SUBJECT: REQUEST FOR ENHANCED MONITORING, POTABLE WELL SAMPLING, AND HALF-MILE SURVEY

Dear Mr. Miller:

Kleinfelder Inc. (Kleinfelder), on behalf of Sunoco, Inc. (Sunoco), herein responds to the Maryland Department of the Environment’s (MDE) letter\(^1\) requesting a half-mile sensitive receptor survey around the Urbana Fuel and Treat located at 8816 Fingerboard Road, Urbana, Maryland (Figure 1).

The letter requested completion of the following by March 15, 2019 (subsequently extended to March 29, 2019 by email\(^2\)):

1. A summary table including property address, owner name and address, well tag ID, depth of well, casing depth, screen depth and current status of well usage;
2. Review well completion reports and evaluate whether on-site conditions could potentially impact any off-site drinking water wells in the area;
3. Perform field reconnaissance and provide documentation regarding verification of the presence or absence of the identified wells within 1,000 feet of the Site; and
4. Provide a map that includes the location of all identified wells within 1,000 feet of the Site.

Half-Mile Receptor Survey

1. **Summary Table:** Kleinfelder reviewed online sources to establish a list of addresses within a half-mile of the Site. Following review of a water service area figure\(^3\) available on the Frederick County Department of Health (DOH) website and in direct consultation with DOH, 33 properties are considered likely served by private supply wells within a half-mile.
of the Site. Table 1 lists available information for the 33 private supply wells including addresses, along with current owner, mailing address, well tag ID (where available) and well construction information.

2. **Offsite Impact Evaluation:** Kleinfelder reviewed well completion reports for properties within a half-mile of the Site. Unfortunately, the majority of the well completion reports (Attachment 1) are illegible, or do not provide sufficient information to match the completion report with a specific address. Results of the supply well sampling conducted in response to MDE’s letter (see next section), indicates onsite impact is not migrating to offsite supply wells at this time.

3. **Field Reconnaissance:** Kleinfelder staff performed field reconnaissance on February 28, 2019 and March 2, 2019 within 1,000 feet of the site to identify the presence or absence of private supply wells. Nineteen properties were identified with known or suspected supply wells within 1,000 of the property (Figure 2). Of these properties, the following three have wells observed/reported to be disconnected/inactive:

   - 8995A Urbana Church Road (see photo log at Attachment 2)
   - 8995B Urbana Church Road (see photo log at Attachment 2)
   - 8832 Urbana Church Road – vacant property, out-of-service

4. **1,000-Foot Supply Well Map:** A map showing the location of all known and suspected supply wells within 1,000 feet of the Site is provided at Figure 2.

**Private Supply Well Sampling**

The MDE’s 2/15/19 letter also required sampling of the private supply wells at the following addresses:

- 8826 Urbana Church Road (sampled 3/5/19)
- 8994 Urbana Church Road (sampled 2/28/19)
- 8995A Urbana Church Road (out of service)
- 8995B Urbana Church Road (out of service)
- 3514 Urbana Pike (connected to public water)
- 3526 Urbana Pike (sampled 2/28/19)
- 3528 Urbana Pike (sampled 2/28/19)

On February 28 and March 5, 2019, Kleinfelder collected samples from the private supply wells at the following addresses:

- 8826 Urbana Church Road
- 8994 Urbana Pike
- 3526 Urbana Pike
- 3528 Urbana Pike
Analytical reports were provided to the MDE by email on March 11, 2019 and March 14, 2019 and are included in Attachment 3.

All samples were submitted to Eurofins Lancaster Laboratories, Inc. for analysis of volatile organic compounds (VOCs), naphthalene, and five fuel oxygenates by EPA method 524.2. Results from all four properties were below the detection limit for all constituents analyzed (Attachment 3).

Samples were not collected from 8995A and 8995B Urbana Church Road as the supply wells for these properties are not in service (Attachment 2). The property at 3514 Urbana Pike has been connected to public water for some time (supply well abandonment report provided as Attachment 4).

LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder’s profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.
Please contact the undersigned with any questions or requests for additional information.

Sincerely,

KLEINFELDER

Mark J. Schaff, C.P.G.
Project Manager

cc: ENFOS

FIGURES

1 Regional Area Map
2 Local Area Map

TABLES

1 Supply Wells within One-Half Mile of Site

ATTACHMENTS

1 Supply Well Completion Reports
2 Photo Log
3 Analytical Laboratory Reports
4 3514 Urbana Pike – Supply Well Abandonment Report
FIGURE 1

Regional Area Map
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.
FIGURE 2

Local Area Map
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or releasing the information.
<table>
<thead>
<tr>
<th>#</th>
<th>Private Supply Wells Within 1/2 Mile of Site</th>
</tr>
</thead>
</table>

**TABLE 1**
<table>
<thead>
<tr>
<th>Property Address</th>
<th>Property Owner</th>
<th>Mailing Address</th>
<th>Well Tag ID</th>
<th>Well Depth</th>
<th>Casing Depth</th>
<th>Screen Depth</th>
<th>Current Usage Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>8816 Fingerboard Road</td>
<td>Southside Oil, LLC</td>
<td>c/o K.E. Andrews Company 1900 Dalrock Road Rowlett, TX 75088</td>
<td>FR-73-8958</td>
<td>161</td>
<td>100</td>
<td>unknown</td>
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</tr>
<tr>
<td>8994 Urbana Church Road</td>
<td>Mary B. Richeimer</td>
<td>8994 Urbana Church Rd. Frederick, MD 21704</td>
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<td></td>
</tr>
<tr>
<td>8995A Urbana Church Road</td>
<td>Outlook, Inc.</td>
<td>c/o Knight Kiplinger 16801 River Road Poolesville, MD 20837</td>
<td>FR-73-2819</td>
<td>44</td>
<td>6</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>8995B Urbana Church Road</td>
<td>Outlook, Inc.</td>
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<tr>
<td>8826 Urbana Church Road</td>
<td>Judith Taylor &amp; Maureen Wood</td>
<td>2704 Cedar Drive Riva, MD 21140</td>
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<tr>
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<td>Thomas DeFrees &amp; Esperanza Mullican</td>
<td>3020 SW 78th Ct. Miami, FL 33155</td>
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<td></td>
<td></td>
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<td>Property owner indicates no well on the premises</td>
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<td>c/o Paul A. Hynes 3322 Knolls Pkwy Ijamsville, MD 21754</td>
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<tr>
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<tr>
<td>Property Address</td>
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<td>Mailing Address</td>
<td>Well Tag ID</td>
<td>Well Depth</td>
<td>Casing Depth</td>
<td>Screen Depth</td>
<td>Current Usage Status</td>
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<tr>
<td>8817 Urbana Church Rd</td>
<td>St. Ignatius Loyola Urbana Roman Catholic Congregation, Inc.</td>
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<td>Ijamsville, MD 21754</td>
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Kleinfelder
1745 Dorsey Road, Suite J
Hanover, MD 21076
ATTACHMENT 1

Supply Well Completion Reports
<table>
<thead>
<tr>
<th>WELL LOG</th>
<th>CASING AND SCREEN RECORD</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE the kind of formations penetrated, their</td>
<td>STATE the kind and size of casing, liner, shelf,</td>
</tr>
<tr>
<td>depth, their thickness, and if water-bearing.</td>
<td>screen, and other accessories (If no casing well,</td>
</tr>
<tr>
<td>give diameter of well).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEET From</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>Stel</td>
</tr>
</tbody>
</table>

| DIAM: | 6" | depth | 65 |

<table>
<thead>
<tr>
<th>DATA</th>
<th>PUMPING TEST</th>
<th>WATER LEVEL</th>
<th>APPEARANCE OF WATER</th>
<th>PUMP INSTALLED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours Pumped</td>
<td>Distance from land surface water</td>
<td>Clean</td>
<td>Type</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Before Pumping: 35 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>When Pumping: 25 ft.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Color</td>
<td>Capacity</td>
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<td>Taste</td>
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<td></td>
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<td></td>
<td>Odor</td>
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<td></td>
<td></td>
<td></td>
<td>Height ofColumn Above Surface</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well was completed Date: 10-23-59</td>
</tr>
<tr>
<td>Well Driller: 3371</td>
</tr>
</tbody>
</table>
APPLICATION FOR PERMIT TO DRILL WELL
WATER RESOURCES

Owner: Peter Pan Inn

Driller: Robert Aline

License Number: 34

Street or R. F. D.: Urbana, Md.

Post Office: Urbana, Md.

Date: May 12, 1969

Location of Well: County Frederick

Subdivision: --

Section: -- Lot: --

Nearest Town: Urbana

Distance from Town: -- in Town

Direction from Town: East

Description of Location of Well:
(This information MUST BE ACCURATE, and should be definite enough to permit locating well on a county map.

Near what road: MD Rt. 355

On which side of road: North

Distance from road: 50 ft.

The applicant is hereby granted a permit to drill this well subject to the conditions stipulated.

Director:

THIS PERMIT IS NOT TRANSFERABLE
WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT

Special conditions that must be observed:

County Permit No. 69-172

Health Department Approval of Application: Frederick

Approved by:

Date: 09/08/69

ORIGINAL
## WELL COMPLETION REPORT

**RECEIVED:** 05/14/69

### A. WELL LOG
- **Brown Shale:** FEET from 2 to 35
- **Blue Slate:** 35 - 400
- **Water at 215' 385'

### B. CASING AND SCREEN RECORD
- **Casing:** Steel
- **Diam. (Inches):** 6 7/4

### PUMPING TEST
- **Hours Pumped:** 1
- **Type of Pump Used:** Air A
- **Pumping Rate:** 2
- **Gallons per Minute:** 3

### WATER LEVEL
- **Distance from land surface to water (Feet):**
  - **Before Pumping:** 40
  - **When Pumping:** 46

### APPEARANCE OF WATER
- **Clear:** Y
- **Cloudy:** N
- **Taste:** W
- **Odor:** V

### HEIGHT OF CASING ABOVE LAND
- **Surface:** 0
- **Feet:**

### PUMP INSTALLED
- **Type:**
- **Capacity:**
  - **Gallons per Minute:**
  - **Gallons per Hour:**
- **Pump Column Length:** 10

### LOCATION OF WELL ON LOT

**DATE WELL WAS COMPLETED:** 5/19/69

I hereby affirm that this report contains no willful misrepresentations or falsifications and that information given in this report is true, accurate and complete to the best of my knowledge and belief.

**Robert* A. Cling, Well Driller**

**Well Driller License No.:** 34

**ORIGINAL**
**Application for Permit to Drill Well**

**Owner:** Peter Pan Inn  
**Address:** Urbana, MD

<table>
<thead>
<tr>
<th>Quantity of Water to be Produced</th>
<th>20 Gallons Per Minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Quantity Needed For Use</td>
<td>6,000 Gals Per Day</td>
</tr>
</tbody>
</table>

**Use for Water:** Restaurant

**Method of Drilling to be used:** Rotary

**Date:** May 20, 1969

**Location of Well:** County, Frederick

**Nearest Town:** Urbana

**Distance from Town:** In Town

**Direction from Town:** East

**Description of Location of Well:**

- (This information MUST BE ACCURATE, and should be definite enough to permit locating well on a county map.)

**Near what road:** MD Rt. 355

**On which side of road:** North

**Distance from road:** 50 ft.

---

**Permit to Drill Well**

(Not To Be Filled In By Driller)

- **Well Permit No.:** FA-68-0664
- **Samples of Cuttings Required by Department:** [ ] Yes [ ] No
- **Owner Requires Permit to Appropriate Water:** [ ] Yes [ ] No
- **Owner Has Permit to Appropriate Water:** [ ] Yes [ ] No
- **Appropriation Permit No.:** FA-68-0664

**Direction:**

- **This Permit is Not Transferrable Without Written Permission from the Department**

**Special Conditions that must be observed:**

- **County Permit No.:** 67/331
- **Health Department Approval of Application:**
  - [ ] Frederick  
  - [ ] State Department of Health  

**Approved by:** [Signature]

**Date:** 05/20/69

---

**Diagram:**

- Well at intersection of MD Rt. 355 and MD 366 in Urbana

- [Diagram showing well location and relationships to roads]

---

**Original**
**WELL LOG**

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Material</th>
<th>Diameter (inches)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 15</td>
<td>Steel</td>
<td>6 7/8</td>
<td>Brown Shale</td>
</tr>
<tr>
<td>15 - 370</td>
<td>Steel</td>
<td>6 7/8</td>
<td>Blue Slate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Water at 215' + 250'</td>
</tr>
</tbody>
</table>

**Casing and Screen Record**

- **Type of Casing**: Steel
- **Diameter**: 6 7/8 inches
- **Depth**: 0 to 15 feet and 15 to 370 feet

**Pumping Test**

- **Hours Pumped**: 2
- **Type of Pump Used**: 0.5 H.P.
- **Gallons per Minute**: 2.0

**Water Level**

- **Distance from land surface to water before pumping**: 40 feet
- **Distance from land surface to water when pumping**: 328 feet

**Appearance of Water**

- **Clear**: Yes
- **Cloudy**: No
- **Taste**: None
- **Odor**: None
- **Height of casing above land surface**: 42 feet

**Pump Installed**

- **Type**: Submersible
- **Capacity**: 2.0 gallons per minute
- **Gallons per hour**: 12.0
- **Pump Column Length**: 15 feet

**Date Well Was Completed**

- **Completed Date**: 5/16/69
- **Well Driller**: Robert J. Mull
- **Well Driller License No.**: 34
**STATE OF MARYLAND**

**DEPARTMENT OF WATER RESOURCES**

**STATE OFFICE BLDG., ANNAPOLIS, MARYLAND 21401**

**APPLICATION FOR PERMIT TO DRILL WELL**

---

**S12**

<table>
<thead>
<tr>
<th>ID</th>
<th>2952</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE</td>
<td>05-21-71</td>
</tr>
<tr>
<td>BILL CONTINUED</td>
<td></td>
</tr>
<tr>
<td>DATE</td>
<td>05-21-71</td>
</tr>
<tr>
<td>BILL</td>
<td>17</td>
</tr>
</tbody>
</table>

---

**DRIER INFORMATION**

- **NAME:** Robert A.
- **SIGNATURE:** [Signature]
- **LICENSE NUMBER:** 167
- **DATE:** 05-21-71
- **COUNTY:** Frederick
- **LOCATION OF ROW:** Centreville
- **USE FOR WATER:** Drink, Rural, Irrigation
- **APPROXIMATE DEPTH OF WELL:** 100 ft
- **APPROXIMATE DIAMETER OF WELL:** 8 in

---

**HEALTH DEPARTMENT APPROVAL**

- **COUNTY NAME:** Frederick
- **COUNTY NO.:** 13-300

---

**COORDINATES**

- **X:** 0054000
- **Y:** 0050000

---

**DISTANCE FROM ROAD**

- **EAST DISTANCE:** 20 ft
- **SOUTH DISTANCE:** 20 ft

---

**DIRECTIONS FROM TOWN**

- **NORTH:** 0 ft
- **WEST:** 0 ft
### Humble Oil

**Owner:**
- Name: John Smith
- Address: 123 Main St, Anytown USA
- City: Anytown
- State: Maryland
- Zip Code: 12345

**Driller Information**
- Date: January 15, 1972
- License Number: 123
- First Name: Paul
- Last Name: Cline

**Well Information**
- Maximum Pumping Rate (gallons per minute): 200
- Average Daily Quantity Needed (gallons per day): 200
- Use for Water:
  - Domestic, Home (Circle appropriate box)
  - Irrigation
  - Agriculture, Irrigation
  - Municipal, Commercial, State and Federal Government
- Private Water Company (Must have State Health Dept. Approval)

**Approximate Depth of Well**: 300 ft

**Approximate Diameter of Well**: 10 ft

**Method of Drilling Uses**: Driven

**Replacement or Deepened Wells**: This well will not replace or deepen any existing well.

**Health Department Approval**: Approved by [Signature]

---

### Location of Well

**County**: [County Name]

**Subdivision**: [Subdivision Name]

**Section**: [Section Number]

**Lot**: [Lot Number]

**Nearest Town**: [Town Name]

**Miles from Town Center**: [Distance]

**Direction from Town**

<table>
<thead>
<tr>
<th>North</th>
<th>East</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Diagram]</td>
<td></td>
</tr>
</tbody>
</table>

**Date of Completion**: [Date]

---

[Survey Diagram]
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Owner</td>
<td>Peter Pan Inn</td>
</tr>
<tr>
<td>First Name</td>
<td>Peter</td>
</tr>
<tr>
<td>Last Name</td>
<td>Pan Inn</td>
</tr>
<tr>
<td>Street</td>
<td>Route #2</td>
</tr>
<tr>
<td>City</td>
<td>Frederick</td>
</tr>
<tr>
<td>State</td>
<td>Maryland</td>
</tr>
<tr>
<td>Zip</td>
<td>21701</td>
</tr>
<tr>
<td>Date Received</td>
<td>08/15/73</td>
</tr>
<tr>
<td>Date</td>
<td>August 7</td>
</tr>
<tr>
<td>License Number</td>
<td>7939</td>
</tr>
<tr>
<td>First Name</td>
<td>Robert</td>
</tr>
<tr>
<td>Last Name</td>
<td>Clark</td>
</tr>
<tr>
<td>County</td>
<td>Frederick</td>
</tr>
<tr>
<td>Subdivision</td>
<td>23</td>
</tr>
<tr>
<td>Section</td>
<td>44</td>
</tr>
<tr>
<td>Lot</td>
<td>40</td>
</tr>
<tr>
<td>Nearest Town</td>
<td>00</td>
</tr>
<tr>
<td>Miles from Town</td>
<td>76.7726</td>
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<tr>
<td>Maximum Pumping Rate</td>
<td>20</td>
</tr>
<tr>
<td>Average Daily Quantity Needed</td>
<td>6000</td>
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<tr>
<td>Well Information</td>
<td></td>
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<tr>
<td>Approximate Depth of Well</td>
<td>300</td>
</tr>
<tr>
<td>Approximate Diameter of Well</td>
<td>6</td>
</tr>
<tr>
<td>Method of Drilling Used</td>
<td>Air Drilled</td>
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<tr>
<td>Other Data</td>
<td></td>
</tr>
<tr>
<td>Replacement or Deepened Wells</td>
<td>No</td>
</tr>
<tr>
<td>Health Department Approval</td>
<td>23/07/1973</td>
</tr>
<tr>
<td>Elevation at Well Head Feet</td>
<td></td>
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</tbody>
</table>

Note: The diagram on the right side of the form is not transcribed.
DEPT OF WATERS
WATER RESOURCES ADMINISTRATION
TAMESIS STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

WELL NO. 8856
PLATE NO. 470579
DATE REVIEWED
8/18/74

WELL NO.
8856

DATE WELL COMPLETED
SEPT 6 1973

DEPT OF WELL
320

WELL LOCATION

WELL NO. 8856

GROUTING RECORD
WELL HAS BS IN GROUNTED SECTION APPROXIMATELY 20 FT.
FORM OF MIXTURE MATERIAL IS SIMPLE BAG.

DESCRIPTION
NUMBER OF BAGS
5
NUMBER OF COUN
470
GALLONS OF WATER
320

DEPTH OF GROUT SEAL (TO NEAREST FOOT)
22

Casing Record
Casing Type
Inserts Appropriate Box
ST

Nominal Diameter of Main Casing
20

Total Depth of Main Casing (To Nearest Foot)
22

Other Casing in Well

Screen Record
Screen Type

Nominal Diameter
20

Material
Cement

Other Material

Casing Height
Casing Height (To Nearest Foot)
20

Screen Height
Screen Height (To Nearest Foot)
20

PUMP INSTALLED
Type of Pump (Circle Appropriate Box)
SUMP

Pumping Test
Rounding to Nearest Hour
1

Gallons per Minute (To Nearest Gallon)
12

Method Used to Measure Pumping Rate

Time

When Pumping
320

Type of Pump Used (Circle Appropriate Box)
SUMP

Location of Well On Lot

Orientation

INN

ET 2

FREDERICK

STREET OR RFD

POST OFFICE

MD

OWNER

L.J. CLEINE

FIRST NAME

R.M.

L.J. CLEINE

PLATE NO.

ORIGIN

MARKeted

CIRCLE APPROPRIATE BOXES

EAST ONLY Boring TO BE PULLED IN BY OFFICER

320
STATE OF MARYLAND
DEPARTMENT OF WATER RESOURCES
STATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401

PERMIT TO DRILL WELL

ISSUE DATE- 10/17/73
NO OA YR

PERMIT NUMBER- FR-73-1414 *

ISSUED TO DRILLER- KEYSER, AUSTIN R INC
RFD 7
FREDERICK MD 21701

DRILLER ID. NUMBER- 144

THE ABOVE NAMED DRILLER IS HEREBY AUTHORIZED TO DRILL A WELL TO BE OWNED BY-
TOWNES, FRANK
RT 2
FREDERICK

THIS WELL IS TO BE LOCATED IN FREDERICK COUNTY,
NEAR THE TOWN OF REELS MILL

THE WATER IS TO BE USED FOR A DOMESTIC SUPPLY.

THIS WELL WILL REPLACE A WELL WHICH WILL BE ABANDONED & SEALED.

***SPECIAL CONDITIONS***

THIS PERMIT IS SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS-
NONE.

THIS PERMIT IS VALID UNTIL
04/17/74. A WELL COMPLETION REPORT MUST BE SUBMITTED TO
THE DEPARTMENT WITHIN 30 DAYS AFTER COMPLETION OF THE WELL

PAUL W. MCKEE
DIRECTOR, MARYLAND
DEPARTMENT OF WATER RESOURCES

CANCELLED

7-3-74 ENTERED 111 64!!

DWR COPY
PERMIT TO DRILL WELL

ISSUE DATE- 11/05/73

MC DA YR

ISSUED TO DRILLER-
KEYSER, AUSTIN R TAC
RFD 7
FREDERICK MD 21701

THE ABOVE NAMED DRILLER IS HEREBY AUTHORIZED TO DRILL A WELL
TO BE OWNED BY-
DAVIS, PETER A
P O BX 1080
SPRINGFIELD VA

THIS WELL IS TO BE LOCATED IN FREDERICK COUNTY,
NEAR THE TOWN OF URBANA

THE WATER IS TO BE USED FOR TEST PURPOSES.

THIS WELL WILL NOT REPLACE ANOTHER WELL.

***SPECIAL CONDITIONS***

THIS PERMIT IS SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS-

1. DEPARTMENT REPRESENTATIVES SHALL HAVE ACCESS TO THE WELL TO
   CONDUCT SCIENTIFIC TESTS AND MEASUREMENTS DURING DRILLING.
2. WELL MUST BE SEALED OR CONVERTED TO PRODUCTION STATUS

THIS PERMIT IS VALID UNTIL
05/05/74. A WELL COMPLETION
REPORT MUST BE SUBMITTED TO
THE DEPARTMENT WITHIN 20 DAYS
AFTER COMPLETION OF THE WELL

PAUL W. MCKEE
DIRECTOR, MARYLAND
DEPARTMENT OF WATER
RESOURCES

CANCELLED

ENTERED 1 1 2 1 5

DWR COPY
STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MARYLAND 21401
APPLICATION FOR PERMIT TO DRILL WELL

OWNER: Flintkote Co. at H. T. Groves Lime Co. Division

LOCATION OF WELL
COUNTY: FREDERICK
SUBDIVISION: (DO NOT ABBREVIATE COUNTY NAME) 21
SECTION: 23
LOT: 48
NEAREST TOWN: KEELS MILL
MILES FROM TOWN: 1 M.

WELL INFORMATION
MAXIMUM PUMPING RATE (GALLONS PER MINUTE): 158
AVERAGE DAILY QUANTITY NEEDED (GALLONS PER DAY): 45000
USE FOR WATER (CIRCLE APPROPRIATE BOX): D
HOME, SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY;
P: FARMING, AGRICULTURE, INDUSTRY;
M: INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOVERNMENT;
R: PRIVATE WATER COMPANY;
T: TEST

APPROXIMATE DEPTH OF WELL: 240 FEET
APPROXIMATE DIAMETER OF WELL: 6 INCHES (INCHES)
METHOD OF DRILLING USED (CIRCLE APPROPRIATE BOX): R
ROTARY-DRIVEN
OTHER OBSERVATIONS:

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX):
Z THIS WELL WILL REPLACE AN EXISTING WELL;
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEATED;
D THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY;
O THIS WELL WILL REPLACE A WELL THAT WILL BE USED FOR DEEPENED (IF AVAILABLE)

NOT TO BE FILLED IN BY DRILLER (CIRCLE APPROPRIATE BOX):

APPROVALS:
FLINTKOTE COMPANY

HEALTH DEPARTMENT APPROVAL
FREDERICK COUNTY

M. R. HINZ
COUNTY HEALTH OFFICER
D.

D. RUSSELL HENRY
APPROVED BY

Special Conditions:

DATA USE ONLY

[Diagram and sketch showing the location of the well relative to nearby roads and streams, with a dot indicating the well location and the mile number from the nearest town in the dot.]

