driller Licensed Well Pump Installer
License # and name of individual resp	
Name (Print): Kaben to 4, 700	License# 3/32
A licensed individual must perform	n the actual installation. Apprentices must be under the direct
	in or master plumber, pump installer or well driller. Licenses may be
subjected to field verification.	
Name of Property Owner: NV /	ovn() Telephone # 4/10 - 5 79 - 5 956
Subdivision: WARFIBED F	TAYES II. Lot # 13 Well Tag # HO95 1509
Site Address IM 5.81 TAME	SEPHIOA NO.
Cuarens XI	
Submersible Pump Data	Pitfess Adapter Well Cap and Electric Conduit
Make STA-REAS	Make: Sovn POU. Two piece watertight cap: V
Model #: 5 7 PV 15 15 18 1	Model#: PT 800 Screened, vented well cap.
Purrip Capacity 7 GPM Well Yield: 7. 5 GPM	Depthi 4 (36" min) Cap secured to casing NSF approved; Conduit min 18" B.G.
Depth of well encountered at time of p	imp installation 5.75 (feet) Conduit secured to well cap: V
To wome conscient exceeds well tried a	low water cut off switch is required by NSPC 1990 Section 17,8,4
Torque arrestors of Cable guards are re	quired - Must circle one
Safety rope, if used, attached to insid	e of well casing with eye bolt
Piping to house	House Connection
Type: To / Y	PVC sleeved to undisturbed soll at wall penetration:
PSI: <u>200 (160 psi min)</u>	Approximate length of sleeve: 10
Depth of supply line: 10k (36" min)	Sleeve caulked and sealed properly:
he water supply line is required to D	e at least ten feet from the septic tank, pump chamber, sewage piping,
pproval prior o installation.	age reserve area. If this cannot be accomplished, contact this office for
pprovid priorio installation.	
X det Z Ten	19/11/10
ignature of company representative tes	ponsible for installation date
The same of the sa	TWO PECTION CALLED IN FOR Y/10/10 HM
For Health Depa	rtment Use Only - Not to be completed by Installer
	IND/ONDED
ate Insp. Requested:	Date Insp. Approved: 10/26/2010 1999)
spection Data: Pitless adapter and wat	er supply line at least 36" below grade
	and attached to casing securely
Safety rope installed in	t least 18" below grade/attached to cap properly
Cornect wall too erroche	d properly and casing 8" above finished grade
Water sunniv line sleev	ed adequately at house connection
	d below pitless adapter
The state of the wide in A 199 FIGURE 20 and the first billion	こうしょう かくし 一 一 神経 たず はくわた マンメララマ こんかけんちょうだく たっぱ しゃ こうかんしん だしょうしゅださ





Bureau of Environmental Health 7178 Gateway Drive Columbia, MD (410) 313-2640 Fax (410) 313-26

TDD (410) 313-2323

Columbia, MD 21046 Fax (410) 313-2648 Toll Free 1-866-313-6300

website: www.hchealth.org

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

October 26, 2010

Homeowner 14581 Triadelphia Road Glenelg, MD 21737

RE:

Warfields II, Lot 13 14581 Triadelphia Road Glenelg, MD 21737 BP #B10001885 Well Permit #HO-95-1509

Dear Sir/Madam.

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 9/23/2010. Final approval of the well line connection to the dwelling was approved on 10/26/2010.

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 raw nitrate sample results were previously documented to be 19.6 ppm. A nitrate removal device (Reverse Osmosis) has been installed to treat the excessive nitrate contamination. The nitrate treatment device appears to be operating properly as evidenced by the water sample results taken on 10/22/2010 which indicates a nitrate level of <1.0 ppm.

### **Permanent Deviation for Nitrates**

COMAR 26.04.04.09 prohibits approval of any water supply with a nitrate-nitrogen contaminant level in excess of 10 parts per million. This department will grant a permanent deviation to that section of the regulation on condition that the nitrate removal system effectively maintains the nitrate-nitrogen contaminant level of 10 ppm or less.

### Furthermore, it will be necessary for you to comply with the following conditions:

- 1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the **residence**.
- 2. It is recommended that a laboratory certified for water testing perform a <u>yearly</u> nitrate analysis. (Certified to test for nitrates)
- 3. If you decide to sell or rent your home in the future, you <u>must</u> make any potential buyer/tenant aware of the above condition.

# INTERIM CERTIFICATE OF POTABILITY (Permanent Deviation for Nitrates)

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-95-1509 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.