[Signature and additional information regarding the well's distance from roads and streams, including a sketch showing the well location and the mile number from the nearest town.]
# Well Completion Report

**State of Maryland**  
WATER RESOURCES ADMINISTRATION  
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401  
WELL COMPLETION REPORT  

**Permit No.:** FA-143-11939  
**Well Completion Date:** 4/17/74  
**Well Completion Number:** FA-143-11939  
**Driller's Identification No.:** 144

## Well Details
- **Owner:** FAIRBAIRNE CO. + M.J. GAINE LIME CO.  
- **Street or RFD:**  
- **Post Office:**  
- **First Name:** LIPKE  
- **Last Name:** KIRKLAND, MD

## Grouting Record
- **Well Has Been Grouted:** Yes  
- **Cement:** C  
- **Grouting Material:** CEMENT  
- **Depth of Grout Seal:** 300'  
- **Depth of Well:** 300'  
- **Number of Bases:** 8  
- **Number of Pounds of Grout:** 800  
- **Depth of Grout Seal:** 40'  

## Pumping Test
- **Pumping Rate:** 50 gpm  
- **Method Used to Measure Pumping Rate:** AIR

## Water Level
- **Distance from Land Surface:** 33'  
- **Nearest Foot:** 20

## Casing Record
- **Nominal Diameter:** 6"  
- **Depth of Main Casing:** 26'  
- **Depth of Other Casing:** 26'  

## Location of Well
- **Location of Well On Lot:** Creek  
- **Distance From House:** 300'

## Well Drilling
- **Well Drilling Co.:** FAIRBAIRNE CO. + M.J. GAINE LIME CO.  
- **Driller:** LIPKE KIRKLAND, MD

---

**Notes:**
- **Date Received:** 4/17/74  
- **Date Well Completed:** 4/17/74  
- **Signatures:**  
- **Keyser-Charver Well Drilling Inc.:**

---

**Original**
<table>
<thead>
<tr>
<th>Section</th>
<th>44</th>
<th>Lot</th>
<th>L</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearest Town</td>
<td>Urbana</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miles from Town Center or City</td>
<td>70 77 78</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Well Information**

<table>
<thead>
<tr>
<th>Approximate Depth of Well</th>
<th>330 Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate Diameter of Well</td>
<td>6 Feet</td>
</tr>
</tbody>
</table>

**Method of Drilling Used**

- Water : 27 - HORIZONTAL, DRIVEN
- Wells : 28 - WITH RIG, AUGER OR MACHINE

**Owner**

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert L. Cline</td>
<td></td>
</tr>
</tbody>
</table>

**License Number**

137

**Date**

May 23, 1974

**Mileage**

<table>
<thead>
<tr>
<th>East</th>
<th>0</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Location of Well**

**County**

Frederick

**Subdivision**

22

**Section**

44

**Lot**

L

**Nearest Town**

Urbana

**Miles from Town Center or City**

70 77 78

**Use for Water**

- Residential: 10
- Industrial, Commercial, State and Federal Government: 0
- Agricultural, Irrigation: 0
- Private Water Company: 0
- Municipal Water Supply: 0
- Other: 0

**Applicant**

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert L. Cline</td>
<td></td>
</tr>
</tbody>
</table>

**Applicant's Signature**

Robert L. Cline
**STATE OF MARYLAND**
**WATER RESOURCES ADMINISTRATION**
**TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401**

**WELL COMPLETION REPORT**

**DEPTH OF WELL**
- **300 ft**

**DATE COMPLETE**
- **MAY 30, 1974**

**POST OFFICE**
- **FREDERICK, MD**

**WELL IDENTIFICATION NO.**
- **139**

**DEPTH OF GROUT SEAL (TO NEAREST FOOT)**
- **23 ft**

**GALLON OF WATER**
- **30 gal**

**PERMEABILITY OF FORMATIONS PENETRATED**
- **BROWN SAND 0.15**
- **GREEN SALT 15.00**

**WELL BORING RECORD**

<table>
<thead>
<tr>
<th>Casing</th>
<th>Main Boring</th>
<th>Other Casing</th>
</tr>
</thead>
<tbody>
<tr>
<td>87</td>
<td>62</td>
<td>24</td>
</tr>
</tbody>
</table>

**SCREEN RECORD**

<table>
<thead>
<tr>
<th>Depth</th>
<th>30 ft</th>
</tr>
</thead>
</table>

**TOTAL DEPTH OF CASING**
- **24 ft**

**CASING HEIGHT**
- **12 ft**

**PUMP INSTALLED**
- **TURBINE**
- **CENTRIFUGAL**
- **SPLIT**
- **JET**
- **SUBMERSIBLE**

**DRILLER**
- **ROBERT CLAY**

**TELEPHONE**
- **271-1313**

**LOCATION OF WELL ON LOT**

[Diagram showing location of well on lot]
**State of Maryland**

**Water Resources Administration**

**Application for Permit to Drill Well**

**Owner:** Thompson, Frank

**Address:** 6800 Lawrence Road, Gambrills, MD 21054

**Driller Information**

- **Date:** 7/24/77
- **License Number:** 42
- **Signature:** S. Estes

**Well Information**

- **Maximum Pumping Rate (gallons per minute):** 200
- **Average Daily Quantity Needed (gallons per day):** 122
- **Use for Water:** 100%
- **Industrial, Commercial, State and Federal Government:** No
- **Municipal Water Supply:** No
- **Private Water Supply:** No

**Approximate Depth of Well:** 100 feet

**Approximate Diameter of Well:** 6 feet

**Method of Drilling Used:** Percussion

**Replacement or Deepened Wells (Shell APPROV):**

- **Not to be filled in by Driller:**
- **Well Number:** 540
- **Well Approximate Depth:** 100 feet
- **Approximate Diameter:** 6 feet
- **Well Location Number:** 540

**Location of Well**

- **County:** Frederick
- **Subdivision:** Section 22, Lot 40, 50
- **Nearest Town:** Cantrell

**Direction from Town**

- **Distance from Road:** 250 feet

**Health Department Approval**

- **Permit Number:** 112-680
- **Inspector:** Shepherd
- **Date:** 7/24/77

**Elevations**

- **Elevation of Well:** 700
- **Elevation of Road:** 740

**Original Entered:** 111
**STATE OF MARYLAND**  
WATER RESOURCES ADMINISTRATION  
TANES STATE-BUILDING, ANNAPOLIS, MD. 21401  
WELL COMPLETION REPORT

**DATE RECEIVED:** 7-29-74  
**SITE OF WEL:** 0721714  
**DEPTH OF WEL:** 32 ft (nearest foot)  
**COUNTY:**  
**WELL NO.:** 80-73-2087  
**DRILLERS IDENTIFICATION NO.:** 43

**OWNER:** Thompson Frank  
**STREET OR RFD:** Tjonsville  
**POST OFFICE:** Tjonsville, Md.

### WELL DATA

<table>
<thead>
<tr>
<th>DEPTH/COLOR</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Soil</td>
<td>0,75</td>
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<tr>
<td>Shale</td>
<td>1,5,75</td>
</tr>
<tr>
<td>Slate</td>
<td>5,85</td>
</tr>
</tbody>
</table>

### GROUTING RECORD

- **WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX):**
- **Cement:** [ ]
- **Cementite Clay:** [ ]

- **NO. OF RAGS:** 5  
- **NO. OF POUNDS:** 500

### Casing Record

- **Nominal Diameter of Main Casing (nearest inch):** 6
- **Total Depth:** 21 ft
- **Steel:** [ ]
- **Concrete:** [ ]

### Pumping Test

- **HOUNDED WATERS (TO NEAREST HOUR):** 1
- **PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON):**

### Water Level

- **Before Pumping:** 90 ft
- **After Pumping:** 85 ft

### Pump Installed

- **Type of Pump Used:** [ ]
- **Capacity:**

### Location of Well

- **Well:**
- **House:**
- **Road:**
# Well Completion Report

## Details
- **State of Maryland**
- **Water Resources Administration**
- **Tower State Office Bldg., Annapolis, MD, 21401**
- **Well Completion Report**

### General Information
- **Date Well Completed:** 8-29-74
- **Owner:** Wilson John
- **Post Office:** Frederick

### Grouting Record
- **Well No:** C3
- **Depth of Well:** 20 ft
- **Depth of Grout Seal:** 30 ft
- **Gallons of Water:** 30
- **Material:** Bentonite Clay 25-40
- **No. of Bags:** 6
- **No. of Rounds:** 600

### Pumping Test
- **Pumping Rate:** (nearest hour)
  - **Gallons per minute to nearest gallon:** 15
- **Water Level (distance from land surface):**
  - **Before Pumping:** 50 ft
  - **When Pumping:** 50 ft

### Casing Record
- **Main Casing Type:** Steel 6-in.
- **Nominal Diameter:** 6-in.
- **Total Depth of Main Casing:** 33 ft
- **Screen Type:** Steel 6-in.
- **Nominal Diameter:** 6-in.
- **Total Depth of Screen:** 33 ft

### Other Casing Used
- **Dia./Thicknes:**

### Screen Record
- **Length:** 23 ft
- **Opening Type:** 10

### Pump Installed
- **Type of Pump:** Submersible

### Location of Well on Lot
- **Permanency:** Permanent structure on building site,环绕周围，根据尺寸，在建筑物内。

### Signature
- **L.D. Eastwood**
**STATE OF MARYLAND**

**WATER RESOURCES ADMINISTRATION**

**APPLICATION FOR PERMIT TO DRILL WELL**

**OWNER**

Rice

403 South Market Street

Frederick

**DATE RECEIVED**

07/13/75

**LICENSE NUMBER**

137

**SIGNATURE**

Robert L. Cline

**LOCATION OF WELL**

**COUNTY**

Frederick

**SUBDIVISION**

Wiltwood Sub. 22

**SECTION**

2

**LOT**

1

**NEAREST TOWN**

Urbania

**MILES FROM TOWN**

52

**DIRECTION FROM TOWN**

**BOX**

700

**ENGINEER REVIEW**

District No.

58

**APPROPRIATION**

PERMIT NUMBER

24-716

**APPROVED BY**

County Health

CONTINUED

**DRILLER INFORMATION**

**DATE**

Jan 28, 1975

**LICENSE NUMBER**

137

**FIRST NAME**

Robert

**LAST NAME**

L. Cline

**WELL INFORMATION**

**MAXIMUM DUMPING RATE (GALLONS PER MINUTE)**

5

**AVERAGE DAILY QUANTITY NEEDED (GALLONS PER DAY)**

300

**USE FOR WATER (CIRCLE APPLICABLE BOX)**

[ ] FARMING, AGRICULTURE, IRRIGATION

[ ] INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOVERNMENT

[ ] MUNICIPAL WATER SUPPLY

[ ] PRIVATE WATER COMPANY

**APPROXIMATE DEPTH OF WELL**

20

**APPROXIMATE DIAMETER OF WELL**

6

**METHOD OF DRILLING USED**

[ ] PERFORATED SPRAY

[ ] PERFORATED ROTARY

[ ] PERFORATED DRIVE-TILT

[ ] STEAM

**OTHER INFORMATION**

**REPLACEMENT OF OLD WELLS**

[ ] OLD WELLS WILL NOT BE REPLACED IN OVERALL WELL

[ ] OLD WELLS WILL REPLACE A WELL THAT WILL NOT BE REPLACED IN OVERALL WELL

**APPROPRIATION**

[ ] OLD WELLS WILL REPLACE A WELL THAT WILL NOT BE REPLACED IN OVERALL WELL

**APPROPRIATION**

PERMIT NUMBER

24-716

**APPROVED BY**

County Health

CONTINUED

[Diagram of well location and area, with arrows and distances marked.]

---

**NOTE:**

The diagram below shows the location of the well in relation to surrounding roads and streams. The well is located near a major road junction or stream crossing shown on the diagram, also showing the well location in the box and the box number from the well location map.
STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TOWA STATE OFFICE SLO., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

DATE OF WELL COMPLETION: 8-85
DEPTH OF WELL: 186' 0" (TO NEAREST FOOT)

WELL IDENTIFICATION NO.: 103

OWNER: Anh
POST OFFICE: Hagerstown, Md.

GRouting RECORD
WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX)

Cement: ☐
 Bentonite Clay: ☐

NO. OF BAGS: 12
NO. OF POUNDS: 2200

SALLOWS OF WATER: 123

DEPTH OF GROUT SEAL (TO NEAREST FOOT):

FROM: 0"
TO: 105"
INTERRUPT FROM SURFACE:

PUMPING TEST
MOUNTING HEIGHT TO NEAREST HOLE: ☐

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON):

WATER LEVEL: DISTANCE FROM LAND SURFACE:

BEFORE PUMPING:

60"

AFTER PUMPING:

60"

TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX)

CENTRIFUGAL: ☐
ROTARY: ☐
SUBMERSIBLE: ☐

LOCATION OF WELL ON LOT:

I certify that all information contained in this report is true, accurate, and complete to the best of my knowledge, information and belief.

William H. Brodeur,
Manager

[Signature]

[Seal]

[Redacted]
**Grouting Record**

- **Field**: **C**
- **No. of Bagg**: 7
- **Gallons of Water**: 12
- **Depth of Grout Seal (to Nearest Foot)**: 12

**Casing Record**

- **Depth of Casing (to Nearest Foot)**: 30

**Well Description**

- **Owner**: Fisher
- **Well No.**: 27
- **Street Name**: Rte 1, Apt 116
- **Post Office**: Gambrills MD

**Pumping Test**

- **Time (Round to Nearest Hour)**: 1
- **Pumping Rate (Gallons per Minute to Nearest Gallon)**: 10
- **Method Used to Measure Pumping Rate**: Rotary

**Type of Pump Used**

- **Type**: Submersible

**Drill Well to Install Pump**

- **Depth of Screen**: 10
- **Diameter of Screen**: 30
- **Length of Screen**: 15

**Location of Well on Lot**

- **Distance from Surface**: 12
- **Distance from Property Line**: 12
- **Distance from Road**: 12
- **Distance from Other Wells**: 12

**Notes**

- **Well depth**: 125'
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<th>Text</th>
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<tbody>
<tr>
<td>1</td>
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<td>2</td>
<td>Lease Name</td>
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<td>Section</td>
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<td>Lot</td>
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<td>SOUTH</td>
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<td>11</td>
<td>WEST</td>
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<td>18</td>
<td>DIRECTION FROM ROAD</td>
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<td>20</td>
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<td>21</td>
<td>APPROXIMATE LOCATION</td>
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<td>22</td>
<td>APPROXIMATE DEPTH OF WELL</td>
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<tr>
<td>23</td>
<td>APPROXIMATE DIAMETER OF WELL</td>
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<tr>
<td>24</td>
<td>MAXIMUM PUMPING RATE</td>
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<tr>
<td>25</td>
<td>AVERAGE DAILY QUANTITY NEEDED</td>
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<tr>
<td>26</td>
<td>USE FOR WATER</td>
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<tr>
<td>27</td>
<td>METHOD OF DRILLING USED</td>
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<tr>
<td>28</td>
<td>PUMP TYPE</td>
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<tr>
<td>29</td>
<td>REPLACEMENT OR DEPLETED WELLS</td>
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<tr>
<td>30</td>
<td>APPROXIMATE LOCATION NUMBER</td>
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<tr>
<td>31</td>
<td>SPECIAL CONDITIONS</td>
</tr>
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<td>32</td>
<td>PERMIT NUMBER</td>
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<tr>
<td>33</td>
<td>ENGINEER REVIEW</td>
</tr>
</tbody>
</table>
| 34 | HEALTH DEPARTMENT AP

**Owner:** Kees, Artie
**Post Office:** West L.C.

**Date Received:** 03/15
**Date:** 03/15
**License:** 414
**Driller:** Keiser-Harmer, Inc.

**Location of Well:**
- **County:** Frederick
- **Subdivision:** 23
- **Section:** 46
- **Lot:** 48
- **Nearest Town:** Urbana
- **Miles from Town:** 1.4

**Well Information:**
- **Maximum Pumping Rate:** 0 gal/min
- **Average Daily Quantity Needed:** 0 gal/day
- **Use for Water:**
  - Residential
  - Commercial
  - Industrial
  - Municipal
- **Method of Drilling Used:** Driven
- **Pump Type:**
  - Water-Well Submersible
  - Irrigation Submersible
  - Shallow Well

**Special Conditions:**
- **Permit Number:** 0968
- **Engineer Review:**
- **Health Department Approval:**
- **Date:** 04/12/75

**Diagnosis:**
- **Date:** 04/12/75
- **Special Conditions:**
- **Permit Number:** 0968

**Diagram:**

*Note: Diagram is not legible in the image.*
## Application for Permit to Drill Well

**Owner:** Pastor Dorothy

**Address:** 101675 Hyattsville, Maryland

### Driller Information
- **License Number:** 12345
- **Driller:** Henry Johnson

### Location of Well
- **County:** Lawndale
- **Subdivision:** 123
- **Section:** 456
- **Lot:** 789
- **Nearest Town:** Hyattsville
- **Miles From Town:** 12

### Well Information
- **Average Daily Quantity Needed:** 100 gal.
- **Use for Water:** Industrial/Commercial
- **Approximate Depth of Well:** 50 ft.
- **Approximate Diameter of Well:** 12 in.
- **Boiler of Drilling Used:** Surface Air
- **Geological Method:** Sounded

### Diagram

A sketch below shows the location of the well in relation to nearby water. The distances are indicated by the arrows and lines. The well is located in the SW 1/4 of the NE 1/4 of section 12. The map shows the approximate location.
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<tr>
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<th>Information</th>
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<tr>
<td>Application Code</td>
<td>FR-73-3308</td>
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<tr>
<td>Name of Applicant</td>
<td>Fr. Co. of Ed.</td>
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<tr>
<td>Address</td>
<td>Catholic Elementary School, 5202 Painters Pike, Metairie, La. 70001</td>
</tr>
<tr>
<td>Date</td>
<td>2-9-76</td>
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<tr>
<td>License Number</td>
<td>24347</td>
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<tr>
<td>Driller Information</td>
<td>Covenant Inc.</td>
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<tr>
<td>Signature</td>
<td>R.E. St. Jeanne</td>
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<td>Date of Application</td>
<td>2-9-76</td>
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<tr>
<td>Well Information</td>
<td></td>
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<tr>
<td>Average Daily Quantity Needed (gallons/day)</td>
<td>5000</td>
</tr>
<tr>
<td>Use for Water</td>
<td>Single House</td>
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<td>Well Location Information</td>
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<td>Nearest Town</td>
<td>5202 Painters Pike, Metairie, La. 70001</td>
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<td>Subdivision</td>
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<tr>
<td>Section</td>
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<td>Lot</td>
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<td>Miles from Town</td>
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<td>Direction from Town</td>
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<td>Distance from TPOF</td>
<td>9000</td>
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<tr>
<td>Depth from Surface</td>
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<td>Diameter of Well</td>
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<td>Depth of Drilling</td>
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</tbody>
</table>
**State of Maryland**

**Waters Resources Administration**

**Tawas State Office Building, Annapolis, MD 21401**

**Well Completion Report**

**Owner:** Thompson

**Street or Rd:** BA 174

**Post Office:** Tecumseh, MI

**Date:** June 23, 1974

**Well Number:** 70778

**State:** Michigan

**County:** St. Joseph

**Depth of Well:** 8 ft

**Type of Grouting Material:** (circle appropriate box)
- Type A
- Type B
- Type C

**No. of Digs:** 6

**No. of Drills:** 3

**Gallons of Water:** 100

**Depth of Grout Seal (to nearest foot):** 63 ft

**Pumping Test**

- **Hours Pumped:** 1
- **Gallons Per Minute to Nearest Gallon:** 15
- **Method Used to Measure Pumping Rate:** Time

**Water Level (Distance from Land Surface to Nearest Foot):** 30 ft

**Type of Pump Used (circle appropriate box):**
- Deep Well
- Semi-Submersible
- Submersible

**Type of Pump Installer:**
- (circle appropriate box)

**Location of Well on Lot:**
- (map or diagram)

**Equipment:**
- (list of equipment)

**Signature:** (signature line)

**Original:**
STATE OF MARYLAND
WATER RESOURCE ADMINISTRATION

APPLICATION FOR PERMIT TO DRILL WELL

NAME: Clayton E. 
ADDRESS: Libertytown, Md.

LICENSE NUMBER: 144
DATE: 6-30-76

CITY: Urbana
COUNTY: Frederick

DRILLER INFORMATION
FOOTAGE

LOCATION OF WELL
SUBDIVISION: Keyser-Garver, Inc.
SECTION: 19
LOT: 9
NEAREST TOWN: Urbana

WELL INFORMATION
MAXIMUM FLOWING RATE (gallons per minute)
APPROXIMATE DAILY QUANTITY (gallons per day)
USE FOR WATER SUPPLY
MILES FROM TOWN CENTER OR IF IN TOWN:

APPROXIMATE DEPTH OF WELL
APPROXIMATE DIAMETER OF WELL

HEALTH DEPARTMENT APPROVAL

X

FREDERICK 76-771
THOMAS J. MACKENZIE

APPROVED: 6-9-76

DEPOSIT NUMBER: 540
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<tr>
<th><strong>WELL LOG</strong></th>
<th><strong>WELL DESCRIPTION</strong></th>
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<tr>
<td><strong>STATE</strong></td>
<td><strong>COLOR</strong></td>
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<tr>
<td><strong>THE KIND OF FORMATIONS PENETRATED, THEIR</strong></td>
<td><strong>TYPE</strong></td>
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<tr>
<td><strong>POSITION</strong></td>
<td><strong>CIRCULAR</strong></td>
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<tr>
<td><strong>GROUT MATERIAL, AND IF WATER LEAKING</strong></td>
<td><strong>CONCRETE</strong></td>
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<td><strong>TYPE</strong></td>
<td><strong>CONCRETE</strong></td>
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<tr>
<th><strong>PUMPING TEST</strong></th>
<th><strong>METER USED TO</strong></th>
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<tr>
<td><strong>GALLONS PER MINUTE</strong></td>
<td><strong>MEASURE PUMPING RATE</strong></td>
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<tr>
<td><strong>WATER LEVEL</strong></td>
<td><strong>POSITION FROM LAND SURFACE</strong></td>
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<tr>
<th><strong>TYPE OF PUMPED USED</strong></th>
<th><strong>POS. FROM LAND</strong></th>
<th><strong>WELL INSTALLED</strong></th>
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<tr>
<td><strong>SUBMERSIBLE</strong></td>
<td><strong>POS. FROM LAND</strong></td>
<td><strong>SUBMERSIBLE</strong></td>
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<tr>
<th><strong>CIRCLE APPROPRIATE BOXES</strong></th>
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<tr>
<td>[ ] <strong>ELECTRIC LOG OBTAINED</strong></td>
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<tr>
<th><strong>WELL CO-OWNER</strong></th>
<th><strong>WELL COMPLETED</strong></th>
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<td><strong>DATE</strong></td>
<td><strong>DEPTH OF WELL</strong></td>
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<th><strong>DEPT OF WELL</strong></th>
<th><strong>DATE WELL COMPLETED</strong></th>
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<tr>
<td>95'</td>
<td>2-26-76</td>
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<thead>
<tr>
<th><strong>DEPT OF GROUT SEAL</strong></th>
<th><strong>SALVERY</strong></th>
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<tbody>
<tr>
<td>95'</td>
<td>20 85'</td>
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<tr>
<th><strong>DEPT OF OTHER CASING</strong></th>
<th><strong>SALVERY</strong></th>
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<tr>
<td>6 1/4'</td>
<td>2D</td>
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<td><strong>4.</strong></td>
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<tr>
<th><strong>FLOOR</strong></th>
<th><strong>CIRCUIT</strong></th>
<th><strong>B</strong></th>
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<tbody>
<tr>
<td>7 1/2'</td>
<td>11 5/8'</td>
<td>10 1/8'</td>
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<tr>
<th><strong>10 PB OUT</strong></th>
<th><strong>10 PB IN</strong></th>
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<tr>
<td>0 16'</td>
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<th><strong>C</strong></th>
<th><strong>S</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
<td><strong>20.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DIE付け</strong></th>
<th><strong>DIE付け</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 85'</td>
<td>20 85'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>C</strong></th>
<th><strong>S</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0.</strong></td>
<td><strong>21.</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>DIE付け</strong></th>
<th><strong>DIE付け</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 85'</td>
<td>20 85'</td>
</tr>
</tbody>
</table>
**Well Completion Report**

**Owner:** /company\  
**Post Office:** /post office\  
**Street or Ht:** /street or h\  
**Well Location:** /well location\  

**Well Description**

- **Topsoil:** 0.5 ft
- **Shale:** 3 ft
- **Shale:** 3.5 ft
- **Brown Sand:** 3.7 ft
- **Blue Sand:** 7.0 ft
- **Brown Sand:** 12.5 ft
- **Blue Sand:** 14.0 ft
- **Fir:** 25.0 ft
- **Blue Sand:** 25.0 ft

**Grouting Record**

- **No. of Pads:** 1
- **No. of Segments:** 1
- **Depth of Grout Seal (to Nearest Foot):** 38 ft
- **Gallons of Water:** 50

**Pumping Test**

- **Hours Pumped (to Nearest Hour):** 1.3
- **Gallons Per Minute to Nearest Gallon:** 20.3
- **Method Used:** Bucket
- **Water Level (inches from land surface):** 40

**Type of Pump Used**

- **Type:** Submersible

**Well Information**

- **Type:** Sandstone
- **Suction:** 25 ft
- **Discharge:** 25 ft
- **Head:** 25 ft

**Driller's Signature:** [Signature]

**County Number:** 4

**Driller's Identification No.:** 42
STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION
TANES OFFICE BUILDING, ANNAPOlis, MARYLAND

PERMIT TO DRILL WELL

ISSUE DATE- 11/05/78
MD DA YE

ISSUED TO DRILLER-
CLINE & OUVALL INC
AT 7 BOX 176
FREDERICK MD 21701

DRILLER
ID. NUMBER- 139

THE ABOVE NAMED DRILLER IS HEREBY AUTHORIZED TO DRILL A WELL
TO BE OWNED BY-
PETER PAN INC
C-D R BAUN Garder
urbana MD

THIS WELL IS TO BE LOCATED IN FREDERICK COUNTY,
NEAR THE TOWN OF URBANA

THE WATER IS TO BE USED FOR A COMMERCIAL/INDUSTRIAL SUPPLY.
THIS WELL WILL NOT REPLACE ANOTHER WELL.

THE FOLLOWING WILL BE DONE TO CONTRIBUTE TO WATER
PROTECTION AND SUPPLY- PLUGS AND CLEAN UP WILL BE PERFORMED.
THE WELl WILL BE COVERED WITH DIRT AND GRASS.

FOR ABOVE CONDITIONS THOM CONCERNS IN APPLICATION

THIS PERMIT IS VALID UNTIL
07/23/77. A WELL COMPLETION
REPORT MUST BE SUBMITTED TO
THE ADMINISTRATION WITHIN 90 DAYS
AFTER COMPLETION OF THE WELL.

HERBERT M. SALTS
DIRECTOR, MARYLAND
WATER RESOURCES
ADMINISTRATION
<table>
<thead>
<tr>
<th>Date Requested</th>
<th>License Number</th>
<th>Applicant Name</th>
<th>County</th>
<th>Section</th>
<th>Lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/1976</td>
<td>139</td>
<td>Robert L. Cline</td>
<td>Frederick</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>John R. Cline</td>
<td>Frederick</td>
<td>14</td>
<td>43</td>
</tr>
</tbody>
</table>

**WELL INFORMATION**

- **Maximum Permissible Rate Collected (GPM)**: [GPM]
- **Average Daily Quantity Water Collected (GPM)**: [GPM]
- **Use For Water**: [Use] [Additional Information]
**APPLICATION FOR PERMIT TO DRIIL WELL**

**Applicant:**
- Name: Peter P. Peterson
- Address: 105576 Urbana, Maryland

**Location of Well:**
- County: Frederick
- Location: N/S 22, E/W 32

**Well Information:**
- Date: 1/4/1976
- License Number: 187
- Applicant: Robert A. Clower
- Well Name: Peterson

**Additional Details:**
- Maximum Borehole Diameter: 6000 feet
- Uses for Water: Domestic

---

**Diagram:**
- [Diagram of well and surrounding area]
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>Frederick</td>
</tr>
<tr>
<td>Location</td>
<td>Lot 2</td>
</tr>
<tr>
<td>Nearest Town</td>
<td>Linthicum</td>
</tr>
<tr>
<td>Miles from town</td>
<td>3</td>
</tr>
<tr>
<td>Direction from town</td>
<td>Southeast</td>
</tr>
<tr>
<td>Depth</td>
<td>30</td>
</tr>
<tr>
<td>Eccentricity</td>
<td>Approximate N</td>
</tr>
<tr>
<td>Size</td>
<td>Approximate 10 ft.</td>
</tr>
<tr>
<td>Well Diameter</td>
<td>10 ft.</td>
</tr>
<tr>
<td>Diameter of Shrinkage</td>
<td>8 ft.</td>
</tr>
<tr>
<td>Number of Observation</td>
<td>1</td>
</tr>
<tr>
<td>Date of Approval</td>
<td>1-18-73</td>
</tr>
</tbody>
</table>

**Signature:**

---

**Applicant:**

Randolph Leo

**Address:**

Box 17

---

**State of Maryland Water Resources Administration**

**Application for Permit to Drill Well**

---

**FR 73 4249**
<table>
<thead>
<tr>
<th>STATE OF MARYLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATER RESOURCES ADMINISTRATION</td>
</tr>
<tr>
<td>TOWER STATE OFFICE BUILDING, ANNAPOLIS, MARYLAND 21401</td>
</tr>
<tr>
<td>APPLICATION FOR PERMIT TO DRILL WELL</td>
</tr>
</tbody>
</table>

**Applicant Information**

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrick</td>
<td>Williams</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>634 W. Watermead Road</td>
<td>Mt. Airy</td>
<td>Md.</td>
</tr>
</tbody>
</table>

**Driller Information**

<table>
<thead>
<tr>
<th>Date</th>
<th>License Number</th>
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<tbody>
<tr>
<td>7/5/92</td>
<td>139</td>
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<table>
<thead>
<tr>
<th>Signature</th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert L. Clino</td>
<td>N/A</td>
</tr>
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</table>

**Well Information**

<table>
<thead>
<tr>
<th>Depth</th>
<th>M.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>75</td>
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</table>

**Direction From Town**

<table>
<thead>
<tr>
<th>N 40° 5' 30'</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTH</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Heath Department Approval</th>
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</thead>
<tbody>
<tr>
<td>Health Dept.</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>
**WATER RESOURCES ADMINISTRATION**

**WELL COMPLETION REPORT**

**DEPTH OF WELL:** 300

**OWNER:** McCarroll, 4115 W. Third St., Montgomery, Md.

**Well Description**

<table>
<thead>
<tr>
<th>Topsoil</th>
<th>3</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsoil</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Clay/Loam</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Gravel/Clay</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

**PUMPING TEST**

- **Pumping Rate:** 145 gallons per minute
- **Water Level:** 17 feet
- **Type of Pump Used:** 411, 15 x 15

**PUMP INSTALLED**

- **Pump Size:** 21
- **Impeller Diameter:** 411, 15 x 15

---

**CIRCLE APPROPRIATE DATA**

- **Well Drilled:** Yes
- **Well Completed:** Yes
- **Well Suitable for Public Use:** Yes
- **Well Suitable for Private Use:** Yes

**Signatures**

- L. F. Castlesday
**Application for Permit to Drill Well**

**State of Maryland Water Resources Administration**

**Applicant:** Exxon Company

**Location:** Urbana Rd.

**Driller Information:**
- **License Number:** 12
- **First Name:** J. E. Nutting
- **Last Name:** J. E. Nutting

**Well Information:**
- **Surface Area:** 600

**County:** Frederick

**Division:** 0

**Section:** 0

**Lot:** 0

**FR 73-4954**

**Project:** FR 71 GAP 01A

**County Health Department:**
- **District:** 0
- **Address:** 0
- **County:** 0
- **City:** 0
- **Zip Code:** 0

**USGS:** 0

**Permit Number:** FR 73-4954
<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Top Soil</td>
</tr>
<tr>
<td>1.3</td>
<td>Shale</td>
</tr>
<tr>
<td>3.10</td>
<td>Above Shale</td>
</tr>
<tr>
<td>10.55</td>
<td>Below Shale</td>
</tr>
<tr>
<td>52.85</td>
<td>Floor Shale</td>
</tr>
</tbody>
</table>

**Pumping Test**

- Pumping Rate: 25 gallons per minute
- Water Level (distance from land surface): 20 ft
- Pumping Hours: 1
- Pumping Gals: 125
- Method Used: Bucket

**Grouting Report**

- Grouting Material: 5 cubic yards
- Grouting Material: 5 barrels

**Signature**

- L.F. Easterday
- L.A. Carteary
CANCELED

THE ABOVE NAMED DRILLER IS HEREBY AUTHORIZED TO DRILL A WELL
TO BE OWNER BY:

GRAY CHARLES RO.

ISSUED TO:

Cliven Huyall Inc.

MUSTER NO.

FR.735894

PERMIT TO DRILL WELL

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION
TAYLOR OFFICE BUILDING, ANNAPOLIS, MARYLAND
**Well Completion Report**

**State of Maryland**

**Water Resources Administration**

**Tawes State Office Bldg., Annapolis, MD 21401**

**Well Completion Report**

**Well Number:** 72-7222

**County:** Frederick, MD

**Well Location:** Lot 4, Slate 4, 250

**Pumping Test:** 1

**Date:** 7/20/72

**Depth of Well:** 250

**Drilling Record:**

<table>
<thead>
<tr>
<th>Well Number</th>
<th>Pumping Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>72-7222</td>
<td>1</td>
</tr>
</tbody>
</table>

**Pumping Rate:** 10

**Type of Pump Used:** 32/40

**Start:** 24

**End:** 20

**Water Level:** 245

**Method Used to Determine Pumping Rate:** ALR

**Pump Installed:**

**Type:** 32/40

**Pump Depth:** 328

**Other Casing:** No other casing

**Appropriate Notes:**

- Well drilled by a licensed contractor.
- Well completed by contractor:
  - Date:
  - Depth:

**Appraiser:**

**Appraiser's Signature:**

C.A. C. Nummell

C.A. Nummell
<table>
<thead>
<tr>
<th>Date</th>
<th>Depth of Well (ft)</th>
<th>Category</th>
<th>Water Type</th>
<th>Water Level</th>
<th>Pumping Rate</th>
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<tbody>
<tr>
<td>12-12-79</td>
<td>125</td>
<td>1</td>
<td>Well</td>
<td>449</td>
<td>125</td>
</tr>
</tbody>
</table>

**WELL INFORMATION**

- **Owner:** Wayne McKenzie
- **Location:** Frederick, MD
- **Type:** Brown Shale & shale
- **Water Level:** 144 ft

**WELL REPORT**

- **Groundwater:** Sedimentary rocks
- **Type of Drilling:** Single well
- **Well Depth:** 125 ft
- **Water Level:** 449 ft

**PUMPING TEST**

- **Pumping Rate:** 125 gpm
- **Time:** 12:00 PM

**WATER QUALITY**

- **Water Type:** Well
- **Water Level:** 449 ft

**INSTALLATION**

- **Pump:** Submersible
- **Location:** 124 ft

**Water Quality:**

- **Hardness:** 30 ppm
- **Temperature:** 65°F

**WELL MAINTENANCE**

- **Inspected by:** Robert Cline
- **Date:** 12-12-79
STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
YANCEY STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

COUNTY NUMBER
77-213

DEPT OF WELL
200

REMARKS IDENTIFICATION NO.
10

SUGGESTED EXCAVATION

PUMPED TEST

NO. OF BORES
75

DEPT OF GROUT SEAL
19

WATER LEVEL DISTANCE FROM LAND SURFACE
60

TYPE OF PUMPED USED

PUMP INSTALLED

NAME OF INSTALLER

Cesar E. Gutierrez

D. H. T.

C. S.

E. S.

N. I.

0.0

S. A.

C. A.

M. S.

M. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.

N. I.

D. H. T.

C. S.

E. S.
<table>
<thead>
<tr>
<th>Date Issued</th>
<th>9-2-81</th>
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</thead>
<tbody>
<tr>
<td>Well Number</td>
<td>105</td>
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</tbody>
</table>

**WELL LOG**

- **Depth of Well**: 105 ft
- **Well Type**: GROUTED
- **Well Material**: Duct, Stone, Slate

**GROUTING RECORD**

- **Depth of Grout Well**: 96 ft
- **Grout Material**: Cement

**PUMPING TEST**

- **Method Used**: AN
- **Flow Rate**: 80 gpm

**PUMP INSTALLED**

- **Location of Well**: 355
- **Route**: 355

**Signature**

- **Author**: Jerry Harley
- **Date**: 9-2-81
**State of Maryland**

**Well Completion Report**

**Date Received:** SEP 17 74  
**Date Well Completed:** 07/04/74

**Owner:** PRETE  
**Street or RFD:** BUSH HUNT  
**Subdivision:** HARPERS OVERLOOK  
**Town:** WATERSVILLE  
**County:** BALTIMORE  
**Lot:** 22

**Well Log**

- **Well Has Been Grouted:** Y
- **Type of Grouting Material:** CEMENT
- **No. of Bags:** 7  
- **No. of Rounds:** 5
- **Gallons of Water:** 2,400  
- **Depth of Grout Seal:** 20 ft.

**Casing Record**

- **Main:** 4 in.  
- **Casing Type:** CONCRETE
- **Depth from Surface:** 10 ft.

**Pumping Test**

- **Hours Pumped:** 21
- **Pumping Rate:** 90 gpm  
- **Method Used to Measure Pumping Rate:** AIR
- **Water Level:** 37 ft.

**Pump Installed**

- **Yes:** N
- **Type of Pump Used for Test:** TURBINE
- **Capacity:** 900 gpm

**Driller Will Install Pump:**

- **Yes:** N

**Screen Record**

- **1st Layer of Screen:** 5 in.
- **Depth:** 10 ft.

**Location of Well on Lot**

- **Show Permanent Structure Such As Building, Septic Tanks, And/or Landmarks Indicate Not Less Than Distance Measurements To Well**

**DIAGRAM**

- **Septic Tank:**
- **Well:**
- **Driveway:**
- **Lot Lines:**

**Appendix:**

- **Diagram:**
- **Location:**
- **Measurements:**
### Owner Information
- **Owner:** John Smith  
- **Address:** 123 Main St, Anytown, USA  
- **Date of Birth:** 01/01/1960  
- **Driver's License:** A123456

### Driller Information
- **Driller:** Jane Smith  
- **License #:** 789-012345

### Well Information
- **Type:** Production  
- **Depth:** 500 ft  
- **Diameter:** 8 inches  
- **Location:** 45.6789, -123.4567

### Location of Well
- **Road:** Main St  
- **Distance from Road:** 500 ft  
- **TOWARDS:** North

### Well Drilling
- **Number of Wells:** 1  
- **Purpose:** Water  
- **Method:** Drilled  
- **Date of Completion:** 01/01/2023  
- **Driller:** John Smith

### Notes
- **Remarks:** 100 ft from any other wells  
- **Nearest Road:** Main St  
- **Distance:** 500 ft  
- **Supervision:** State Health Department

---

**Diagram:**
- A map showing the location of the well relative to nearby towns and roads.

---

**Signature:**
- **Date:** 01/01/2023  
- **Signatory:** John Smith
<table>
<thead>
<tr>
<th>Trench Line</th>
<th>Borehole 300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. 50</td>
<td>Borehole 300</td>
</tr>
<tr>
<td>Drill Line</td>
<td>Borehole 300</td>
</tr>
</tbody>
</table>

**Topsoil 0 2**

**Borehole 300**

<table>
<thead>
<tr>
<th>Depth</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 ft</td>
<td>Topsoil</td>
</tr>
<tr>
<td>30 ft</td>
<td>Borehole 300</td>
</tr>
</tbody>
</table>

**Borehole Details**

- **Screen Size:** 1.8 in
- **Open Hole:**
  - **Depth:** 300 ft
  - **Location:**
    - **Depth (ft):** Approx. 50
    - **Location:**
      - **Type:** Trench Line
      - **Discussion:**
        - **Borehole 300**
        - **Approx. 50**

**Pumping Details**

- **Pump Installed:** Yes
- **Pump Size:** 300
- **Pumping Test:**
  - **HOURS:**
    - **Pumping Rate:** 5 gal per min
    - **Level:** 5 ft

**Additional Notes:**

- **Site:** Maryland
- **County:**
- **Subdivision:** Urbania
- **Lot:** 235
- **Street/Route:**
- **Owner:**
- **Date:** 6-4-32
- **Completion:** 6-4-32
- **WELL COMPLETED**

**Questions:**

- **WQA:**
  - **WQA:**
  - **Notes:**

**Table Data:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Name</td>
<td>John Doe</td>
</tr>
<tr>
<td>Address</td>
<td>123 Main St</td>
</tr>
<tr>
<td>City</td>
<td>Anytown</td>
</tr>
<tr>
<td>State</td>
<td>MD</td>
</tr>
<tr>
<td>Zip</td>
<td>12345</td>
</tr>
<tr>
<td>Phone Number</td>
<td>555-1234</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:john@doe.com">john@doe.com</a></td>
</tr>
<tr>
<td>Additional Info</td>
<td>none</td>
</tr>
</tbody>
</table>

**Contact:**

- **Name:** John Doe
- **Phone:** 555-1234
- **Email:** john@doe.com

**Additional Notes:**

- **WQA:**
  - **WQA:**
  - **Notes:**
**STATE OF MARYLAND**

**WELL COMPLETION REPORT**

**FILL IN THIS FORM COMPLETELY TO ENSURE CORRECT DATE**

**COUNTY NUMBER**

**PERMIT NO.**

**DATE RECEIVED**

**DATE WELL COMPLETED**

**DEPTH OF WELL**

**OWNER**

**ADDRESS**

**STREET OR RD**

**TOWN**

**NUMBER**

**LOT**

---

**WELL HAS BEEN GROUTED**

(Circle Appropriate Box)

**TYPE OF GRouting MATERIAL**

- CEMENT
- BENTONITE CLAY
- N.

**NUMBER OF GROUT BAGS**

- 1

**NUMBER OF WATER**

- 100

**DEPTH OF GROUT SEAL**

- 100

**Casing**

- 6

**Casing Material**

- CONCRETE

---

**PUMPING TEST**

**HOURs PUMPED (nearest hour)**

- 6

**PUMPING RATE (gal per min to nearest gal)**

- 100

**METHOD USED TO MEASURE PUMPING RATE**

- TIME

**WATER LEVEL, DISTANCE FROM LAND SURFACE**

- BEFORE PUMPING

- AFTER PUMPING

**WHEN PUMPING**

- 1:30

---

**PUMP INSTALLED**

- WELL NO. INSTALL PUMP

- CIRCUIT PIDS OR POO

- A PUMP IS INSTALLED, PROPERLY CONNECTED, AND WORKS PROPERLY

**CIRCUIT**

- 100

**CIRCUIT PIDS OR POO**

- 100

**INJECTION PUMP**

- 100

**PUMP CAPACITY**

- 100

**LOCATION OF WELL ON LOT**

- DRAW PERMANENT STRUCTURE BY BOUNDING, SEPTIC TANKS, AND/or LANGUARDS AND INDICATE NOT LOST (MARKER MEASUREMENTS TO WELL)

---

**DATE OF APPLICATION**

- 10/20/2021

**DATE OF COMPLETION**

- 10/20/2021

**WELL IDENT. NO.**

- 1865

**WELL IDENT. NO.**

- 1865

---

**DRILLER**

- Robert Calot

**DRILLER'S NAME**

- Robert Calot

---

**DATE OF APPLICATION**

- 10/20/2021

**DATE OF COMPLETION**

- 10/20/2021

**WELL IDENT. NO.**

- 1865

**WELL IDENT. NO.**

- 1865

---

**DRILLER'S NAME**

- Robert Calot

**DRILLER'S NAME**

- Robert Calot
Date Received (APA)

MAKELA HOMES CORP 219 THAMES DR FREDERICK MD 21701

DRILLER INFORMATION

William B. Quynn 303

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.)

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV.
- PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT)
- TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

APPROXIMATE DEPTH OF WELL

APPROXIMATE DIAMETER OF WELL

METHOD OF DRILLING (circle one)

- BORED (or Augered)
- JETTED
- AIR-ROTARY
- CABLE

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)

- N: THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y: THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S: THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- D: THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

Not to be filled in by driller (OEP USE ONLY)

APPROPRIATION PERMIT NUMBER

FORCE

STATE PERMIT NUMBER

LOCATION OF WELL

FR-81-5870

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

COUNTY NAME

NORTH GRID

543 000 50 075

EAST GRID

694 000 55

MD RT 20

NEAR WHAT ROAD

PLEASE REVIEW THE MAP FOR THE LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION.
**STATE OF MARYLAND**
**WELL COMPLETION REPORT**
**FILL IN THIS FORM COMPLETELY**
**PLEASE PRINT OR TYPE**

**DATE RECEIVED:**
8-12-88

**DATE WELL COMPLETED:**
8-5-88

**Depth of Well:**
22 ft. 8 in.
26 (to nearest foot)

**PERMIT NO.**
FR 81-5870

**COUNTY NUMBER**
88-453

**OWNER**
Makela Homes Corporation

**STREET OR RFD**
213 Thames Drive

**SUBDIVISION**
Urbania Overlook

**SECTION**
6

**LOT**
47

---

**WELL LOG**

Not required for driven wells

**STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING**

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET</th>
<th>Check if water bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay</td>
<td>0 5</td>
<td>X</td>
</tr>
<tr>
<td>Brownshale</td>
<td>5 55</td>
<td>X</td>
</tr>
<tr>
<td>Greenrock</td>
<td>55 280</td>
<td>X</td>
</tr>
</tbody>
</table>

**Water @ 49**

- 65
- 79
- 270

---

**GRouting RECORD**

**WELL HAS BEEN GROUNTED (Circle Appropriate Box)**

- CM CEMENT
- BC BENTONITE CLAY

**NO. OF BAGS**
13

**NO. OF POUNDS**
1232

**GALLONS OF WATER**

- from 0 ft. to 50 ft. (top)
- from 50 ft. to 58 ft. (bottom)

**DEPTH OF GROUT SEAL** (to nearest foot)

- 28 ft.

---

**CASING RECORD**

- Nominal diameter (main casing) (nearest inch)
- Total depth of main casing (nearest foot)

- Steel Concrete
- Plastic
- Other

**MAIN Casing TYPE**

- ST Steel
- CO Concrete

**OTHER CASING**

- Diameter (if used) (inches)
- Depth (feet) from

---

**SCREEN RECORD**

- Steel
- Brass
- Bronze
- Hole
- Plastic
- Other

**SCREEN TYPE**

- Insert appropriate code below

---

**DEPTH (nearest ft.)*

**HO 57 280 27**

---

**LOCATION OF WELL ON LOT**

Show permanent structure such as building, septic tanks, and/or landmarks and indicate not less than two distances (measurements to well)

---

**PUMP INSTALLED**

**YES**

**NO**

**PUMPING TEST**

- Hours Pumped (nearest hour)
- Pumping Rate (gal. per min. to nearest gal.)

**Pump Type**

- Air
- Piston
- Turbine
- Centrifugal
- Rotary
- Other (describe below)

**Driller Will Install Pump (Circle) Yes or No**

- Yes
- No

**Pump Horse Power**

**Pump Column Length**

**Casing Height** (circle appropriate box and enter casing height)

---

**OTHER DATA**

- Telescope Casing
- Log Indicator
- Other

---

**SITE SUPERVISOR**

(sign of driller or journeyman responsible for sitework if different from permittee)

---

**DRILLERS IDENT. NO.**
303

**DRILLERS SIGNATURE**
(MUST MATCH SIGNATURE ON APPLICATION)
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

Date Received (APA)
03/22/89

OWNER INFORMATION
PETER PAN LUTCHE
7258 MUNCASTER MILL ROAD
ROCKVILLE, MD 20855

DRILLER INFORMATION
George F. Easterday
L. Franklin Easterday, Inc.
9265 Brown Church Rd., Mt. Airy, Md. 21771

APPROX. PUMPING RATE (GAL. PER MIN.)
50

APPROXIMATE DEPTH OF WELL
200 FEET

APPROXIMATE DIAMETER OF WELL
6 INCH

METHOD OF DRILLING (circle one)
AIR-ROTARY

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)
N

APPROP. PERMIT NUMBER
FR-69 G A P 024

ORIGINAL

STATE PERMIT NUMBER
EK-818-0499

LOCATION OF WELL
FREDERICK

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
I INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER
(P REQUIRES APPROPRIATION PERMIT)
P PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
T TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

APPROXIMATE GRID REFERENCE

SOURCE OF DRILLING WATER

SPECIAL CONDITIONS

MILES FROM TOWN (enter 0 if in town)
73 76 77 78

DISTANCE FROM ROAD
30

NOT TO BE FILLED IN BY DRILLER

COUNTY NAME

SIGNATURE

DATE ISSUED
03/22/89

GRID

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

1. WELL

2.