Further more under COMAR 26.04.04.09 E. Disclosure, any and all special conditions to this interim certificate of potability shall be disclosed to any purchaser of the property served by the well HO-95-0757 before entering into a contract of sale or lease. A person who fails to make this disclosure is subject to the penalties set out in Regulation .12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.

This certificate may become final upon completion of the second bacteriological and nitrate tests, which may be taken by the health department within six months of the date 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 Sample(s):

10/18/2010, & 10/22/2010

Date of Well Completion:

02/06/2008

Respectfully,

Brian Baker R.S.

Environmental Sanitarian Well and Septic Program

cc:

Building Inspector's office Community Health Services



### TRACE LABORATORIES, INC

5 North Park Drive

Hunt Valley, MD 21030 USA Telephone: 410/584-9099 / Fax: 410/584-9117 Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

### CERTIFICATE OF ANALYSIS

Requester:

NV Homes

Attn: Buddy

6085 Marshalee Drive Suite 130

Elkridge, MD 21075

**Property Sampled:** Sample Location:

Residual Chlorine:

14581 Triadelphia Road, 21737 R/O Tap

<0.1 mg/L

S/O Number: 79228

Report Date: October 25, 2010

**Building Permit #:** 

Sampler ID #:

B 10007885 9813AM

Samples Iced:

Yes

Retest

County: Map:

Howard 27

Subdivision: Parcel:

114

Warfield Estates

Lot #:

80-13

Date/Time Collected in Field:

Date/Time Received in Lab:

October 22, 2010 @ 10:50 am October 22, 2010 @ 11:45 am

Well Tag #:

HO-95-1509 2-Piece Cap

Well Condition:

Satisfactory Condition

Water Treatment:

Softener, Neutralizer, Reverse Osmosis

MCL RESULT **PARAMETER METHOD** PASS/FAIL SM 4500D 10 mg/L as N <1.0 mg/L as N **Nitrate Pass** 

**Drinking Water Division** 



### TRACE LABORATORIES, INC

5 North Park Drive Hunt Valley, MD 21030 USA Telephone: 410/584-9099 / Fax: 410/584-9117 Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

Report Date: October 25, 2010

#### CERTIFICATE OF ANALYSIS

Requester:

**NV Homes** 

Attn: Buddy

6085 Marshalee Drive Suite 130

Elkridge, MD 21075

**Property Sampled:** Sample Location:

Residual Chlorine:

14581 Triadelphia Road, 21737

Pressure Tank

<0.1 mg/L

**Building Permit #:** 

Sampler ID #: Samples Iced:

B 10007885 9813AM

Yes

County: Map:

Howard

27

Subdivision:

Parcel:

Warfield Estates 114

Lot #:

S/O Number: 79176

80-13

Date/Time Collected in Field:

Date/Time Received in Lab:

October 18, 2010 @ 10:40 am October 18, 2010 @ 3:00 pm

Well Tag #:

HO-95-1509 2-Piece Cap

**Well Condition:** 

Satisfactory Condition

Water Treatment:

Softener, Neutralizer

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
E. coli	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	19.6 mg/L as N	FAIL
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pН	EPA 150.1	*6.5-8.5 Units	6.8 Units	***
Sand		Negative	Negative	

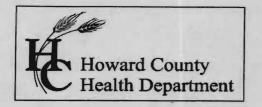
Kára Waltimyer

**Drinking Water Division** 

MCL: Maximum Contamination Level, an enforceable level established by the EPA

\*SMCL: Secondary Maximum Contamination Level, a level recommended by the EPA

<sup>\*\*\*</sup>A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.



**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 L. Beilenson, M.D., M.P.H., Health Officer

Friday, January 18, 2008

**MEMORANDUM** 

To: WELL DRILLER,

FILE

From: Kevin Wolf, Sanitarian

Well and Septic Program

Re: The Warfield's II (F-07-040)

Lot's 6-14

**IMPORTANT** 

In order to preserve the quality of ground drinking water, a special condition has been set for wells of lots 6 though 14 for the above referenced property. This condition requires the driller to seal off the upper strata by placing a certain amount of casing to the approximate depth below the very first water-bearing fracture OR a minimum of 75 feet (which ever comes first). For example, if you hit a water-bearing fracture at 53 feet, then there should be at least 55 feet of casing or enough casing to get below that fracture. Any deviations to this condition are to be prior approved by the Health Department.