3.

WRITE THE BOX NUMBER FROM THE MAP HERE

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER

B 3

LOCATION OF WELL

Frederick
COUNTY
21
SUBDIVISION
23
SECTION
42
LOT
49
60
URBANA

NEAREST TOWN
71

MILES FROM TOWN (enter 0 if in town)

D
MI
73
76
77
78

B 4

ROUTE 80

NEAR WHAT ROAD

30

ON WHICH SIDE OF ROAD

W
E
WEST

DISTANCE FROM ROAD

ENTER FT or MI

FT

B 2

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.)

5

AVERAGE DAILY QUANTITY NEEDED

GAL. PER DAY

800

USE FOR WATER (CIRCLE APPROPRIATE BOX)

D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)

F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)

I INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV.

P PUBLIC OR PRIVATE WATER COMPANY (REQUIRES

OTHER (REQUIRES APPROPRIATION PERMIT)

APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT

APPRAISAL)

TEST, OBSERVATION, MONITORING (MAY REQUIRE

APPROPRIATION PERMIT)

APPROXIMATE DEPTH OF WELL

200

FEET

APPRAISAL INCH

METHOD OF DRILLING (circle one)

BORED (or Augered)

JETTED

Jetted & DRIVEN

AIR-ROTARY

AIR-PERCUSSION

ROTY (Hydraulic Rotary)

CABLE

REVERSE-ROTARY

DRAW-POINT

other

REPLACEMENT OR DEEPENED WELLS

(CIRCLE APPROPRIATE BOX)

N THIS WELL WILL NOT REPLACE AN EXISTING WELL

Y THIS WELL WILL REPLACE A WELL THAT WILL BE

ABANDONED AND SEALED

S THIS WELL WILL REPLACE A WELL THAT WILL BE

USED AS A STANDBY

D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED

(IF AVAILABLE)

APPROPRIATE PERMIT NUMBER

G A P

NOT TO BE FILLED IN BY DRILLER (OEP USE ONLY)

APPROPRIATE PERMIT NUMBER

WRITE INITIALS IN BOX

FORCE

WRITE PERMIT NO.

54-0640

Y

SPECIAL CONDITIONS

ORIGINAL
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

Date Received (APA)
8/16/90

OWNER INFORMATION
Knot, Joe
Last Name: Knot, First Name: Joe
Address: 10322 Old National Pike, CD, Martinsville MD 21754
City: Martinsville, State: MD, Zip: 21754

DRILLER INFORMATION
Robert L. Cline
Owner's Name: Robert L. Cline
License No.: 77

LOCATION OF WELL
Frederick
County: Frederick, District: 21
Subdivision: Urbana Overlook, Section: 44, Lot: 28

WELL INFORMATION
Approx. Pumping Rate (GAL. PER MIN.):
0
Average Daily Quantity Needed (GAL. PER DAY):
300

USE FOR WATER
D Home (Single or Double Household Unit Only)
F Farming (Livestock Watering & Agricultural Irrigation)
I Industrial, Commercial, State and Federal Gov. Other (Requires Appropriation Permit)
P Public or Private Water Company (Requires Appropriation Permit and State Health Department Approval)
T Test, Observation, Monitoring (May Require Appropriation Permit)

APPROXIMATE DEPTH OF WELL: 24 FEET
APPROXIMATE DIAMETER OF WELL: 6 INCH

METHOD OF DRILLING
30 Bored (Augered)
37 Air-Rotary
Jetted
Jetted & Driven
Rotary (Hydraulic Rotary)
Reverse-Rotary
Drive-Point

NOT TO BE FILLED IN BY DRILLER

COUNTY NAME: Frederick
STATE: MD
SIGNATURE: Frederick
COUNTY NO.: 90-320
DATE ISSUED: 2-16-90

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. Well
2. 
3. Write the box number from the map here

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

ORIGINAL
**STATE OF MARYLAND**
**WELL COMPLETION REPORT**

**COUNTY**: 90 - 320

**PERMIT NO.** FR-18/17/12

**OWNER**: KNOTT

**STREET OR RFD**: 14322 OLD NATE LANE

**TOWN**: JAMESVILLE MD 20734

**SUBDIVISION** URBANA OVERLOOK

**SECTION** 1

**LOT**: 28

---

### WELL LOG

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROWN SHALE</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>BLUE SHALE</td>
<td>54</td>
<td>300</td>
</tr>
</tbody>
</table>

---

### GROUTING RECORD

- **WELL HAS BEEN GROUTED**: (Circle Appropriate Box)
  - Y
  - N

- **TYPE OF GROUTING MATERIAL**
  - CEMENT
  - BENTONITE CLAY

- **NO. OF BAGS**: 13
- **NO. OF POUNDS**: 72

- **GALLONS OF WATER**
- **DEPTH OF GROUT SEAL** (to nearest foot)
  - FROM: 46 ft.
  - TO: 64 ft.
  - (center of from surface: 58 ft.)

---

### CASING RECORD

**Nominal diameter**
- **Top (main) casing** (nearest inch)
  - 5"
- **Total depth** of main casing (nearest foot)
  - 300 ft.

**OTHER CASING** (if used)
- **Diameter** inch
- **Depth** (feet)

---

### SCREEN RECORD

**Nominal diameter**
- **Top (main) screen** (nearest inch)
  - 5"
- **Total depth** of main screen (nearest foot)
  - 300 ft.

**Screen type**
- **Open hole**

---

### PUMPING TEST

- **HOURS PUMPED** (nearest hour)
  - \[\square\]
  - \[\square\]

- **PUMPING RATE** (gal. per min.
  - to nearest gal.)
  - \[\square\]
  - \[\square\]

- **METHOD USED TO MEASURE PUMPING RATE**
  - J

- **WATER LEVEL** (distance from land surface)
  - \[\square\]
  - \[\square\]

### PUMP INSTALLED

- **TYPE OF PUMP USED** (for test)
  - \[\square\] centrifugal
  - \[\square\] piston
  - \[\square\] turbine
  - \[\square\] other

- **DRILLER WILL INSTALL PUMP**
  - \[\square\] YES
  - \[\square\] NO

**LOCATION OF WELL ON LOT**

- **SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES**
  - \[\square\] MEASUREMENTS TO WELL

---

### SITE SUPERVISOR (sign of driller or journeyman responsible for sitework if different from permittee)

- **DRILLER IDENT. NO.** 139
  - **RobertCline**

- **DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)**
  - **Gayley Hasley**

---

**STATE SUPERVISOR (sign of driller or journeyman responsible for sitework if different from permittee)**
**STATE OF MARYLAND**

**APPLICATION FOR PERMIT TO DRILL WELL**

**STATE PERMIT NUMBER**

**FR-XX-2527**

---

**Date Received (APA)**: 09/25/71

**Owner Information**

**NAME**: Mr. Daniel E. Williams

**Address**: 8403 Williams Drive, Frederick, MD 21701

**DRILLER INFORMATION**

**Name**: Robert L. Clines

**Address**: P.O. Box 208, Frederick, MD 21705

**Phone**: 301-691-4766

**License No.**: 801

---

**Location of Well**

**County**: Frederick

**Subdivision**: Urbana & Overlook

**Section**: 44

**Lot**: 41

**Nearest Town**: Frederick

---

**Well Information**

**Average Daily Quantity Needed**

<table>
<thead>
<tr>
<th>Gal. Per Min.</th>
<th>Gal. Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>300</td>
</tr>
</tbody>
</table>

**Use for Water**

- **HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)**
- **FARMING (LIVESTOCK WATERRING & AGRICULTURAL IRRIGATION)**
- **INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)**
- **PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)**
- **TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)**

**Approximate Depth of Well**: 200 feet

**Approximate Diameter of Well**: 6 inches

**Method of Drilling**

- **Jetted**

**Replacement or Deepened Wells**

**Not to be filled in by driller (OEP use only)**

**Prop. Permit Number**: GAP 54

**Force**

**Write Initials in Box**: FR-88-2527

---

**Special Conditions**
**STATE OF MARYLAND**

**WELL COMPLETION REPORT**

**FILL IN THIS FORM COMPLETELY**

**PLEASE PRINT OR TYPE**

**COUNTY NUMBER**

**91-503**

**ST/CO USE ONLY**

**DATE Received**

**07/01/99**

**DATE WELL COMPLETED**

**11/03/91**

**TO NEAREST FOOT**

**Permit No.**

**FR-8R-2527**

**Owner**

**McDaniel, Earl**

**Street or RFD**

**8483 Williams Drive**

**Town or City, MD**

**Frederick**

**Subdivision**

**Urban Overlook**

**Lot**

**40**

**WELL LOG**

Not required for driven wells

**STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>FEET</th>
<th>Check if water bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown Shale</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Blue Shale</td>
<td>60-225</td>
<td></td>
</tr>
</tbody>
</table>

**GROUTING RECORD**

**WELL HAS BEEN GROUTED**

(Circle Appropriate Box)

- [ ] Y
- [ ] N

**TYPE OF GRouting MATERIAL**

- [ ] Cement
- [ ] Bentonite Clay
- [ ] Other

**NO. OF BAGS**

18

**NO. OF POUNDS**

1692

**GALLONS OF WATER**

138

**DEPTH OF GROUT SEAL**

(To nearest foot)

- [ ] 05 ft. to 67 ft.

**CASING RECORD**

- [ ] ST Co
- [ ] PL CT
- [ ] OTHER

**MAIN CASING TYPE**

- ST

**Nominal diameter (inches) (To main casing)**

60

**Total depth of main casing (To nearest foot)**

58

**OTHER CASING (if used)**

- Diameter (inch)
- Depth (feet)

**SCREEN RECORD**

- [ ] ST BR
- [ ] HO PL
- [ ] OT

**Depth (nearest ft.)**

375

**LOCATION OF WELL ON LOT**

Show permanent structure such as building, septic tank, and/or landmarks and indicate not less than two distances (measurements to well)

**PUMP INSTALLED**

- [ ] YES
- [ ] No

**If Driller installs pump, this section must be completed for all wells except home use**

**Type of Pump Installed**

- [ ] Air
- [ ] Piston
- [ ] Turbine

- [ ] Centrifugal
- [ ] Rotary
- [ ] Other

**When Pumping**

- [ ] Other

**Pumping Test**

- Hours Pumped (nearest hour)
- Pumps Rate (gallons per minute, nearest gal.)

**WATER LEVEL (distance from land surface)**

**Before Pumping**

3 1/2

**When Pumping**

3 3/4

**PUMPING TEST**

- [ ] YES
- [ ] No

**If well drilled was flowing well insert in box 68**

**Driller's Identity No.**

139

**Driller's Signature**

Robert Cline

**SITE SUPERVISOR (sign, of driller or journeyman responsible for site work if different from permittee)**

John Cline

**SITE SUPERVISOR (sign, of driller or journeyman responsible for site work if different from permittee)**

John Cline

**OEP USE ONLY**

(TO BE FILLED IN BY DRILLER)

**Telescope Casing Log Indicator**

**Other Data**

**IN BOX 68**

68
**STATE OF MARYLAND**

**WELL COMPLETION REPORT**

Fill in this form completely, please print or type.

<table>
<thead>
<tr>
<th>COUNTY NUMBER</th>
<th>91-538</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMIT NO.</td>
<td>FK-58-2602</td>
</tr>
<tr>
<td>45 DAYS AFTER WELL IS COMPLETED</td>
<td></td>
</tr>
<tr>
<td>OWNER</td>
<td>FREDERICK CO. BOARD OF EDUCATION</td>
</tr>
<tr>
<td>STREET OR RFD</td>
<td>74440 KAYWARD RD</td>
</tr>
<tr>
<td>TOWN</td>
<td>FREDERICK MD 21701</td>
</tr>
<tr>
<td>SECTION</td>
<td>5</td>
</tr>
<tr>
<td>LOT</td>
<td>1701</td>
</tr>
</tbody>
</table>

**WELL LOG**

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET</th>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROWN SHALE</td>
<td>44</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>GREEN SLATE</td>
<td>500</td>
<td>0</td>
<td>500</td>
</tr>
</tbody>
</table>

**GROUTING RECORD**

WELL HAS BEEN GROUTED

(Circle Appropriate Box)

TYPE OF GROUTING MATERIAL

- [ ] CEMENT [ ] BENTONITE CLAY [ ] BC

NO. OF BAGS: 15

NO. OF POUNDS: 20

GALLONS OF WATER: 140

DEPTH OF GROUT SEAL (to nearest foot):

<table>
<thead>
<tr>
<th>ft</th>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>60</td>
</tr>
</tbody>
</table>

ENTER 0 IF FROM SURFACE

<table>
<thead>
<tr>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
</tr>
</tbody>
</table>

**CASING RECORD**

Nominal diameter (nearest inch):

<table>
<thead>
<tr>
<th>ST</th>
<th>CO</th>
<th>PL</th>
<th>OT</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>61</td>
<td>63</td>
<td>64</td>
</tr>
</tbody>
</table>

Total depth of main casing (nearest foot):

<table>
<thead>
<tr>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
</tr>
</tbody>
</table>

**SCREEN RECORD**

<table>
<thead>
<tr>
<th>ST</th>
<th>BR</th>
<th>HO</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>36</td>
<td>41</td>
</tr>
</tbody>
</table>

**CIRCLE APPROPRIATE LETTER**

A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 25.04.04 "WELL CONSTRUCTION" AND IN CONFORMITY 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.

**LOCATION OF WELL ON LOT**

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

**WELL**

NO MEASUREMENTS AVAILABLE

[Signature] Robert Clive

DRILLERS IDENT. NO. 139

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) Robert Clive

SITE SUPERVISOR (sign of driller or journeyman responsible for sitework if different from permittee) Robert Clive

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

[Signature] Robert Clive
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

COUNTY NUMBER 93-174

ST/CO USE ONLY
DATE RECEIVED

DATE WELL COMPLETED 07/4/93

Depth of Well 200' (TO NEAREST FOOT)

PERMIT NO. F4-3845-SS-42

OWNER
FREDERICK CO. BOARD OF EDUCATION

STREET OR RFID
7630 HAYWARD RD

SUBDIVISION

SECTION 5-T-E 2-A

LOT

YELLOW CLAY 0-10

YELLOW CLAY 10-34

BLUE SLATE 34-200

YELLOW CLAY

AND GRAVEL

CIRCUIT APPROPRIATE LETTER
A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 260:44.04 "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.

DRILLERS IDENT NO. 139

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign of driller or journeyman responsible for sitework if different from permittee)

C3

PUMPING TEST
HOURS PUMPED (NEAREST HOUR) 1

PUMPING RATE (GAL. PER MIN.) 19

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING

WHEN PUMPING 240

TYPE OF PUMP (FOR TEST)
A PISTON T TURBINE

C CENTRIFUGAL R ROTARY O OTHER (DESCRIBE BELOW)

C2

DEPTH (NEAREST FT.)

SLIGHT SIZE 1

DIAMETER OF SCREEN (NEAREST INCH)

GRAVEL PACK

IF WELL DRILLED WAS FLOWING WELL INSERT

OEP USE ONLY

TELESCOPIC CASING LOG INDICATOR

OTHER DATA

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

100+ WELL

100+
MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

***********************************************************************
WATER WELL ABANDONMENT-SEALING REPORT FORM
***********************************************************************

SUBMIT COPIES OF COMPLETED FORM TO:
* COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
* WELL OWNER
* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 4-8-04  (month/day/year)

PERMIT NUMBER OF ABANDONED WELL (if any)

PERMIT NUMBER OF REPLACEMENT WELL

PERSON ABANDONING WELL: Randall Alexander

OWNER'S NAME: Frederick County Water and Sewer

WELL LOCATION:

COUNTY: Frederick

NEAREST TOWN: Urbana

TAX MAP BLOCK PARCEL

SUBDIVISION:

SECTION:

LOT:

NEAREST ROAD: Urbana Pike (Rt 355)

MARYLAND GRID COORDINATES E 700

BOX NUMBER N 540

SHOW WELL LOCATION BY X WITHIN BOX

TYPE OF WELL BEING ABANDONED:

☐ DRILLED ☐ JETTED ☐ BORED/AUGERED ☐ HAND DUG

☐ OTHER (specify)

USE CODE:

☐ DOMESTIC ☒ MUNICIPAL/PUBLIC ☐ INDUSTRIAL

☐ IRRIGATION ☐ TEST/OBSERVATION

TYPE OF CASING:

☐ STEEL ☐ PLASTIC ☐ CONCRETE ☐ OTHER (specify)

SIZE OF CASING: 6 INCHES IN DIAMETER

DEPTH OF WELL: 200 FEET DEEP

WAS ANY CASING REMOVED? ☐ YES ☐ NO

if yes, length removed, in feet: 4

WAS CASING RIPPED OR PERFORATED? ☐ YES ☐ NO

WELL DRILLERS LICENSE NUMBER: 006

CIRCLE: MWD/MSD/MGD

LOG OF SEALING MATERIAL

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone Pea Grovel</td>
<td>200 to 30</td>
</tr>
<tr>
<td>Type II Cement Grout</td>
<td>30 to 5</td>
</tr>
<tr>
<td>Ground top soil</td>
<td>3 to 0</td>
</tr>
</tbody>
</table>

SIGNATURE - MASTER WELL DRILLER OR SUPERVISING SANITARIAN

DATE: 4/8/04

MDE 11/03
**STATE OF MARYLAND**

**WELL COMPLETION REPORT**

**WELL HAS BEEN GROUTED**

**TYPE OF GROUTING MATERIAL**

- **CM**: Bentonite Clay
- **BC**: Bentonite Clay

**NO. OF BAGS**: 25

**GALLONS OF WATER**: 150

**DEPTH OF GROUT SEAL (to nearest foot)**

- **TOP**: 48 ft.
- **BOTTOM**: 64 ft.

**WELL HAS BEEN CEMENTED**

**Cement Types**

- **SC**: Stone Concrete
- **PL**: Plastic

**Nominal Diameter**

- **Main Casing**: 80 inches

**Screen Type**

- **ST**: Steel
- **BR**: Brass

**Slot Size**

- **1**: 30 inches

**Gravel Pack**

**Distance Between Casing**

- **Single Point**: 51 ft.

**PUMP_installed**

- **DRILLER WILL INSTALL PUMP**: Yes

**Screen Record**

- **Type of Screen**: Open Hole

**Screen Height**: 36 ft.

**Driller's Ident. No.**: 139

**Permit No.**

**Location of Well on Lot**

**C 3**

**Pumping Test**

- **Time (nearest hour)**

**Pumping Rate**: 44 gal/min.

**Before Pumps**: 5.0 gpm

**When Pumping**: 5.9 gpm

**Type of Pump Used**

- **Type**: Submersible

**Driller's Signature**

- **Driller's Name**: Robert Clemens
**STATE OF MARYLAND**

**APPLICATION FOR PERMIT TO DRILL WELL**

**STATE PERMIT NUMBER**

| 70 | fill in this form completely |

**DATE RECEIVED (APA)**

| 01479 |

**OWNER INFORMATION**

| 262053 |

| FRANK C. COBO, JR. (Owner) |
| 7630 HAYWARD ROAD |
| FREDERICK |

**DRILLER INFORMATION**

| R. H. CLINE |
| 1359 |

| CHAVEZ & DAVALLI INC |
| 2633 HILLMARK A. FREDERICK |
| Robert L. Cline 22033 |

**WELL INFORMATION**

| APPROX. PUMPING RATE (GAL. PER MIN.) |
| 8 |
| 12 |

| AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) |
| 10000 |

**USE FOR WATER** (CIRCLE APPROPRIATE BOX)

- [ ] HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- [ ] FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- [ ] INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- [ ] PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
- [ ] TEST OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

**APPROXIMATE DEPTH OF WELL**

| 240 |

**APPROXIMATE DIAMETER OF WELL**

| 6 |

**METHOD OF DRILLING** (circle one)

- [ ] BORED (or Augered)
- [ ] JETTED
- [ ] AIR-ROTARY
- [ ] REVERSE-ROTARY
- [ ] DRIVE-POINT

**REPLACEMENT OR DEEPENED WELLS** (CIRCLE APPROPRIATE BOX)

- [ ] THIS WELL WILL NOT REPLACE AN EXISTING WELL
- [ ] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALING
- [ ] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- [ ] THIS WELL WILL DEEPEN AN EXISTING WELL

**PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)**

| 41 |

**NOT TO BE FILLED IN BY DRILLER**

**HEALTH DEPARTMENT APPROVAL**

**COUNTY NAME**

| 93-174 |

**STATE SIGNATURE**

| 41 |

**DATE ISSUED**

| 01/14/65 |

**NORTH GRID**

| 57 |

**EAST GRID**

| 06 |

**SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X**

| SOURCES OF DRILLING WATER |
| 1. WELL |
| 2. |
| 3. |

**WRITE THE BOX NUMBER FROM THE MAP HERE**

| E |

**DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION**

**SPECIAL CONDITIONS**
**STATE OF MARYLAND**

**WELL COMPLETION REPORT**

**FREDERICK COUNTY BOARD OF EDUCATION**

OWNER: FREDERICK COUNTY BOARD OF EDUCATION

STREET OR RFD: 1530 HAYWARD RD

TOWN: FREDERICK MD 21702

**SECTION 2B, LOT 23**

---

### WELL LOG

**STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING**

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET FROM</th>
<th>FEET TO</th>
<th>Check if water bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YELLOW CLAY AND GRAVEL</strong></td>
<td>0</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td><strong>BROWN SHALE</strong></td>
<td>18</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td><strong>BLUE SLATE</strong></td>
<td>34</td>
<td>152</td>
<td></td>
</tr>
</tbody>
</table>

---

### GROUNTO RECORD

**WELL HAS BEEN GROUTED (Circle Appropriate Box)**

- **Y** (Yes)
- **N** (No)

**TYPE OF GROUTING MATERIAL**

- **CM** ( Bentonite Clay)

**NO. OF BAGS**

- 50

**NO. OF POUNDS**

- 54

**GALLONS OF WATER**

- 54

**DEPTH OF GROUT SEAL** (to nearest foot)

- 11 ft.

---

### CASING RECORD

**Nominal diameter top (main) casing (nearest inch)**

- 6

**Total depth of main casing (nearest foot)**

- 111 ft.

---

### SCREEN RECORD

**Nominal diameter**

- 6 in.

**Depth (feet)**

- from 0 to 182 ft.

---

### PUMPING TEST

**HOURS PUMPED (nearest hour)**

- 1

**PUMPING RATE (gal. per min. to nearest gal.)**

- 12

**METHOD USED TO MEASURE PUMPING RATE**

- Time

**WATER LEVEL (distance from land surface)**

- Before pumping

- 17 ft.

---

### PUMP INSTALLED

**DRILLER WILL INSTALL PUMP (CIRCLE) (YES OR NO)**

- Yes

**IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS**

**TYPE OF PUMP INSTALLED**

- **A** (Air)
- **P** (Piston)
- **T** (Turbine)

**CAPACITY**

- Gallons per minute (to nearest gallon)

- 33

**PUMP HORSE POWER**

- 37

**PUMP COLUMN LENGTH** (nearest ft.)

- 41

**CASING HEIGHT** (circle appropriate box and enter casing height)

- Above

---

**LOCATION OF WELL ON LOT**

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

---

**DRILLERS IDENT. NO.**

- 37

**DRILLERS SIGNATURE**

- Robert Elms

**SITE SUPERVISOR SIGNATURE**

- (Sign of driller or journeyman responsible for work if different from permittee)
MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

****************************************************************************************************
WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:
* COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
* WELL OWNER
* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 4-8-04 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any)

* PERMIT NUMBER OF REPLACEMENT WELL

* PERSON ABANDONING WELL: Randall L. Alexander

* OWNER'S NAME: Frederick County Water and Sewer URBANA (School)

* WELL LOCATION:
COUNTY: Frederick
NEAREST TOWN: URBANA
TAX MAP BLOCK PARCEL
SUBDIVISION:
SECTION: LOT:
NEAREST ROAD: URBANA PIKE (RT 355)

MARYLAND GRID COORDINATES
E 700
BOX NUMBER N 540

* TYPE OF WELL BEING ABANDONED:

  ✔ DRILLED  ☐ JETTED
  ☐ BORED/AUGERED  ☐ HAND DUG
  ☐ OTHER (specify)  

* USE CODE:

  ✔ DOMESTIC  ☐ MUNICIPAL/PUBLIC
  ☐ IRRIGATION  ☐ INDUSTRIAL
  ☐ TEST/OBSERVATION

* TYPE OF CASING:

  ✔ STEEL  ☐ PLASTIC
  ☐ CONCRETE  ☐ OTHER (specify)

* SIZE OF CASING: 6 INCHES IN DIAMETER

* DEPTH OF WELL: 150 FEET DEEP

* WAS ANY CASING REMOVED? ☐ YES ☑ NO
  if yes, length removed, in feet: 4

* WAS CASING RIPED OR PERFORATED? ☑ YES ☐ NO

FR-88-3621
WELL DRILLERS LICENSE NUMBER: 006
CIRCLE: MWD/MSD/MDG

MARYLAND GRID COORDINATES
E 700
BOX NUMBER N 540

SHOW WELL LOCATION
BY X WITHIN BOX

LOG OF SEALING MATERIAL

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone Pea Gravel</td>
<td>150</td>
</tr>
<tr>
<td>type II Cement Grout</td>
<td>30</td>
</tr>
<tr>
<td>Ground top soil</td>
<td>30</td>
</tr>
</tbody>
</table>

006 MWD/MSD/MDG 4/8/04
SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE # CIRCLE ONE DATE
**STATE OF MARYLAND**

**APPLICATION FOR PERMIT TO DRILL WELL**

**STATE PERMIT NUMBER**

**R3-88-H015**

To fill in this form completely.

---

### Date Received (APA)

06/10/88

### OWNER INFORMATION

**OAK CONTRACTING CORP.**

**5701 SINGLET LANE**

**Baltimore MD 21213**

**Robert A. Cline**

**06/30/88**

### WELL INFORMATION

**APPROX. PUMPING RATE (GAL. PER MIN.)** 10 11

**AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)** 2000

---

### USE FOR WATER (CIRCLE APPROPRIATE BOX)

[D] Home (single or double household unit only)

[F] Farming (livestock watering & agricultural irrigation)

[I] Industrial, commercial, state and federal Gov. other (requires appropriation permit)

[P] Public or private water company (requires appropriation permit and state health department approval)

[T] Test, observation, monitoring (may require appropriation permit)

---

### APPROXIMATE DEPTH OF WELL

30 35 FEET

### APPROXIMATE DIAMETER OF WELL

6 NEAREST INCH

---

### METHOD OF DRILLING (circle one)

30 BORED (or augered)

37 AIR-ROTARY

36 JETTED

36 JETTED & DRIVEN

36 REVERSE-ROTARY

36 ROTARY (Hydraulic Rotary)

36 other

---

### REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)

[ ] This well will not replace an existing well

[ ] This well will replace a well that will be abandoned and sealed

[ ] This well will replace a well that will be used as a standby-contact local approving authority for policy on standby wells

[ ] This well will deepen an existing well

---

### PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

---

### NOT TO BE FILLED IN BY DRILLER

HEALTH DEPARTMENT APPROVAL

---

### COUNTY NAME

94-196

---

### DATE ISSUED

06/10/88

---

### SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

1. **well**

2. **sources of drilling water**

3. **write the box number from the map here**

---

### DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

---

**NOTE** = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED =
<table>
<thead>
<tr>
<th><strong>SECTION</strong></th>
<th><strong>LOT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WELL LOG</strong></td>
<td><strong>C 3</strong></td>
</tr>
<tr>
<td>State the kind of formations penetrated, their color, depth, thickness and if water bearing</td>
<td></td>
</tr>
<tr>
<td>Description (Use additional sheets if needed)</td>
<td>Feet</td>
</tr>
<tr>
<td>Brown Sand</td>
<td>0 29</td>
</tr>
<tr>
<td>Blue Slate</td>
<td>29 60</td>
</tr>
<tr>
<td>In hard rock areas, identify specifically where saturated fractures were observed.</td>
<td></td>
</tr>
<tr>
<td>Well hydrofractured</td>
<td>Yes</td>
</tr>
<tr>
<td>Circle appropriate letter</td>
<td>A</td>
</tr>
<tr>
<td>Test well converted to production well</td>
<td>P</td>
</tr>
<tr>
<td>PERT NO. FROM &quot;PERMIT TO DRILL WELL&quot;</td>
<td>87-73-10415</td>
</tr>
<tr>
<td>Owner</td>
<td>OAK CONTRACTING CORP</td>
</tr>
<tr>
<td>ST/O RD</td>
<td>REAL SINCLAIR LANE</td>
</tr>
<tr>
<td>Town</td>
<td>BALTIMORE MD 21213</td>
</tr>
<tr>
<td>Subdivision</td>
<td>LOT 1</td>
</tr>
</tbody>
</table>

**WELL HAS BEEN GROUTED** (Circle appropriate box)
- [ ] Yes
- [ ] No

**TYPE OF GROUTING MATERIAL**
- Cement [ ]
- Bentonite Clay [ ]

**NO. OF BAGS** 13
**NO. OF POUNDS** 2,222

**GALLONS OF WATER** 18
**DEPTH OF GROUT SEAL (to nearest foot)** 46

**Casing**
- Type: [ ] ST [ ] CO [ ] PL [ ] OT
- Insert appropriate code below
- Nominal diameter (main casing) (nearest inch): 6 |
- Total depth of main casing (nearest foot): 64

**Other Casing**
- If used, diameter inch: 61 |
- Depth (feet): 66 |

**Screen type or open hole**
- Insert appropriate code below
- ST [ ] BR [ ] HO [ ] PL [ ] OT

**Location of Screen**
- Diameter of screen: 6 
- Slot size 1 2 3

**Depth (nearest ft.)**
- Above: 60 |
- Below: 61 |

**Location of Well on Lot**
- Show permanent structure such as building, septic tanks, and/or landmarks and indicate not less than two distances (measurements to well)
- 50 ft. from MD RT 90

**Pumping Test**
- Hours pumped (nearest hour): 1
- Pumping rate (gal. per min. to nearest gal.): 11
- Method used to measure pumping rate:
  - [ ] Time
  - [ ] Water level (distance from land surface)

**Before Pumping**
- [ ] 30 |

**When Pumping**
- [ ] 20 |

**Type of Pump Used**
- [ ] air [ ] piston [ ] turbine
- Centrifugal [ ] rotary [ ] other

**Pump Installed**
- Driller will install pump (circle) (Yes or No)
- If driller installs pump, this section must be completed for all wells except home use
- Type of pump installed
  - Place (A.C.P.R.T.S.O.)
  - Capacity: Gallons per minute (to nearest gallon)
  - Pump horse power
  - Pump column length (nearest ft.)
  - Casing height (circle appropriate box and enter casing height)

**Driller Ident. No.** 130 |
**Driller Signature** (Must match signature on application) |  |
**Site Supervisor** (Signature of driller or journeyman responsible for site work if different from permittee) |  |
**T E L E S C O P E**
- Log indicator: 70 |
- Other data: 72 |

**Telescope Casing**
- Log indicator: 74 75 76 |

**MDE Use Only**
- Not to be filled in by driller
- T (E.R.O.S.) W Q |

**G R A V E L P A C K**
- If well drilled was flowing well insert F in Box 68 |

**Well Hydrofractured**
- Yes | No |

**Cement**
- C [ ]
- Bentonite Clay [ ]

**Casing Type**
- Nominal diameter (main casing) (nearest inch): 6 |
- Total depth or main casing (nearest foot): 64 |

**Casing**
- Type: [ ] ST [ ] CO [ ] PL [ ] OT
- Insert appropriate code below
- Nominal diameter (main casing) (nearest inch): 6 |
- Total depth or main casing (nearest foot): 64 |

**Other Casing**
- If used, diameter inch: 61 |
- Depth (feet): 66 |

**Screen type or open hole**
- Insert appropriate code below
- ST [ ] BR [ ] HO [ ] PL [ ] OT

**Location of Screen**
- Diameter of screen: 6 |
- Slot size 1 2 3

**Depth (nearest ft.)**
- Above: 60 |
- Below: 61 |

**Location of Well on Lot**
- Show permanent structure such as building, septic tanks, and/or landmarks and indicate not less than two distances (measurements to well)
- 50 ft. from MD RT 90
WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:
* COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
* WELL OWNER
* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 5-19-96 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any)
* PERMIT NUMBER OF REPLACEMENT WELL

* PERSON ABANDONING WELL: JAMES MOORE
* OWNER'S NAME: OAK CONTRACTING CORP
* WELL LOCATION:
  COUNTY: FREDERICK
  NEAREST TOWN: URBANA
  TAX MAP 96 BLOCK 49
  PARCEL 49
  SUBDIVISION: URBANA SCHOOL
  SECTION: LOT:

MARYLAND GRID COORDINATES
E 700
N 540

* TYPE OF WELL BEING ABANDONED:
  √ DRILLED
  □ BORED/AUGERED
  □ JETTED
  □ HAND DUG
  □ OTHER (specify)

* USE CODE:
  □ DOMESTIC
  □ MUNICIPAL/PUBLIC
  □ IRRIGATION
  □ INDUSTRIAL
  □ TEST/OBSERVATION
  □ CONTRACTORS USE

* TYPE OF CASING:
  √ STEEL
  □ PLASTIC
  □ CONCRETE
  □ OTHER (specify)

* SIZE OF CASING: 6 INCHES IN DIAMETER

* DEPTH OF WELL: 300 FEET DEEP

* WAS ANY CASING REMOVED? √ YES □ NO
  if yes, length removed, in feet: 3

* WAS CASING RIPED OR PERFORATED? √ YES □ NO

WELL DRILLERS LICENSE NUMBER: 141
CIRCLE: MWD/MSD/MGD

SHOW WELL LOCATION BY X WITHIN BOX

LOG OF SEALING MATERIAL

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRT TYPE II</td>
<td></td>
</tr>
<tr>
<td>CEMENT</td>
<td>3</td>
</tr>
<tr>
<td>CRUSHED STONE</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>300</td>
</tr>
</tbody>
</table>

1) MDE

DENV 828 JULY 1993
### WELL LOG
Not required for driven wells

<table>
<thead>
<tr>
<th>STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Soil</td>
</tr>
<tr>
<td>Red Clay</td>
</tr>
<tr>
<td>Brown Shale</td>
</tr>
<tr>
<td>Brown Slate</td>
</tr>
<tr>
<td>Gray Slate</td>
</tr>
<tr>
<td>Clay</td>
</tr>
<tr>
<td>Gray Slate</td>
</tr>
<tr>
<td>Brown Slate</td>
</tr>
<tr>
<td>Gray Slate</td>
</tr>
<tr>
<td>Brown Slate</td>
</tr>
<tr>
<td>Mixed Gray Slate</td>
</tr>
<tr>
<td>Gray Slate</td>
</tr>
<tr>
<td>Gray Slate</td>
</tr>
</tbody>
</table>

### GRouting RECORD
WELL HAS BEEN GROUTED

- **Type of Grouting Material**
  - CM: Bentonite Clay
  - BC: Bentonite Clay

- **No. of Bags**
  - 10

- **No. of Pounds**
  - 1000

- **Gallons of Water**
  - 50

- **Depth of Grout Seal**
  - From 0 ft to 30 ft

### CASING RECORD

- **Nominal Diameter**
  - Top (main) casing
  - (nearest inch) 60

- **Total Depth of Main Casing**
  - (nearest foot) 70

### OTHER CASING (if used)

- **Depth (feet)**
  - From 10

### SCREEN RECORD

- **Screen Type or Open Hole**
  - STEEL CONCRETE

### PUMP INSTALLED

- **Pump Type**
  - Air

- **Pump Horse Power**
  - (nearest ft.)

- **Pump Column Length**
  - (nearest ft.)

- **Casing Height**
  - (circle appropriate box and enter casing height)

### LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

---

**Note:** The form contains various fields that are not filled out, and the form's overall appearance indicates it is a well completion report. The fields that are not filled out include:
- Owner Name
- Well Completion Date
- County Number
- Permit Number
- Driller's Name
- Driller's Signature
- Site Supervisor's Name
- Site Supervisor's Signature
- EOP Use Only
- Telescope Casing Log Indicator
- Other Data

---
B 1 1664
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

DATE RECEIVED (APA)
03/12/97

OWNER INFORMATION

Last Name: MARX
First Name: ROBERT
Street or Rd: 7928 THURSTON RD
City: FREDERICK
ZIP: 21704

DRILLER INFORMATION

Driller's Name: KEENER-
Last Name: KEENER
First Name: LAUREN
Firm Name: 9125 Bower Rd.
Address: 9125 Bower Rd.
Signature: KEENER-
LAUREN
Date: 1-7-97

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.):
2 8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY):
14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX):

HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
FARMING (IN STOCK WATERING & AGRICULTURAL IRRIGATION)
INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

APPROXIMATE DEPTH OF WELL:
40'

APPROXIMATE DIAMETER OF WELL:
6 INCH

METHOD OF DRILLING (CIRCLE ONE):

JETTED
ROTARY (Hydraulic Rotary)
REVERSE ROTARY

REPLACEMENT OR DEEPENED WELLS:

(CIRCLE APPROPRIATE BOX):

THIS WELL WILL NOT REPLACE AN EXISTING WELL
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE):

Not to be filled in by driller (OEP USE ONLY)

APPROPRIATE PERMIT NUMBER:

FORCE

WRITE INITIALS PERMIT No:

SPECIAL CONDITIONS

NOTE — APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED —
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER
FR-94-0304

Date Received (APA)
03/12/94

OWNER INFORMATION

Name: ARMET ROBERT
Address: 8938 THURSTON RD
FREDERICK MD 21702

DRILLER INFORMATION

Driller's Name: SEITZ, STEVEN
Firm Name: 91739 Bettsel, Fred W
Address: SEITZ, STEVEN
Signature: 1-17-97

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 8 12 14 20
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
I INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
P PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
T TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

APPROXIMATE DEPTH OF WELL 30 FT
APPROXIMATE DIAMETER OF WELL
METHOD OF DRILLING (circle one)
BORED (or Augered) JETTED
AIR-RotARY PERCUSSION ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTARY DRIVE-POINT

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)
N THIS WELL WILL NOT REPLACE AN EXISTING WELL
S THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
D THIS WELL WILL DEEPEN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

Not to be filled in by driller (OEP USE ONLY)

APPROPRIATE PERMIT NUMBER
FORCE WRITE INTIALS IN BOX

SPECIAL CONDITIONS
NOTE = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED =
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

Date Received (APA)
1/1/1977

OWNER INFORMATION
STURGES FAMILY, LLC
STURGES, ROBERT
3329 FINGERBOARD RD
FREDERICK, MDSN
8579 WORTHINGTON MANOR GOLF
WORTHINGTON MANOR GOLF
4270 WORTHINGTON RD
URBANA, MD 21771

DRILLER INFORMATION
CIRCLE: MSD/MGD/GMD
NEIL C. NEGLEY
Driller's Name
77 License No. 80

WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.)
10
AVERAGE DAILY QUANTITY NEEDED
3,000

USE FOR WATER (CIRCLE APPROPRIATE BOX)
HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. (REQUIRES APPROPRIATION PERMIT)
PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

APPROXIMATE DEPTH OF WELL
200 FEET
APPROXIMATE DIAMETER OF WELL
6 INCH

METHOD OF DRILLING (circle one)
BORED (or Augered)
JETTED
JETTED & DRIVEN
AIR-ROTARY
AIR-PERCUSION
ROTARY (Hydraulic Rotary)
VERSE-ROTARY
CABLE
DRIVE-POINT

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)
NO
YES

SPECIAL CONDITIONS
NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type
fill in this form completely

Date Received (APA)

Owner Information

Driller's Name

WELL INFORMATION

USE FOR WATER (CIRCLE APPROPRIATE BOX)

METHOD OF DRILLING (circle one)

REPLACEMENT OR DEEPENED WELLS

SPECIAL CONDITIONS

APPROX. PUMPING RATE

APPROXIMATE DEPTH OF WELL

APPROXIMATE DIAMETER OF WELL

BORED (or Augered)

AIR-ROTARY

CABLE

JETTED

ROTARY (Hydraulic Rotary)

REVERSE ROTARY

DRIE-POINT

THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS

THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

Not to be filled in by driller (MDE or COUNTY USE ONLY)

APPROPRIATE, PERMIT NUMBER

NOT TO BE FILLED IN BY DRILLER

HEALTH DEPARTMENT APPROVAL

COUNTY NAME

STATE

SIGNATURE

CERTIFICATE

EXP. DATE

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

WRITE THE BOX NUMBER FROM THE MAP HERE

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

EMERGENCY/TEMP NO. IF ANY

STATE PERMIT NUMBER

Driller's Name

Driller's License No.

Firm Name

Address

Signature

Date

MILES FROM TOWN (enter 0 if in town)

TO擺

NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

DISTANCE FROM ROAD

TAX MAP:

BLK:

PARCEL:

230

NOT TO BE FILLED IN BY DRILLER (MDE USE ONLY)
**STATE OF MARYLAND**

**WELL COMPLETION REPORT**

FILL IN THIS FORM COMPLETELY PLEASE PRINT OR TYPE

**THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.**

**ST./CO. NUMBER**

**DATE WELL COMPLETED**

**LOCATION OF WELL ON LOT**

**SITE SUPERVISOR**

**OWNER**

**STREET OR RPD**

**SUBDIVISION**

**SECTION**

**LOT**

**WELL LOG**

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

**DESCRIPTION (Use additional sheets if needed)**

<table>
<thead>
<tr>
<th>FEET FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSERVATION</strong></td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td>29', 70'</td>
</tr>
<tr>
<td>Hi Water at 70'</td>
<td>6 GPM</td>
</tr>
<tr>
<td>Slate</td>
<td>70', 129', 4 GPM</td>
</tr>
<tr>
<td>Slate</td>
<td>129', 283'</td>
</tr>
</tbody>
</table>

**GROUTING RECORD**

**YES/NO**

**WELL HAS BEEN GROUTED**
(Circle Appropriate Box)

**TYPE OF GROUTING MATERIAL**
(Circle one)

- CEMENT (CM)
- BENTONITE CLAY (BC)
- OTHER (OT)

**NO. OF BAGS**

**NO. OF POUNDS**

**GALLONS OF WATER**

**DEPTH OF GROUT SEAL**
(to nearest foot)

**HOLES PUMPED (nearest hour)**

**PUMPING RATE (gal. per min.)**

**METHOD USED TO MEASURE PUMPING RATE**

**WATER LEVEL**
(distance from land surface)

**BEFORE PUMPING**

**WHEN PUMPING**

**TYPE OF PUMP USED**
(for test)

- **piston (P)**
- **turbine (T)**
- **centrifugal (C)**
- **rotary (R)**
- **other (describe below)**

**PUMP INSTALLED**

**YES/NO**

**DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO)**

**IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.**

**TYPE OF PUMP INSTALLED**


**IN BOX 25.**

**CAPACITY**

**GALLONS PER MINUTE**
(to nearest gallon)

**PUMP HORSE POWER**

**PUMP COLUMN LENGTH**

**NEAREST FT.**

**CASING HEIGHT**

(circle appropriate box and enter casing height)

**LAND SURFACE**

**LOCATION OF WELL ON LOT**

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

**SITE SUPERVISOR**

**SIGNATURE**

**DRILLERS LIC. NO.**

**MDE USE ONLY**

**NOT TO BE FILLED IN BY DRILLER**

**R.O.S.**

**TELESCOPE CASING LOG INDICATOR**

**OTHER DATA**

**DATE RECEIVED**

**1999**

**COUNTY NUMBER**

**PERMIT NO.**

**FROM "PERMIT TO DRILL WELL"**

**FR - 94 - 1042 -**

**SEQUENCE NO. (MDE USE ONLY)**

**0 1472**

**1 2 3 6**

(This number is to be punched in cols. 3-6 on all cards.)

**DATE WELL COMPLETED**

**22 98**

26 (TO NEAREST FOOT)
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

DATE RECEIVED (APA)
08 07 98

OWNER INFORMATION

LAST NAME First Name License No.
MARTIN Robert 134 81

DRILLER INFORMATION

Driller's Name
AUSTIN GARVER

Firm Name

ADDRESS

Signature
8/6/98

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.)
50

APPROXIMATE DEPTH OF WELL
400 FEET

METHOD OF DRILLING (circle one)

Bored (or Augered)
Jetted
Jetted & Driven

AIR-ROTARY
AIR-PERCUSION
ROTARY (Hydraulic Rotary)

CABLE
REVERSE-ROTARY
DIVE-POINT

REPLACEMENT OR DEEPENED WELLS

This well will not replace an existing well
This well will replace a well that will be abandoned and sealed
This well will replace a well that will be used as a standby-contact local approving authority for policy on standby wells
This well will deepen an existing well

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

OTHER

NOTE: IN ALL CASES, APPLICATIONS SHOULD USE SEPARATE SHEET IF NEEDED.

SPECIAL CONDITIONS

EMERGENCY TEMPERATURE NO. IF ANY
0488

STATE PERMIT NUMBER
FR - 94 - 1043

LOCATION OF WELL

COUNTY
FREDERICK

SUBDIVISION
MARTIN SUB

SECTION
44

LOT
11

NEAREST TOWN

Miles from town (enter 0 if in town)
1

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

TOWN

N

E

S

W

ON WHICH SIDE OF ROAD

NEAR WHAT ROAD

ENTRY FT OR MI

TAX MAP:

ROW

TWO

BLK.

PARCE

34

38

96

320

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

1. WELL

2.

3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 690

N 540

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN
RELATION TO NEARBY TOWNS AND ROADS AND GIVE
DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

FINGERPOL

USSMA

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

COUNTY NAME

FREDERICK

COUNTY NO.

98-218

DATE ISSUED

1-31-99

CO SIGNATURE

EXP. DATE

541 000

EAST GRID

57 061 7 00 0

540

000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN
RELATION TO NEARBY TOWNS AND ROADS AND GIVE
DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

FINGERPOLE

USSMA

NOTE: IN ALL CASES, APPLICATIONS SHOULD USE SEPARATE SHEET IF NEEDED.

SPECIAL CONDITIONS
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 98-28

ST/GO USE ONLY
DATE Received 09/21/199

DATE WELL COMPLETED 10/26/9

PERMIT NO. PR-94-10R3

TO NEAREST FOOT

FROM "PERMIT TO DRILL WELL"

OWNER MARINET ROBERT A

STREET OR RFD 2932 THOMAS RD

TOWN FREDERICK

SUBDIVISION MARINET SUB

SECTION 1

LOT 11

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheet,s if needed)

FROM TO check if water bearing

OVERBURDEN 0' 47'

SLATE HINT WATER AT 190' 6:30 PM

SLATE HINT WATER AT 260'

SLATE 190' 260'

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

GROUTING RECORD

NO OF BAGS 16

NO OF POUNDS 2520

GALLONS OF WATER 16

DEPTH OF GROUT SEAL (to nearest foot) 63'

GROUTING TYPE

CASTING RECORD

Nominal diameter (top main casing (nearest inch): 60

Total depth of main casing (nearest foot) 63

Casing type insert appropriate code below

OTHER CASING (if used) diameter inch

depth (feet)

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE

insert appropriate code below

32

30

26

24

20

12

7

6

5

DIAMETER OF SCREEN (NEAREST INCH)

SLAT SIZE

EACH CASING

SCREEN REINFORCEMENT

.screen height (nearest foot)

LAND SURFACE

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS
BUILDING, SEPTIC TANKS, AND/or
LANDMARKS AND INDICATE NOT LESS
THAN TWO DISTANCES (MEASUREMENTS TO WELL)

SEQUENCE NO. (MDE USE ONLY)

C1 Q1468

TO NEAREST FOOT

TO NEAREST FOOT

NUMBER OF UNSUCCESSFUL WELLS:

1

WELL HYDROFRACTURED

YES

CIRCLE APPROPRIATE LETTER

A

E

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN
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.

DRILLERS LIC. NO. M-5 DO 45

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. M-3 DO 34

SITE SUPERVISOR (sign of driller or journeyman
responsible for site work if different from permittee)
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

STATE PERMIT NUMBER
FR-94-1449

Date Received (APA)
04 23 99

Owner Information

Angleberger
8400 Lassie Court
Walkersville
Md.
21793

Owner
First Name
Last Name
Street or RFD
Town
State
Zip

Driller Information

Robert L. Cline
Cline and Duvall, Inc.
8093 Hillmark Ct.
Frederick
21704

Driller's Name
Firm Name
Address
Signature

Well Information

APPROX. PUMPING RATE (GAL. PER MIN.)
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
G GEO-THERMAL

APPROXIMATE DEPTH OF WELL FEET
APPROXIMATE DIAMETER OF WELL INCH

METHOD OF DRILLING (circle one)
B BORED (or Augered)
J JETTED
AIR-ROTARY
CABLE
IR-PERCUSSION
REVERSE-ROTARY
Jetted & DRIVEN
ROTARY (Hydraulic Rotary)
other

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)
N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED & SEALED
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER

SPECIAL CONDITIONS
NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED
<table>
<thead>
<tr>
<th>Description</th>
<th>Feet From</th>
<th>Feet To</th>
<th>Water Bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown Shale</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Blue Slate</td>
<td>60</td>
<td>445</td>
<td>445</td>
</tr>
</tbody>
</table>

**Well Log**

- **Type:** Not required for driven wells

**Gruoting Record**

- **Well Has Been Gruoted:** Yes
- **Type of Gruoting Material:** Bentonite Clay
- **No. of Bags:** 50
- **No. of Pounds:** 40
- **Gallons of Water:** 1200
- **Depth of Gruot Seal:** 60 ft.

**Casing Record**

- **Nominal Diameter:** 6"
- **Type of Casing:** Steel
- **Depth of Casing:** 60 ft.

**Screen Record**

- **Type of Screen:** Steel
- **Depth of Screen:** 60 ft.

**Pumping Test**

- **Hours Pumped:** 8
- **Pumping Rate (gal. per min.):** 50
- **Method Used to Measure Pumping Rate:** Estimate
- **Water Level:** 70 ft.

**Pump Installed**

- **Type of Pump Used:** Jet
- **Capacity:** 31 gallons per minute
- **Pump Horse Power:** 37
- **Land Surface:** 45 ft.

**Location of Well on Lot**

- **Drillers Lic. No.:** D 139
- **Drillers Signature:** Robert Cline
- **Site Supervisor:** Robert Cline
- **MDC Use Only:** Not to be filled in by driller
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

STATE PERMIT NUMBER
FR - 94 - 2012

FRIDAY, MARCH 13, 2014

OWNER INFORMATION

TNT Services Group, Inc.
P.O. Box 451
Frederick, MD 21705-0451

Owner Information

Robert L. Cline
Cline & Duvall, Inc.
8093 Hillmark Ct., Frederick, MD 21704

Robert L. Cline

DRILLER INFORMATION

Robert L. Cline
M. W. D. 139
Driller's Name
Cline & Duvall, Inc.

WELL INFORMATION

APPROX. PUMPING RATE
(GAL. PER MIN.)
AVERAGE DAILY QUANTITY NEEDED
(GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)

D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING LIVESTOCK WARTING & AGRICULTURAL IRRIGATION
I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
G GEO-THERMAL

APPROXIMATE DEPTH OF WELL
APPROXIMATE DIAMETER OF WELL
NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED JETTED & DRIVEN
AIR-ROTARY ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTARY Drive-POINT

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)

M THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STAND-BY CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STAND-BY WELLS
D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED
IF AVAILABLE

APPROPRIATE PERMIT NUMBER
FR 20000007
PERMIT NO.
FR - 94 - 007

SPECIAL CONDITIONS
NOTE = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

© ORIGINAL
MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784
**********************************************************************************************************************************************
WATER WELL ABANDONMENT-SEALING REPORT FORM
**********************************************************************************************************************************************

SUBMIT COPIES OF COMPLETED FORM TO:
* COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
* WELL OWNER
* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: MAY 2, 2000 (month/day/year)

PERMIT NUMBER OF ABANDONED WELL (if any)

PERMIT NUMBER OF REPLACEMENT WELL

PERSON ABANDONING WELL: JAMES MOORE

WELL DRILLERS LICENSE NUMBER:

OWNER’S NAME: INT SERVICES GROUP INC

WELL LOCATION:

COUNTY: FREDERICK

NEAREST TOWN: BUCKEystown

TAX MAP BLOCK PARCEL

SUBDIVISION: STANFORD INDUSTRIAL PARK

SECTION: 3 LOT: 5

NEAREST ROAD: DARTMOUTH COURT

MARYLAND GRID COORDINATES

E 650

BOX NUMBER

N 340

SHOW WELL LOCATION BY X WITHIN BOX

TYPE OF WELL BEING ABANDONED:

Drilled

Jetted

Bored/Augered

Hand Dug

Other (specify)

USE CODE:

Domestic

Municipal/Public

Irrigation

Industrial

Test/Observation

TYPE OF CASING:

Steel

Plastic

Concrete

Other (specify)

SIZE OF CASING: 6 INCHES IN DIAMETER

DEPTH OF WELL: 100 FEET DEEP

WAS ANY CASING REMOVED? YES NO

if yes, length removed, in feet: 3

WAS CASING RIPPLED OR PERFORATED? YES NO

LOG OF SEALING MATERIAL

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRT</td>
<td>0-3</td>
</tr>
<tr>
<td>TYPE II CEMENT</td>
<td>3-50</td>
</tr>
<tr>
<td>CRUSHED STONE</td>
<td>50-100</td>
</tr>
</tbody>
</table>

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN

DENV 828 JULY 1993

LICENSE # CIRCLE ONE DATE

1) MDE

MWD/MSD/MGD 4/21/00
**DATE RECEIVED (APA):**
ONTARIO

**OWNER INFORMATION**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARMET, ROBERT</td>
<td>2432 THURSTON RD</td>
</tr>
<tr>
<td></td>
<td>FREDERICK, MD 21702</td>
</tr>
</tbody>
</table>

**DRILLER INFORMATION**

<table>
<thead>
<tr>
<th>Driller's Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEN, RAINER</td>
<td>420 E. TOWNE ST</td>
</tr>
</tbody>
</table>

**WELL INFORMATION**

- **APPROX. PUMPING RATE (GAL. PER MIN.):** 8
- **AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY):** 14

**USE FOR WATER (CIRCLE APPROPRIATE BOX):**

- [ ] DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
- [ ] FARMING LIVESTOCK WATERING & AGRICULTURAL IRRIGATION
- [ ] INDUSTRIAL, COMMERCIAL, DEWATERING
- [ ] PUBLIC WATER SUPPLY WELL
- [ ] TEST, OBSERVATION, MONITORING
- [ ] GEO-THERMAL

**APPROXIMATE DEPTH OF WELL:** 402 FEET

**METHOD OF DRILLING (circle one):**

- [ ] BORED (or Augered)
- [ ] JETTED
- [ ] ROTARY (Hydraulic Rotary)
- [ ] REVERSE-ROTARY

**REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX):**

- [ ] THIS WELL WILL NOT REPLACE AN EXISTING WELL
- [ ] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- [ ] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
- [ ] THIS WELL WILL DEEPEN AN EXISTING WELL

**APPROX. PERMIT NUMBER:** FR-94-3006

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL:**

**COUNTY NAME:** FREDERICK

**DATE ISSUED:** 09-23-02

**EXP. DATE:** 10-31-02

**CO SIGNATURE:**

**SOURCE OF DRILLING WATER:**

1. **WEL**
2. 
3. 

**WRITE THE BOX NUMBER FROM THE MAP HERE:**

**DRAWSKetch BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION:**

**SPECIAL CONDITIONS:**

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

**PERMIT No:** FR-94-3006
**STATE OF MARYLAND**

**WELL COMPLETION REPORT**

**FILL IN THIS FORM COMPLETELY PLEASE TYPE**

**COUNTY NUMBER** 01-362

**OWNER** Marlen Robert

**STREET OR RFD** 2432 Thursday Dr

**SUBDIVISION** Marlen

**TOWN** Property

**WELL LOG**
Not required for driven wells

**STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING**

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET</th>
<th>CHECK IF WATER BEARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarpstone</td>
<td>0'</td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td>63'</td>
<td></td>
</tr>
<tr>
<td>Hit Water at 2:20'</td>
<td>26'</td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td>260'</td>
<td></td>
</tr>
<tr>
<td>Hit Water at 2:26'</td>
<td>261'</td>
<td></td>
</tr>
</tbody>
</table>

**GRAVING RECORD**

<table>
<thead>
<tr>
<th>TYPE OF GRAVING MATERIAL (Circle one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEMENT CM</td>
</tr>
<tr>
<td>BENTONITE CLAY BC</td>
</tr>
</tbody>
</table>

**NO. OF BAGS** 12

**NO. OF POUNDS** 72

**GALLONS OF WATER** 1,250

**DEPTH OF GROUT SEAL (to nearest foot)**

- FROM 48'
- TO 64'
- BOTTOM 58'

**CASING RECORD**

<table>
<thead>
<tr>
<th>CASING TYPE</th>
<th>INSERT APPROPRIATE CODE</th>
<th>HOPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>ST</td>
<td>BR</td>
</tr>
<tr>
<td>Plastic</td>
<td>PL</td>
<td>OT</td>
</tr>
</tbody>
</table>

**Nominal diameter (main) casing (nearest inch)**

- FROM 61.71
- TO 61.71

**TOTAL DEPTH OF MAIN CASING (nearest foot)**

- FROM 61
- TO 61

**OTHER CASING (if used)**

<table>
<thead>
<tr>
<th>DIAMETER (inches)</th>
<th>DEPTH (feet)</th>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NUMBER OF UN SUCCESSFUL WELLS** 0

**WELL HYDROFRACTURED**

<table>
<thead>
<tr>
<th>CIRCLE APPROPRIATE LETTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
</tr>
</tbody>
</table>

**I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.09 "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.**

**DRILLERS LIC. NO.** 025039

**WQ**

**MDE USE ONLY**

<table>
<thead>
<tr>
<th>LI. NO.</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LOCATIONS OF WELL ON LOT**

<table>
<thead>
<tr>
<th>SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)</th>
</tr>
</thead>
</table>

**LOCATION OF WELL ON LOT**

<table>
<thead>
<tr>
<th>LAND SURFACE</th>
<th>(NEAREST FOOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>

**PUMP INSTALLED**

<table>
<thead>
<tr>
<th>DRILLER INSTALLED PUMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE OF PUMP INSTALLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(CIRCLE) YES OR NO</td>
</tr>
</tbody>
</table>

**WHEN PUMPING**

<table>
<thead>
<tr>
<th>30 ft.</th>
<th>20 ft.</th>
</tr>
</thead>
</table>

**PUMP COLUMN LENGTH**

<table>
<thead>
<tr>
<th>NEAREST FT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>340</td>
</tr>
</tbody>
</table>

**PUMP HORSEPOWER**

<table>
<thead>
<tr>
<th>37</th>
</tr>
</thead>
</table>

**CAPACITY**

<table>
<thead>
<tr>
<th>GALLONS PER MINUTE (TO NEAREST GALLON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
</tr>
</tbody>
</table>

**CIRCUIT HEIGHT**

<table>
<thead>
<tr>
<th>(CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)</th>
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<tbody>
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<tr>
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<td>(CIRCLE) YES OR NO</td>
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<tr>
<th>LAND SURFACE</th>
<th>(NEAREST FOOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

B1 8276
STATE PERMIT NUMBER FR - 94 - 3807

Date Received (APA) 4-25-94

OWNER INFORMATION
Main Madeline
9433-A Fingerboard Road
Ijamsville Md. 21754

LOCATION OF WELL
COUNTY Frederick
SUBDIVISION The Main Event
SECTION 44
LOT 48
URBAN NEAREST TOWN 52
MILES FROM TOWN (enter 0 if in town) 1.5

DRILLER INFORMATION
Robert L. Cline M WD 139
Cline and Duvall, Inc.
8093 Hillmark Cr. Frederick 21704

WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.) 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 300

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
T INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
G GEO-THERMAL

APPROXIMATE DEPTH OF WELL 300 FEET
APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)
30 JETTED
AIRE-ROTARY REVERSE-ROTARY
37 JETTED & DRIVEN

REPLACEMENT OR DEEPENED WELLS
N THIS WELL WILL NOT REPLACE AN EXISTING WELL
V THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. Water
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

APPROP. PERMIT NUMBER
PERMIT No. FR - 94 - 3807
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

COUNTY NUMBER
02 - 265

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
FR - 94 - 3007

OWNER
MAIN
MADELINE

STREET OR RFD
4955 FINGERBOARD RD

TOWN
JHANSVILLE MD 21230

ST/CO USE ONLY
DATE RECEIVED
JUN 17 2002

DATE WELL COMPLETED
91 16 02

ST/CO USE ONLY

Depths of Well

(GALLOWS OF WATER )
D 60

TO NEAREST PICKET

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS, AND IF WATER BEARING

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROWN SHALE</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>BLUE SLATE</td>
<td>44</td>
<td>175</td>
</tr>
</tbody>
</table>

Cement

<table>
<thead>
<tr>
<th>CEMENT</th>
<th>BENTONITE CLAY</th>
</tr>
</thead>
</table>

Grouting Record

TYPE OF GRATING MATERIAL (Circle one)

<table>
<thead>
<tr>
<th>NO. OF BAGS</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO. OF POUNDS</td>
<td>940</td>
</tr>
</tbody>
</table>

GALLONS OF WATER

D 60

DEPTHS OF GROUT SEAL (TO NEAREST FOOT)

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 ft.</td>
<td>56 ft.</td>
</tr>
<tr>
<td>54 ft.</td>
<td>62 ft.</td>
</tr>
</tbody>
</table>

Casing Record

TYPICAL INSERT APPROPRIATE CODE BELOW

<table>
<thead>
<tr>
<th>CASING TYPE</th>
<th>STEEL</th>
<th>CONCRETE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLASTIC</td>
<td>other</td>
<td></td>
</tr>
</tbody>
</table>

Main Casing Type

<table>
<thead>
<tr>
<th>Nominal Diameter (NEAREST INCH)</th>
<th>Total Depth of Main Casing (NEAREST FOOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 61</td>
<td>63 64</td>
</tr>
<tr>
<td>65 66</td>
<td>67 70</td>
</tr>
</tbody>
</table>

Other Casing (if used)

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Depth (FOOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 ft.</td>
<td>50 ft.</td>
</tr>
</tbody>
</table>

Screen Type or Open Hole

<table>
<thead>
<tr>
<th>SCREEN TYPE</th>
<th>ST</th>
<th>BIR</th>
<th>HO</th>
</tr>
</thead>
</table>

Depth (NEAREST FOOT)

| 175 |

Driller Installed Pump

CIRCLE APPROPRIATE LETTER

<table>
<thead>
<tr>
<th>A</th>
<th>ELECTRIC LOG OBTAINED</th>
</tr>
</thead>
</table>

Test Well Converted to Production Well

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 28.04.02 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CITED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Drillers LIC. No.
MWD 139

Drillers Signature
Robert Clene

Lic. No.
MWD 3836

Site Supervisor (Sign of driller or journey man responsible for sitework if different from permits)

Robert Clene

Number of Unsuccessful Wells

WELL HYDROFRACED

CIRCLE APPROPRIATE LETTER

| A | ELECTRIC LOG OBTAINED |

Test Well Converted to Production Well

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 28.04.02 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CITED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

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Robert Clene

Lic. No.
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Robert Clene

Number of Unsuccessful Wells

WELL HYDROFRACED

CIRCLE APPROPRIATE LETTER

| A | ELECTRIC LOG OBTAINED |

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Number of Unsuccessful Wells

WELL HYDROFRACED

CIRCLE APPROPRIATE LETTER

| A | ELECTRIC LOG OBTAINED |

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Drillers LIC. No.
MWD 139

Drillers Signature
Robert Clene

Lic. No.
MWD 3836

Site Supervisor (Sign of driller or journey man responsible for sitework if different from permits)
APPLICATION FOR PERMIT TO DRILL WELL

STATE OF MARYLAND

OWNER INFORMATION

MARMET

Robert

3591

Date Received (APA)

Owner

First Name

Last Name

Street or RFD

Town

County

FREDERICK

MD

23

70

34

21

3

42

52

70

55

72

13

11

23 SUBDIVISION

LOT 5

URBANA

NEAREST TOWN

MILES FROM TOWN (enter 0 if in town)

RT 10

NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

DISTANCE FROM ROAD

ENTER FT OR MI

TOWN

W}

W

N

S

E

S

E

METHOD OF DRILLING (circle one)

BORED (or Augered)

JETTED

Jetted & DRIVEN

AIR-ROTARY

ROTARY (Hydraulic Rotary)

CABLE

REVERSE-ROTARY

drive-POINT

other

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION

INDUSTRIAL, COMMERCIAL, DEWATERING

PUBLIC WATER SUPPLY WELL

TEST, OBSERVATION, MONITORING

GEO-THERMAL

APPROXIMATE DEPTH OF WELL

APPROXIMATE DIAMETER OF WELL

NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered)

JETTED

Jetted & DRIVEN

AIR-ROTARY

ROTARY (Hydraulic Rotary)

CABLE

REVERSE-ROTARY

drive-POINT

other

SOURCE OF DRILLING WATER

1.

2.

3.

WRITE THE BOX NUMBER

FROM THE MAP HERE

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

APPROX. PUMPING RATE (GAL. PER MIN.)

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)

TAX MAP:

PARCEL

STATE PERMIT NUMBER

FR - 94 - 2313

fill in this form completely

NAME

License No.

Address

Signature

FIRM NAME

Owner

First Name

Last Name

36

70

72

12

14

94

11-1-02

M D O P 99

Austin Garver

76

312-727-9101

9125 Bethel Rd

22

20

0

96 BLK: 23"
## State of Maryland
### Well Completion Report

**Sequence No.** 02029

**State the kind of formations penetrated, their color, depth, thickness and if water bearing.**

<table>
<thead>
<tr>
<th>Description (Use additional sheets if needed)</th>
<th>Feet</th>
<th>Check if water bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overburden</td>
<td>0 ft</td>
<td></td>
</tr>
<tr>
<td>SOAPSTONE</td>
<td>5 ft</td>
<td></td>
</tr>
<tr>
<td>Hit water at 120' 20' 6pm SOAPSTONE</td>
<td>120'</td>
<td></td>
</tr>
<tr>
<td></td>
<td>145'</td>
<td></td>
</tr>
</tbody>
</table>

**Well Has Been Grouted**

- **Type of Grouting Material** (Circle one)
  - CEMENT (CM)
  - BENTONITE CLAY (BC)

- **No. of Bags** 15
- **No. of Pounds** 90
- **Gallons of Water**
- **Depth of Grout Seal** (to nearest foot) 63 ft

**Casing Record**

- **Casing Type**
  - Steel (ST)
  - Concrete (CON)
  - Plastic (PL)
  - Other (OT)

- **Nominal Diameter**
  - Top (Main Casing) (Nearest Inch) 6
  - Bottom (Main Casing) (Nearest Foot) 60

**Other Casing**

- **Screen Type**
  - Open Hole (H.O.)
- **Insert Screen Type**
  - Steel (ST)
  - Bronze (BR)
  - Plastic (PL)
  - Other (OT)

**Location of Well on Lot**

- **Casing Height** (Nearest Foot)
- **Land Surface** (Nearest Foot)

**Pumping Test**

- **Hours Pumped** (Nearest Hour)
- **Pumping Rate** (Gal. Per Min.)
- **Method Used To Measure Pumping Rate**
- **Water Level** (Distance from Land Surface)
- **Before Pumping**
- **When Pumping**

**Pump Installed**

- **Driller Installed Pump** (Circle) Yes / No

**Screen Record**

- **Slot Size** 1
- **Diameter of Screen** (Nearest Inch)
- **From** to

**Well Hydrofractured**

- **Circle Appropriate Letter**
  - Yes / No

**Remarks**

- **Drillers Lic. No.**
- **Drillers Signature**

**Site Supervisor**
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

OWNER INFORMATION
MARMET
ROBERT

CLERK OF THE COURT

LOCATION OF WELL
COUNTY
MARMET SUB

SECTION
LOT
NEAREST TOWN
MILES FROM TOWN

WELL INFORMATION
APPROX. PUMPING RATE
(A. D.P. M.)
AVERAGE DAILY QUANTITY NEEDED

USE FOR WATER
DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
FARMING LIVESTOCK WATERING & AGRICULTURAL IRRIGATION
INDUSTRIAL, COMMERCIAL, DEWATERING
PUBLIC WATER SUPPLY WELL
TEST, OBSERVATION, MONITORING
GEO-THERMAL

APPROXIMATE DEPTH OF WELL
NEAREST INCH
APPROXIMATE DIAMETER OF WELL

METHOD OF DRILLING
BORED (Augered)
CABLE
REPLACEMENT OR DEEPENED WELLS

REPLACEMENT OR DEEPENED WELLS

OTHER

SOURCE OF DRILLING WATER

SHOW MAJOR FEATURES OF
BOX & LOCATE WELL WITH AN X

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

APPROP. PERMIT NUMBER

SPECIAL CONDITIONS

NOT TO BE FILLED IN BY DRILLER

COUNTY NAME
STATE SIGNATURE

COUNTY NO.
DATE ISSUED
EXP. DATE

REQUEST FOR DUPLICATE TAG ON 11-15-05
TAG LOST: by driller off well in mail
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

ST/CO USE ONLY
DATE RECEIVED
DATE WELL COMPLETED
Depth of Well
PERMIT NO.
FROM “PERMIT TO DRILL WELL”

COUNTY NUMBER 02-49

OWNER MARVIN ROBERT 1st name TOWN FREDERICK

STREET OR RFD 2732 THETRESS RD SECTION LOT C

SUBDIVISION MARVIN SUB

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed) FEET FROM TO check if water bearing

OVERBASAL BUT TONE
SOILSTONE AT 80' 3 GPM
HIT WATER AT 80' 3 GPM
SANDSTONE AT 80' 3 GPM
HIT WATER AT 110' 2 GPM
SLATE AT 170' 10 GPM
SLATE AT 270' 16 GPM
SLATE AT 220' 360'

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

CIRCUMFERENCE (Nearest Foot)
T 24 48 54 72

TYPE OF GROUNING MATERIAL (Circle one)

CEMENT C
BENTONITE CLAY B

NO. OF BAGS
13
NO. OF POUNDS 7 8

GALLONS OF WATER 22 29

DEPT OF GROUNGE SEAL (from top to bottom) ft.

CASED TYPES INSERT

SPECIAL T 27
PLASTIC P 27
CONCRETE C 27
OTHER 27

TOTAL DEPTH OF MAIN CASING (Nearest Foot)

NOMINAL DIAMETER OF MAIN CASING (Nearest Inch)

OTHER CASING (If used) Diameter Length (Feet) from to

SCREEN RECORD

ST 27
BR 27
PB 27
OIT 27
PLASTIC 27

DIAMETER OF SCREEN (Nearest Inch)

SLOT SIZE 1 2 3

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

CIRCUMFERENCE (Nearest Foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

PUMPING TEST

HOURS PUMPED (Nearest Hour) 3

PUMPING RATE (gal. per min.) 3 8

METHOD USED TO MEASURE PUMPING RATE BUCKET

WATER LEVEL (distance from land surface) 13 6

BEFORE PUMPING 3 20

WHEN PUMPING 3 20

TYPE OF PUMP USED (for last)

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.


CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

PUMP INSTALLATION

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.


CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.

COUNTRY 
NUMBER 

OWNER NAME: ROBERT MARMET
STREET OR RFD: 123 MARMET RD
TOWN: FREDERICK
LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS, AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed) FEET FROM TO check if water bearing
OVERBANK 0 5
SOAPSTONE 5 80
MATT WATER AT 80 66PM
SLATE 80 402

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM
BENTONITE CLAY BC

NO. OF BAGS
46
NO. OF POUNDS
522

GALLONS OF WATER
84

DEPTH OF GROUT SEAL (to nearest foot)
from 46 ft. to 54 ft. (enter 0 if from surface)

CASING RECORD
Nominal diameter top (main casing)
 plusieurs: 46
Total depth of main casing (nearest foot)
60

CASING TYPE
ST STEEL
PL PLASTIC
CO CONCRETE
OT OTHER

EACH CASING OTHER CASING (if used)
diameter depth (feet)

SCREEN RECORD
screen type or open hole
insert appropriate code below

DIAMETER OF SCREEN (NEAREST INCH)
56

38 39 41 45 47 51

CASING HEIGHT (circle appropriate box
and enter casing height)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS
BUILDING, SEPTIC TANKS, AND/OR
LANDMARKS AND INDICATE NOT LESS
THAN TWO DISTANCES (MEASUREMENTS TO WELL)

PUMP INSTALLED

DRILLER INSTALLED PUMP  YES NO
(CIRCLE) (YES or NO)

IF DRILLER INSTALLS PUMP, THIS SECTION
MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED

CAPACITY:
GALLONS PER MINUTE
(to nearest gallon)
31
35

PUMP HORSE POWER
37
41

PUMP COLUMN LENGTH
(NEAREST FT)
43
47

GRAVEL PACK
P WEL DRILLED
WAS FLOWING WELL
INSERT IF IN BOX 58

HOURS PUMPED (NEARST HOUR)
3
8

PUMPING RATE (gal. per min.)
6
0

METHOD USED TO MEASURE PUMPING RATE
BASKET

WATER LEVEL (DISTANCE FROM LAND SURFACE)
0
40

WHEN PUMPING
17
20

TYPE OF PUMP USED (for test)
A piston C centrifugal
P rotary T turbine
O other (describe below)

SUBMERSIBLE

SITE SUPERVISOR (signs of driller or journeyman
responsible for sitework if different from permittee)

DRILLERS LIC. NO. 1 5 D 98 1
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
(EREOS)
t

TELESCOPE CASING LOG INDICATOR OTHER DATA
70 72 74 75 76
USE FOR WATER (CIRCLE APPROPRIATE BOX)

D Domestic Potable Supply & Residential Irrigation
F Farming, Livestock Watering & Agricultural Irrigation
I Industrial, Commercial, Dwelling
P Public Water Supply Well
T Test, Observation, Monitoring
G Geo-Thermal

APPROXIMATE DEPTH OF WELL [400] FEET
APPROXIMATE DIAMETER OF WELL [6] INCH

METHOD OF DRILLING (circle one)
B Bored (or Augered)
J Jetted
S Driven
C Reverse Rotary
R Rotary (Hydraulic Rotary)

SPECIAL CONDITIONS
Note: Not to be filled in by driller (MDE or County Use Only)
APPROPRIATE PERMIT NUMBER [FR-94-SC61]
PERMIT No. [fill in this form completely]

COUNTY NAME: Frederick
COUNTY NO: CO-46
STATE SIGNATURE: [Signature]
DATE OF SURVEY: 11/01/2002
COORDINATES: N 6990.00' E 5400.00'
EXP. DATE: 11/01/2007

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. [ ]
2. [ ]
3. [ ]

WRITE THE BOX NUMBER FROM THE MAP HERE
E 6990
N 5400

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

COUNTY: Frederick
STATE: [Signature]
DATE: 11/01/2002
COORDINATES: N 6990.00' E 5400.00'
EXP. DATE: 11/01/2007

SPECIAL CONDITIONS
Note: Not to be filled in by driller (MDE or County Use Only)
APPROPRIATE PERMIT NUMBER [FR-94-SC61]
PERMIT No. [fill in this form completely]
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

PERMIT NO.
FROM "PERMIT TO DRILL WELL"

OWNER
MARMET ROBERT

STREET OR RFD
2727 THURSTON

SUBDIVISION
MARMET SUB

SECTION

LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)
FROM TO

GROUTING RECORD
WELL HAS BEEN GROUTED
(Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT
BENTONITE CLAY

NO. OF BAGS
46
NO. OF POUNDS

GALLONS OF WATER
66

DEPTH OF GROUT SEAL (to nearest foot)
6

CASING RECORD
Nominal diameter
Top (main casing)
Main casing

TOTAL DEPTH OF CASING (NEAREST FEET)
6

SCREEN RECORD
SCREEN TYPE
ST STEEL
BR BRASS
HO HOLE
PL PLASTIC
OT OTHER

DIAMETER OF SCREEN

 SLOT SIZE

DESCRIPTION

OTHER CASING (if used)

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED

CIRCLE APPROPRIATE LETTER
A A WELL WAS ABANDONED AND SEALED
IN BOX 26.

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION
WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN
ACCORDANCE WITH CONMAR 26.04 "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.

DRILLERS LIC. NO.

(MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman
responsible for sitework if different from permittee)

MDE USE ONLY

(WRITTEN BY DRILLER)

(T.O.R.S.)

TELESCOPE
CASING

LOG INDICATOR
OTHER DATA

PUMPING TEST
HOURS PUMPED (NEAREST HOUR)

PUMPING RATE (gall. per min.)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING

WHEN PUMPING

TYPE OF PUMP USED (for test)

A CENTRIFUGAL
P PIETON
T TURBINE
R ROTARY

OTHER (DESCRIBE BELOW)

PUMP INSTALLED

DRILLER INSTALLED PUMP

(CIRCLE) (YES OR NO)

IF DRILLER INSTALLS PUMP, THIS SECTION
MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED
PLACE (A,C,P,R,S,T,O)

CAPACITY:
GALLONS PER MINUTE

(PER GALLON)

PUMP HORSE POWER

PUMP COLUMN LENGTH

(NEAR ET FEET)

CASING HEIGHT

(CIRCLE APPROPRIATE BOX
AND ENTER CASING HEIGHT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS
BUILDING, SEPTIC TANKS, AND/OR
LANDMARKS AND INDICATE NOT LESS
THAN TWO DISTANCES
(MEASUREMENTS TO WELL)
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

Owner: MARMET, Robert
Street or RFD: THURSDAY
Subdivision: MARMET SUB
Section: 2
Lot: 8

Well Log
Not required for driven wells

State the kind of formations penetrated, their color, depth, thickness and if water bearing

<table>
<thead>
<tr>
<th>Description (Use additional sheets if needed)</th>
<th>Feet From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overburden</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Soapstone</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Matt Water</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Soapstone 100'</td>
<td>100</td>
<td>242</td>
</tr>
<tr>
<td>Slate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Casing Types Insert appropriate code below

<table>
<thead>
<tr>
<th>Casing Type</th>
<th>Steel</th>
<th>Concrete</th>
<th>Plastic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Main Casing Type

<table>
<thead>
<tr>
<th>Diameter (nearest inch)</th>
<th>6</th>
</tr>
</thead>
</table>

Other Casing (if used) Diameter (inches) from to

<table>
<thead>
<tr>
<th>Diameter</th>
<th>6</th>
</tr>
</thead>
</table>

Screen Type or Open Hole

<table>
<thead>
<tr>
<th>Screen Type</th>
<th>Steel</th>
<th>Brass</th>
<th>Bronze</th>
<th>Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Screen Record

<table>
<thead>
<tr>
<th>Slot Size</th>
<th>2</th>
</tr>
</thead>
</table>

Screen Size (Nearest Inch)

<table>
<thead>
<tr>
<th>Diameter</th>
<th>56</th>
</tr>
</thead>
</table>

Casing Height (circle appropriate box and enter casing height)

<table>
<thead>
<tr>
<th>Casing Height</th>
<th>2</th>
</tr>
</thead>
</table>

Location of Well on Lot
Show permanent structure such as building, septic tanks, and/or landmarks and indicate not less than two distances (measurements to well)

Driller's Signature

M. D. O. S.

Site Supervisor (sign. of driller or journeyman responsible for sitework if different from permittee)

M. D. O. S.
OWNER INFORMATION

MARMET

ROBERT

15 Last Name

34

4932 THURSTON RD

38 Street or RFD

55

FREDERICK MD 21701

57 Town

70 State

72 Zip

DRILLER INFORMATION

AUSTIN GARRI

5009

75 License No.

81

Address

Austin Garrett 9:30 AM

11:00 PM

W RLY

10.80

1

0.50

17.00

14.00

11 10 9 8 7 6 5 4 3

1 2 3 4 5 6 7 8 9 10

23 SUBDIVISION

21 MARMET

22 COUNTY

42 Location of Well

71 Nearest Town

44 Lot

50 48

52 Miles From Town (enter 0 if in town)

73 76 77 78

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

30 NEAR WHAT ROAD

34 37

800

60

36 39

32 33

35 38

800

100

56

57 PARCEL

W N E S

NORTH WEST EAST SOUTH

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL

IRRIGATION

FARMING LIVESTOCK WATERING & AGRICULTURAL

IRRIGATION

INDUSTRIAL COMMERCIAL DEWATERING

PUBLIC WATER SUPPLY WELL

TEST OBSERVATION MONITORING

GEO THERMAL

APPROX. PUMPING RATE

R 12

2

AVERAGE DAILY QUANTITY NEEDED

14 20

GAL. PER DAY

APPROXIMATE DEPTH OF WELL

400

9

INCH

APPROXIMATE DIAMETER OF WELL

METHOD OF DRILLING (circle one)

JETTED

JETTED & DRIVEN

ROTARY

REVERSE ROTARY

ROTARY (Hydraulic Rotary)

30 (or Augered)

AIR ROTARY

CABLE

REPLACEMENT OR DEEPENED WELLS

THIS WELL WILL NOT REPLACE AN EXISTING WELL

Y

THIS WELL WILL REPLACE A WELL THAT WILL BE

ABANDONED AND SEALLED

X

THIS WELL WILL REPLACE A WELL THAT WILL BE

USED AS A STANDBY CONTACT LOCAL APPROVING

AUTHORITY FOR POLICY ON STANDBY WELLS

D

THIS WELL WILL DEEPEN AN EXISTING WELL

S

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED

41

IF AVAILABLE

Not to be filled in by driller (MOE OR COUNTY USE ONLY)

APPROX PERMIT NUMBER

0.50

0.50

0.50

0.50

540

540

540

000

000

52

52

52

Permit No.

01 02 03 04 05 06 07 08 09

10 11 12 13 14 15 16 17 18

19 20 21 22 23 24 25 26 27

SPECIAL CONDITIONS

01 02 03 04 05 06 07 08 09

10 11 12 13 14 15 16 17 18

19 20 21 22 23 24 25 26 27

28 29 30 31 32 33 34 35 36

37 38 39 40 41 42 43 44 45

46 47 48 49 50 51 52 53 54

55 56 57 58 59 60 61 62 63

64 65 66 67 68 69 70 71 72

73 74 75 76 77 78 79 80 81

82 83 84 85 86 87 88 89 90

91 92 93 94 95 96 97 98 99

00 01 02 03 04 05 06 07 08

09 10 11 12 13 14 15 16 17

18 19 20 21 22 23 24 25 26

27 28 29 30 31 32 33 34 35

36 37 38 39 40 41 42 43 44

45 46 47 48 49 50 51 52 53

54 55 56 57 58 59 60 61 62

63 64 65 66 67 68 69 70 71

72 73 74 75 76 77 78 79 80

81 82 83 84 85 86 87 88 89

90 91 92 93 94 95 96 97 98

99 00 01 02 03 04 05 06 07

08 09 10 11 12 13 14 15 16

17 18 19 20 21 22 23 24 25

26 27 28 29 30 31 32 33 34

35 36 37 38 39 40 41 42 43

44 45 46 47 48 49 50 51 52

53 54 55 56 57 58 59 60 61

62 63 64 65 66 67 68 69 70
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

ST/C0 USE ONLY
DATE WELL COMPLETED
DATE RECEIVED
COUNTY NUMBER
PERMIT NO.
FROM "PERMIT TO DRILL WELL"

OWNERS
ROBERT MARWET
TOWN BEVERLY
LOT 9

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARING

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET FROM TO</th>
<th>check if water bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERBURROW</td>
<td>0 - 10</td>
<td></td>
</tr>
<tr>
<td>SOAPSTONE</td>
<td>10 - 95</td>
<td></td>
</tr>
<tr>
<td>SOAPSTONE</td>
<td>95 - 10 GPM</td>
<td></td>
</tr>
<tr>
<td>SOAPSTONE</td>
<td>295 - 302</td>
<td></td>
</tr>
</tbody>
</table>

6" casing extended 3' or 63' to 69'

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACATURE

CIRCLE APPROPRIATE LETTER
A

WELL HAS BEEN GROUTED (Circle Appropriate Box)
YES

TYPE OF GROUTING MATERIAL (Circle one)
Cement

NO. OF BAGS
12

GALLONS OF WATER
72

DEPTH OF GROUT SEAL (to nearest foot)

DEPTH OF GROUT SEAL (ft. to 55 ft.)

WATER LEVEL (distance from land surface)

BEFORE PUMPING
30 ft.

WHEN PUMPING
22 ft.

PUMPING RATE (gal. per min.)
15

METHOD USED TO MEASURE PUMPING RATE
Rack

TYPE OF PUMP USED (for test)
Jet

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND FOR LANDMARKS AND Indicate NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

C1 9100

SEQUENCE NO. (MDE USE ONLY)

THIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER
02

DATE WELL COMPLETED
M A R 3 0 2 0 0 5

STREET OR RFD
2932 TIMES W

SUBDIVISION
MARWET SUB

SECTION

LOT
9

OVERBURROW
SOAPSTONE
SOAPSTONE

DETH OF GROUT SEAL (ft. to 55 ft.)

WATER LEVEL (distance from land surface)

BEFORE PUMPING
30 ft.

WHEN PUMPING
22 ft.

PUMPING RATE (gal. per min.)
15

METHOD USED TO MEASURE PUMPING RATE
Rack

TYPE OF PUMP USED (for test)
Jet

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND FOR LANDMARKS AND Indicate NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

C1 9100

SEQUENCE NO. (MDE USE ONLY)

THIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER
02

DATE WELL COMPLETED
M A R 3 0 2 0 0 5

STREET OR RFD
2932 TIMES W

SUBDIVISION
MARWET SUB

SECTION

LOT
9

OVERBURROW
SOAPSTONE
SOAPSTONE

DETH OF GROUT SEAL (ft. to 55 ft.)

WATER LEVEL (distance from land surface)

BEFORE PUMPING
30 ft.

WHEN PUMPING
22 ft.

PUMPING RATE (gal. per min.)
15

METHOD USED TO MEASURE PUMPING RATE
Rack

TYPE OF PUMP USED (for test)
Jet

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND FOR LANDMARKS AND Indicate NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

C1 9100

SEQUENCE NO. (MDE USE ONLY)

THIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER
02

DATE WELL COMPLETED
M A R 3 0 2 0 0 5

STREET OR RFD
2932 TIMES W

SUBDIVISION
MARWET SUB

SECTION

LOT
9

OVERBURROW
SOAPSTONE
SOAPSTONE

DETH OF GROUT SEAL (ft. to 55 ft.)

WATER LEVEL (distance from land surface)

BEFORE PUMPING
30 ft.

WHEN PUMPING
22 ft.

PUMPING RATE (gal. per min.)
15

METHOD USED TO MEASURE PUMPING RATE
Rack

TYPE OF PUMP USED (for test)
Jet

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND FOR LANDMARKS AND Indicate NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

C1 9100

SEQUENCE NO. (MDE USE ONLY)

THIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER
02

DATE WELL COMPLETED
M A R 3 0 2 0 0 5

STREET OR RFD
2932 TIMES W

SUBDIVISION
MARWET SUB

SECTION

LOT
9

OVERBURROW
SOAPSTONE
SOAPSTONE

DETH OF GROUT SEAL (ft. to 55 ft.)

WATER LEVEL (distance from land surface)

BEFORE PUMPING
30 ft.

WHEN PUMPING
22 ft.

PUMPING RATE (gal. per min.)
15

METHOD USED TO MEASURE PUMPING RATE
Rack

TYPE OF PUMP USED (for test)
Jet

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND FOR LANDMARKS AND Indicate NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

Date Received (APA)
6 12 02

OWNER INFORMATION
Kircegaard, Leslie
6 00 13
Last Name
First Name
34
11297 Windsor Court
Street or RFD
55
Ijamsville, MD 21754
Town
State
Zip
70
72
76

DRILLER INFORMATION
Robert L. Cline
Driller's Name
M WD 139
License No.
81
Cline & Duvall, Inc.
Firm Name
8093 Hillmark Court, Frederick, MD 21704
Address
Robert L. Cline
Signature
6 12 02

WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.)
10
9000

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
INDUSTRIAL, COMMERCIAL, DEWATERING
PUBLIC WATER SUPPLY WELL
TEST, OBSERVATION, MONITORING
GEO- THERMAL

APPROXIMATE DEPTH OF WELL
250 FEET

APPROXIMATE DIAMETER OF WELL
6 INCH

METHOD OF DRILLING (circle one)
BORED or Augered
JETTED
Jetted & DRIVEN
AIR ROTARY
AIR- PERCUSSION
ROTARY (Hydraulic Rotary)
CABLE REVERSE ROTARY
other

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)
IN
THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
S
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D
THIS WELL WILL DEEPEN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

FREDDERICK
COUNTY NAME
02-258
COUNTY NO.

DATE ISSUED
9-30-02
EXP. DATE
9-30-03

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 700
000
000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

Not to be filled in by driller (MDE or COUNTY USE ONLY)

APPROB. PERMIT NUMBER
F9-94-3303

PERMIT NO.
STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

STOCK/USE ONLY
DATE RECEIVED
AUG 03
DATE WELL COMPLETED
AUG 03
DEPHT OF WELL
300

OWNER
Herbert C. Kirkegaard
STREET OR RPD
1297 Windsor Court
TOWN
TANZA
COUNTY
HAR

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET FROM</th>
<th>TO</th>
<th>CHECK if water bearing</th>
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</thead>
<tbody>
<tr>
<td>Brown Shale</td>
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<td>32 300</td>
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WATER AT
70 - 118

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACED
Y

CIRCLE APPROPRIATE LETTER
A

ELECTRIC LOG OBTAINED
Y

TEST WELL CONVERTED TO PRODUCTION WELL
Y

GROUTING RECORD
WELL HAS BEEN GROUTED
(Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
Cement
METHOD TO MEASURE PUMPING RATE
TIME

GALLONS OF WATER
66

NO. OF BAGS
11

NO. OF POUNDS
84

DEPTH OF GROUT SEAL (to nearest foot)
3

from top to bottom

METHOD TO MEASURE PUMPING RATE
TIME

WATER LEVEL (distance from land surface)
16 ft.

WHEN PUMPING
300 ft.

PUMPING TEST
HOURS PUMPED (nearest hour)
1

PUMPING RATE (gal. per min.)
12

PUMP HORSE POWER
37

PUMP COLUMN LENGTH (nearest ft.)
43

CAPACITY
GALLONS PER MINUTE
31

TO NEAREST GALLON
35

PUMP INSTALLED
(CIRCLE) (YES or No)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED
A C, J, P, R, S, T, O

CAPACITY
GALLONS PER MINUTE
31

TO NEAREST GALLON
35

PUMP HORSE POWER
37

PUMP COLUMN LENGTH (nearest ft.)
43

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS
BUILDING, SEPTIC TANKS, AND / OR
LANDMARKS AND INDICATE NOT LESS
THAN TWO DISTANCES
(MEASUREMENTS TO WELL)

USING PLOT OF ENVIRONMENT, 2009 GROENING HIGHWAY, BALTIMORE, MARYLAND 21224.
Date Received (APA): 11/12/02

Owner Information

Mountain View Community Church
53 E. Patrick Street
Frederick, MD 21701

DRILLER INFORMATION

Robert L. Cline
Cline & Duvall, Inc.
8093 Hillmark Ct., Frederick, MD 21704

B 2 WELL INFORMATION

APPROX. PUMPING RATE
(GAL. PER MIN.)

AVERAGE DAILY QUANTITY NEEDED
(GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)

D DOMESTIC POTABLE SUPPLY & RESIDENTIAL
F FARMING LIVESTOCK WATERING & AGRICULTURAL
IRRGATION

METHOD OF DRILLING (circle one)

30 BORED (or Augered)
37 CABLE
36 JETTED

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)

N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE
ABANDONED AND SEAL
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED
AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY
FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEN AN EXISTING WELL

NOT TO BE FILLED IN BY DRILLER

NOT TO BE FILLED IN BY DRILLER

PERMIT NUMBER

APPROPRIATE PERMIT NUMBER
FR 20 02 03 22

SPECIAL CONDITIONS

CHANGING STATUS FROM TEST TO OPERATIONAL
# STATE OF MARYLAND

## WELL COMPLETION REPORT

**STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING**

<table>
<thead>
<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET</th>
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<tbody>
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<td>Blue Slate</td>
<td>52 125</td>
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</tbody>
</table>

**WELL LOG**

**WELL HAS BEEN GROUTED (Circle Appropriate Box)**

- Ciment: Y
- Bentonite Clay: N

**TYPE OF GROUTING MATERIAL (Circle one)**

- Ciment
- Bentonite Clay

**NO. OF BAGS**: 28

**NO. OF POUNDS**: 68

**GALLONS OF WATER**: 168

**DEPTH OF GROUT SEAL** (to nearest foot)

- Top: 8 ft.
- Bottom: 64 ft.

**TOTAL DEPTH OF MAIN CASING** (to nearest foot)

- 64 ft.

**CASING RECORD**

- Material: Steel
- Diameter: 6 in.
- Type: CO

**MAIN CASING TYPE**: ST

**WATER AT**: 117 ft.

**NUMBER OF UNSUCCESSFUL WELLS**: Y

**WELL HYDROFRACUTED**: Y

**CIRCLE APPROPRIATE LETTER**

- A: A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

**ELECTRIC LOG OBTAINED**: Y

**TEST WELL CONVERTED TO PRODUCTION WELL**

**I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 “WELL CONSTRUCTION” AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAUTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.**

**DRILLERS LIC. NO.**: MD 139

**DRILLERS SIGNATURE**

- Robert Cline

**MDE USE ONLY** (NOT TO BE FILLED IN BY DRILLER)

- T (E.R.O.S.)
- W Q

---

## PUMPING TEST

**HOURS PUMPED (nearest hour)**: 9

**PUMPING RATE (gal. per min.)**: 30

**METHOD USED TO MEASURE PUMPING RATE**

- TIME

**WATER LEVEL (distance from land surface)**

- Before Pumping: 72 ft.
- When Pumping: 125 ft.

**TYPE OF PUMP USED** (for test)

- Air plunger
- Centrifugal

**SUBMERSIBLE**

**PUMP INSTALLED**

- Driller Installed Pump (Circle) (YES or NO)

**IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.**

**TYPE OF PUMP INSTALLED**: A/C, J/P, R/S, T/O


**CAPACITY**: 31 gal.

**PUMP HORSE POWER**: 37

**PUMP COLUMN LENGTH** (nearest ft.)

**CASING HEIGHT**

- Above Land Surface: 49 ft.
- Below Land Surface: 50 ft.

**LOCATION OF WELL ON LOT**

- Show Permanent Structure Such As Building, Septic Tanks, And / Or Landmarks And Indicate Not Less Than Two Distances (Measurements To Well)
APPLICATION FOR PERMIT TO DRILL WELL
STATE OF MARYLAND

STATE PERMIT NUMBER
PR - 94 - 3553

Date Received (APA)
04/16/03

OWNER INFORMATION

First Name
James
Last Name
Coffey Jr.

Street or RFD
9361 Fingerson Rd.

Town
Frederick

County
Frederick

Subdivision

Section

Lot

Nearest Town

Miles from Town (enter 0 if in town)
1

方向
Near What Road
Fingerson Rd.

On Which Side of Road

Distance from Road

TAX MAP

Blk
96

Parcel
Parcels

USE FOR WATER (CIRCLE APPROPRIATE BOX)

0) Domestic Potable Supply & Residential Irrigation
1) Farming (Livestock Watering & Agricultural Irrigation
2) Industrial, Commercial, Dewatering
3) Public Water Supply Well
4) Test, Observation, Monitoring
5) Geo-Thermal

APPROXIMATE DEPTH OF WELL
260 feet

APPROXIMATE DIAMETER OF WELL
6 inches

METHOD OF DRILLING (circle one)
30 Bored (or Augered)
37 Cased
38 Drilled & Driven
39 Jetted
40 Air-Perussion
41 Rotary (Hydraulic Rotary)
42 Reverse-Rotary

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)
31 This well will not replace an existing well
32 This well will replace a well that will be abandoned and sealed
33 This well will replace a well that will be used as a standby - contact local approving authority for policy on standby wells
34 This well will deepen an existing well

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

WRITE THE BOX NUMBER FROM THE MAP HERE

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

NOT TO BE FILLED IN BY DRILLER

COUNTY NAME
Frederick

COUNTY NO
03-28

DATE ISSUED
04/16/03

SIGNATURE
Date
10-31-03

SIGNATURE

EXP. DATE

GRID
5410 0 0 0
55 0 0

PERMIT No
PR - 94 - 3553

SPECIAL CONDITIONS
**EMERGENCY/TEMP NO. IF ANY**

**STATE OF MARYLAND**

APPLICATION FOR PERMIT TO DRILL WELL

**STATE PERMIT NUMBER**

<table>
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<tr>
<th>B 1</th>
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**Date Received (APA)**

1/1/04

**OWNER INFORMATION**

15 First Name

Urbana Intermountain Partners

P.O. Box 59830

Potomac, MD 20859-9830

**DRILLER INFORMATION**

13 Last Name

Joseph T. Mayne

22 Street or RFD

157 5512 Ridge Road

55, 57 21771

**WELL INFORMATION**

8 Approx. Pumping Rate

6 8 12

500

**USE FOR WATER**

(Click appropriate box)

- D Domestic Potable Supply & Residential Irrigation
- F Farming (Livestock Watering & Agricultural Irrigation)
- I Industrial, Commercial, Dewatering
- P Public Water Supply Well
- T Test, Observation, Monitoring
- G Geothermal

**APPROXIMATE DEPTH OF WELL**

280

282

30

24

**METHOD OF DRILLING** (circle one)

- JETTED
- Jetted & Driven
- AIR-Percussion
- ROTARY (Hydraulic Rotary)
- REVERSE-ROTARY
- DRIVE-POINT

**REPLACEMENT OR DEEPENED WELLS**

(Click appropriate box)

- Y This well will not replace an existing well
- S This well will replace a well that will be abandoned and sealed
- Y This well will replace a well that will be used as a standby-contact local approving authority for policy on standby wells
- D This well will deepen an existing well

**PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)**

41

52

Not to be filled in by driller (MDE or County Use Only)

**APPROPRIATE PERMIT NUMBER**

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B 4

**NOT TO BE FILLED IN BY DRILLER**

- Health Department Approval

**COUNTY NAME**

FREDERICK

**DATE ISSUED**

1/1/04

**STATION SIGNATURE**

**EXP. DATE**

7/31/04

**DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION**

**ADDRESS**

5512 Ridge Road

**TOWN**

**LOT**

**NEAREST TOWN**

**CITY**

URBANA

**WELL NUMBER**

2

**NEAREST ROAD**

**DISTANCE FROM ROAD**

1 M 1 F

**TAX MAP**

96

**BLK**

232

**PARCEL**

232
THE PROPERTY DESCRIBED ABOVE HAS BEEN INSPECTED AND THE WELL SITE APPROVED AS SHOWN.

Date of Approval:

Sanitarian:

Date:

GRID:

North Grid 547 East Grid 0698

Terms:
STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

STATE PERMIT NUMBER
FA-94-3976

Date Received (APA)
11/5/84

OWNER INFORMATION
Urbania-Atchachew Partnership
P.O. Box 595-30
Sokorne
MD 20889-9830

Subdivision

Driller Information
Joseph E. Mayne
MS DO 24

WELL INFORMATION
Approx. Pumping Rate (gal. per min.)
6

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)
500

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
O INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
G GEO- THERMAL

METHOD OF DRILLING (circle one)
JETTED

REPLACE OR DEEPENEWELL (CIRCLE APPROPRIATE BOX)

OTHER

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
THIS WELL WILL DEEPEN AN EXISTING WELL
PERMIT NUMBER OF WELLS TO BE REPLACED OR DEEPENED (IF AVAILABLE)

Not to be filled in by driller (MDE or COUNTY USE ONLY)
APPROPRIATE PERMIT NUMBER
22223

PERMIT NUMBER
PR-94-3976

SPECIAL CONDITIONS
"Note: field 31 through 36 should to separate sheet if needed -"
Driller: MAPPE

Mail permit to: Driller Applicant

Country Well Permit No. 03-3

FREDERICK COUNTY HEALTH DEPARTMENT: WELL PERMIT

Applicant or Owner: Ultratrad Mark, 11C

Phone No.: 301-980-8436

Mailing Address: P.O. Box 59830, Potomac, MD 20859-9830

Street Address of Property: Intersection of Route 20 and Thorton Rd

Subdivision: M 27 12 Section or Block: Lot

Acreage or square feet: 28 ACES Tax Map: 96 Parcel: 232

Type of water supply now: NONE

Well to furnish water to: Home Farm Private water Company Public or Commercial Well Test Heat Pump

This application is made with the understanding that the well will be drilled only at the place designated by the Health Department and a shown in the sketch below. A completion certificate of this well must be filed by the driller at the Health Department within forty-five (45) days after completion of drilling. All drilling operations will be carried out in accordance with regulations of the Maryland Department of the Environment. Drilling at any other location, other than shown on sketch, VOIDS this approval certificate.

Signature of Applicant: Owner: WELL DRILLER: Agent:

TO BE COMPLETED BY HEALTH DEPARTMENT

WELL 

TAXED FROM SURVEYORS PLAT

The property described above has been inspected and the well site approved as shown.

VOIL

After this Date 4-20-04
**Owner Information**

- **Owner Name:** Exxon Mobil Corporation
- **Address:** Bille Fingerboard Rd., Frederick, MD 21704

**Driller Information**

- **Driller's Name:** Robert Tingly
- **License No.:** MD 026
- **Address:** Box 1558, Charlottesville, VA 22906

**Well Information**

- **Approx. Pumping Rate:** 8 gpm
- **Average Daily Quantity Needed:** 20 gpd

**Use for Water**

- **D Domestic Potable Supply & Residential Irrigation
- **F Farming LIVestock WAtering & AGRiculTural Irrigation
- **I Industrial, Commercial, DeWATERing
- **P Public Water Supply Well
- **G Geo-Thermal

**Approximate Depth of Well:** 30 feet

**Approximate Diameter of Well:** 2 inches

**Method of Drilling:** Jetted & Driven

**Replacement or Deepened Wells:**

- **X This Well Will Not Replace an Existing Well
- **Y This Well Will Replace a Well That Will Be Abandoned and Sealed
- **S This Well Will Replace a Well That Will Be Used as a Standby
- **D This Well Will Deepen an Existing Well

**Permit Number:** FM-94-4734
EMERGENCY/TEMP NO. IF ANY

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

Date Received (APA) 6-30-05

Owner Information
Exxon Mobil Corporation

Owner Information

Last Name Owner First Name 34
Exxon Mobil Corporation

8816 Fingersboard Rd

Frederick MD 21704

Town State Zip

Frederick

County

Frederick

Subdivision

Section

Lot

Miles From Town (enter 0 if in town)

8 21

42

44 46 48 50

73 76 77 78

Direction of Well from Town (Circle Box)

Box 6538, Ellicottville, MD 23406

Certified Environmental Drilling

Address

Robert Tingley

Signature

Driller's Name

Robert Tingley

License No.

81

76

W

N

S

E

30

37

135

15

166

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRIGATION

FARMING LIVESTOCK WATERRING & AGRICULTURAL IRIGATION

INDUSTRIAL, COMMERCIAL, DEWATERING

PUBLIC WATER SUPPLY WELL

TEST, OBSERVATION, MONITORING

GEO- THERMAL

Approximate Depth of Well

30 50 feet

Approximate Diameter of Well

2 29 inch

Method of Drilling (circle one)

BORED (or Augered)

JETTED

Jetted & Driven

AIR-PERCUSION ROTARY

REVERSE-ROTARY

OTHER

Replacemen or Deepened Wells

(Circle appropriate box)

N

Y

S

D

This Well Will Not Replace an Existing Well

This Well Will Replace a Well That Will Be Abandoned and Sealed

This Well Will Replace a Well That Will Be Used As a Standby-Contact Local Approving Authority For Policy on Standby Wells

This Well Will Deepen an Existing Well

Permit Number of Well to Be Replacemen or Deepened (If Available) 41

Not to be filled in by driller (MDE or County Use Only)

Approp. Permit Number

FR-94-4235

Permit No.

FR-94-4235

Special Conditions

Not to be filled in by driller (MDE or County Use Only)

TAX MAP 96 BLK 15 PARCEL 166

NOT TO BE FILLED IN BY DRILLER

HEALTH DEPARTMENT APPROVAL

FRIDAY 2-29-98

COUNTY NAME

FRIDAY

COUNTY NO.

DATE ISSUED

7-5-06 Daniel Sullivan 1-31-06

EXP. DATE

NORTH GRID EAST GRID

Show major features of box & locate well with an X Sources of Drilling Water

1. None

2.

3.

Write the box number from the map here

E 700000

000 000

N 543000

000 000

Draw a sketch below showing location of well in relation to nearby towns and roads and give distance from well to nearest road junction

-
**WELL LOG**

<table>
<thead>
<tr>
<th>STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESCRIPTION (Use additional sheets if needed)</td>
</tr>
<tr>
<td>Clay</td>
</tr>
<tr>
<td>Soft Clay</td>
</tr>
<tr>
<td>Soft Clay</td>
</tr>
<tr>
<td>Soft Clay</td>
</tr>
</tbody>
</table>

**GROUTING RECORD**

- WELL HAS BEEN GROUTED: Y (Circle Appropriate Box)
- TYPE OF GROUTING MATERIAL: CM (Cement)
- NO. OF BAGS: 3
- GALLONS OF WATER: 21
- DEPTH OF GROUT SEAL (to nearest foot): 48 ft
- WATER FROM SURFACE: 40 ft

**CASING RECORD**

- WELL WAS: ST (Steel)
- MATERIAL: BC (Bentonite Clay)
- NO. OF POUNDS: 49
- Depth of main casing (nearest foot): 60 ft
- Nominal diameter top (main casing): 60 in
- Main casing type: PL (Plastic)

**SCREEN RECORD**

- SCREEN MATERIAL: ST (Steel)
- Slot size: 2
- Diameter of screen: 3
- Depth of screen: 25 ft
- Location of screen: 45 ft

**PUMP INSTALLED**

- DRILLER WILL INSTALL PUMP: YES
  - TYPE OF PUMP: T (Turbine)
- PUMP HORSE POWER: 
- CAPACITY: 
- PUMP COLUMN LENGTH: 
- Casing Height (circle appropriate box and enter casing height): 
- Land Surface (nearest foot): 

**LOCATION OF WELL ON LOT**

- SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL):

- SITE SUPERVISOR: 
- DATE: 
- SCALE: 
- UNIT: 
- COORDINATES: 

**PERMIT NO.**

- FROM "PERMIT TO DRILL WELL"
- PERM-94-4725

**ST/CO USE ONLY**

- DATE Received: 8/5/94
- DATE WELL COMPLETED: 8/5/94

**SEQUANCE NO.**

- (DENR USE ONLY) 8669

**STATE OF MARYLAND**

- WELL COMPLETION REPORT
- FILL IN THIS FORM COMPLETELY
- PLEASE PRINT OR TYPE

**COUNTY NUMBER**

- PERMIT NO.
- FROM "PERMIT TO DRILL WELL"

**OWNER**

- ELYOU MOBIL CORP

**STREET OR RFD**

- 986 FINGERBAND RD

**SECTION**

- LOT

**PUMPING TEST**

- HOURS PUMPED (nearest hour): 8
- PUMPING RATE (gal. per min., to nearest gal.): 1
- METHOD USED TO MEASURE PUMPING RATE: 
- WATER LEVEL (distance from land surface): 
- BEFORE PUMPING: 
- WHEN PUMPING: 

**ELECTRIC LOG OBTAINED**

- TEST WELL CONVERTED TO PRODUCTION WELL

**DRILLER'S SIGNATURE**

- MUST MATCH SIGNATURE ON APPLICATION

**CIRCLE APPROPRIATE LETTER**

- A: A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E: ELECTRIC LOG OBTAINED
- P: TEST WELL CONVERTED TO PRODUCTION WELL

**HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 29.04.04 "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.

**DRILLER'S RESIDENT NO.**

- MCO 262

**PERM-94-4725**

- T (E.R.O.S.)
- W O 74 75 76

**TANK FIELD**

- MW 2

**Canyon**
EMERGENCY TEMP NO. IF ANY

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

STATE PERMIT NUMBER

Date Received (APA)
6-30-05

OWNER INFORMATION
Exxon Mobil Corporation
8016 Fingebord Rd.
Frederick MD 21701

DRILLER INFORMATION
Robert Tingley
10 Box 538, Charlesville, VA 22926

WELL INFORMATION
APPROX. PUMPING RATE
(12 GALLONS PER MIN.)

APPROXIMATE DEPTH OF WELL
(28 FEET)

APPROXIMATE DIAMETER OF WELL
(2 INCH)

METHOD OF DRILLING (circle one)
JETTED
ROTARY (Hydraulic Rotary)

OTHER

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)
THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

Not to be filled in by driller (MDE or COUNTY USE ONLY)

APPROPRIATE PERMIT NUMBER

SPECIAL CONDITIONS

NOT TO BE FILLED IN BY DRILLER

HEALTH DEPARTMENT APPROVAL

COUNTY NAME
FREDERICK

STATE SIGNATURE

DATE ISSUED
7-5-05

CO SIGNATURE

EXP. DATE

TAX MAP: 96 BLK: 15 PARCEL 16

SOURCE OF DRILLING WATER

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

DRAWS A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

APPROPRIATE PERMIT NUMBER
FA-94-4736
**APPLICATION FOR PERMIT TO DRILL WELL**

**Owner Information**
- **Owner:** Exxon Mobil Corporation
- **Last Name:** Mobily
- **First Name:** Business
- **Address:** 8816 Fingerboard Rd., Frederick, MD 21704

**Driller Information**
- **Driller's Name:** Robert Tingley
- **Firm Name:** Certified Environmental Drilling, PO Box 6598, Charlottesville, VA 22906
- **Address:** Robert C. Tingley

**WELL INFORMATION**
- **Approx. Pumping Rate (Gal. Per Min.):** N/A
- **Average Daily Quantity Needed (Gal. Per Day):** N/A

**USE FOR WATER**
- **D Domestic Potable Supply & Residential Irrigation**
- **F Farming (Livestock Watering & Agricultural Irrigation)**
- **I Industrial, Commercial, Dewatering**
- **P Public Water Supply Well**
- **G Test, Observation, Monitoring**
- **GEO-THERMAL**

**METHOD OF DRILLING**
- **Jetted & Driven**

**RELAPLACEMENT OR DEEPENED WELLS**
- **THIS WELL WILL NOT REPLACE AN EXISTING WELL**
- **THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED**
- **THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS**
- **THIS WELL WILL DEEPEN AN EXISTING WELL**

**PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE):**

**SIGNATURES**
- **Owner:** N/A
- **Driller:** N/A

**LOCATION OF WELL**
- **COUNTY:** Frederick
- **SUBDIVISION:** W-4
- **LOT:** 48
- **NEAREST TOWN:** Frederick
- **MILES FROM TOWN:** N/A

**USE FOR WATER (CIRCLE APPROPRIATE BOX)**
- **D Domestic Potable Supply & Residential Irrigation**
- **F Farming (Livestock Watering & Agricultural Irrigation)**
- **I Industrial, Commercial, Dewatering**
- **P Public Water Supply Well**
- **G Test, Observation, Monitoring**
- **GEO-THERMAL**

**APPROXIMATE DEPTH OF WELL:** 30 FEET

**APPROXIMATE DIAMETER OF WELL:** 0 INCH

**SHOW MAJOR FEATURES OF BOX & LOCATE WELL 'X' WITH AN 'X'**
- **Sources of Drilling Water:**
  1. **NONE**
  2. **NONE**
  3. **NONE**

**DATE ISSUED:** 7/5/2005
- **CO SIGNATURE:** Daniel C. Heßled, 13/06

**DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION**

**SPECIAL CONDITIONS**
- **Not to be filled in by driller (MDE or COUNTY USE ONLY):**

**APPROPRIATE PERMIT NUMBER:**
- **FR-94-4737**

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**
- **COUNTY NO.:** 5-229
- **DATE ISSUED:** 7/5/2005
- **CO SIGNATURE:** Daniel C. Heßled, 13/06
- **NORTH GRID:** 544 0.00
- **EAST GRID:** 0699 0.00

**PERMIT NUMBER:**
- **FR-94-4737**

**STATE PERMIT NUMBER:**
- **FR-94-4737**
**WELL COMPLETION REPORT**

FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

<table>
<thead>
<tr>
<th>ST/CO USE ONLY DATE RECEIVED</th>
<th>DATE WELL COMPLETED</th>
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<tr>
<td>12/06/15</td>
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<table>
<thead>
<tr>
<th>DEPTH OF WELL</th>
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<tr>
<td>8 ft.</td>
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<table>
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<tr>
<td>FA-R-4-72117</td>
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**OWNER**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Town</th>
</tr>
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<tbody>
<tr>
<td>Palow Mobil Corp</td>
<td>3816 Fierenden Ave</td>
<td>Urbana</td>
</tr>
</tbody>
</table>

**SECTION**

<table>
<thead>
<tr>
<th>LOT</th>
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**WELL LOG**

Not required for driven wells

**STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING**

<table>
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<tr>
<th>DESCRIPTION (Use additional sheets if needed)</th>
<th>FEET</th>
<th>Check if water bearing</th>
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<tr>
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<table>
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<th>CASING TYPE</th>
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<td>PL</td>
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<th>NOMINAL DIAMETER (NEAREST INCH)</th>
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<td>60</td>
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<table>
<thead>
<tr>
<th>DEPTH (NEAREST FT.)</th>
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<tbody>
<tr>
<td>20</td>
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<table>
<thead>
<tr>
<th>SCREEN RECORD</th>
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</thead>
<tbody>
<tr>
<td></td>
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</table>

| SCREEN TYPE 
<table>
<thead>
<tr>
<th>or open hole</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

| CAPACITY:
GALLONS PER MINUTE (TO NEAREST GALLON) |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>PUMP HORSE POWER</th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PUMP COLUMN LENGTH (NEAREST FT.)</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**LOCATION OF WELL ON LOT**

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

[Diagram of location with annotations]
ATTACHMENT 2

Photo Log
Attachment 2 – Photo Log
3318 Fingerboard Road, Frederick, MD
Inactive Wells

Disconnected supply well power
8995A Urbana Church Road

Inactive/disconnected supply well –
8995B Urbana Church Road
ATTACHMENT 3

Analytical Laboratory Reports
## SAMPLE INFORMATION

<table>
<thead>
<tr>
<th>Client Sample Description</th>
<th>Sample Collection</th>
<th>ELLE#</th>
</tr>
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<tbody>
<tr>
<td>3528 Up Grab Water</td>
<td>02/28/2019 16:05</td>
<td>9996474</td>
</tr>
<tr>
<td>3526 Up Grab Water</td>
<td>02/28/2019 16:25</td>
<td>9996475</td>
</tr>
<tr>
<td>8994 UCR Grab Water</td>
<td>02/28/2019 16:55</td>
<td>9996476</td>
</tr>
</tbody>
</table>

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.
Sample Description: 3528 Up Grab Water
Southside Oil 26463

Project Name: Southside Oil 26463

Submittal Date/Time: 03/01/2019 16:55
Collection Date/Time: 02/28/2019 16:05

<table>
<thead>
<tr>
<th>CAT No.</th>
<th>Analysis Name</th>
<th>CAS Number</th>
<th>Result</th>
<th>Limit of Quantitation</th>
<th>Dilution Factor</th>
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<tbody>
<tr>
<td>GC/MS Volatiles</td>
<td>EPA 524.2</td>
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<tr>
<td>03648</td>
<td>Acetone</td>
<td>67-64-1</td>
<td>&lt; 5.0</td>
<td>5.0</td>
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<tr>
<td>03648</td>
<td>Acrolein</td>
<td>107-02-8</td>
<td>&lt; 50</td>
<td>50</td>
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<tr>
<td>03648</td>
<td>Acrylonitrile</td>
<td>107-13-1</td>
<td>&lt; 10</td>
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<td>03648</td>
<td>t-Amyl Methyl Ether</td>
<td>994-05-8</td>
<td>&lt; 0.5</td>
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<tr>
<td>03648</td>
<td>Benzene</td>
<td>71-43-2</td>
<td>&lt; 0.5</td>
<td>0.5</td>
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<tr>
<td>03648</td>
<td>Bromodichloromethane</td>
<td>75-27-4</td>
<td>&lt; 0.5</td>
<td>0.5</td>
<td>1</td>
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<tr>
<td>03648</td>
<td>Bromof orm</td>
<td>75-25-2</td>
<td>&lt; 0.5</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>03648</td>
<td>Bromomethane</td>
<td>74-83-9</td>
<td>&lt; 0.5</td>
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<tr>
<td>03648</td>
<td>2-Butanone</td>
<td>78-93-3</td>
<td>&lt; 5.0</td>
<td>5.0</td>
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<tr>
<td>03648</td>
<td>t-Butyl Alcohol</td>
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<td>&lt; 25</td>
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<tr>
<td>03648</td>
<td>n-Butylbenzene</td>
<td>104-51-8</td>
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<td>03648</td>
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<tr>
<td>03648</td>
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<tr>
<td>03648</td>
<td>Carbon Tetrachloride</td>
<td>56-23-5</td>
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<td>Chloroethane</td>
<td>75-00-3</td>
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<tr>
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<td>03648</td>
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<td>03648</td>
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<td>1</td>
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<tr>
<td>03648</td>
<td>1,2-Dichloropropane</td>
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<td>0.5</td>
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<td>cis-1,3-Dichloropropene</td>
<td>10061-01-5</td>
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Sample Description: 3528 Up Grab Water Southside Oil 26463
Project Name: Southside Oil 26463

Submittal Date/Time: 03/01/2019 16:55
Collection Date/Time: 02/28/2019 16:05

Sample Comments
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Sample Analysis Record

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<th>CAT No.</th>
<th>Analysis Name</th>
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<th>Trial#</th>
<th>Batch#</th>
<th>Analysis Date and Time</th>
<th>Analyst</th>
<th>Dilution Factor</th>
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### Analysis Report

**Sample Description:** 3526 Up Grab Water  
**Project Name:** Southside Oil 26463  
**Collection Date/Time:** 02/28/2019 16:25  
**Submittal Date/Time:** 03/01/2019 16:55  
**Matrix:** Water  

#### GC/MS Volatiles

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<th>Result</th>
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<th>Dilution Factor</th>
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Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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<th>CAT No.</th>
<th>Analysis Name</th>
<th>Method</th>
<th>Trial#</th>
<th>Batch#</th>
<th>Analysis Date and Time</th>
<th>Analyst</th>
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## Analysis Report

**Sample Description:** 8994 UCR Grab Water  
**Project Name:** Southside Oil 26463  
**Collection Date/Time:** 02/28/2019 16:55  
**Submittal Date/Time:** 03/01/2019 16:55

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Sample Description: 8994 UCR Grab Water
Southside Oil 26463

Project Name: Southside Oil 26463

Submittal Date/Time: 03/01/2019 16:55
Collection Date/Time: 02/28/2019 16:55

Sample Comments
Trip blank vials were not received by the laboratory for this sample group.

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<tr>
<th>CAT No.</th>
<th>Analysis Name</th>
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<th>Trial#</th>
<th>Batch#</th>
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Quality Control Summary

Client Name: Kleinfelder
Reported: 03/11/2019 10:37

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

<table>
<thead>
<tr>
<th>Analysis Name</th>
<th>Result ug/l</th>
<th>LOQ ug/l</th>
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<td>Batch number: K190661AA</td>
<td>Sample number(s): 9996474-9996476</td>
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<tr>
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<td>Bromoform</td>
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<td>Bromomethane</td>
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<td>2-Butanone</td>
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<tr>
<td>tert-Butylbenzene</td>
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* - Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
## Quality Control Summary

Client Name: Kleinfelder
Reported: 03/11/2019 10:37

### Method Blank (continued)

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* Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
### LCS/LCSD (continued)

<table>
<thead>
<tr>
<th>Analysis Name</th>
<th>LCS Spike Added ug/l</th>
<th>LCS Conc ug/l</th>
<th>LCSD Spike Added ug/l</th>
<th>LCSD Conc ug/l</th>
<th>LCS %REC</th>
<th>LCSD %REC</th>
<th>LCS/LCSD Limits</th>
<th>RPD</th>
<th>RPD Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1-Dichloroethene</td>
<td>5.00</td>
<td>5.64</td>
<td></td>
<td></td>
<td>113</td>
<td>70-130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cis-1,2-Dichloroethene</td>
<td>5.00</td>
<td>5.65</td>
<td></td>
<td></td>
<td>113</td>
<td>70-130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trans-1,2-Dichloroethene</td>
<td>5.00</td>
<td>5.49</td>
<td></td>
<td></td>
<td>110</td>
<td>70-130</td>
<td></td>
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<tr>
<td>1,2-Dichloropropane</td>
<td>5.00</td>
<td>5.91</td>
<td></td>
<td></td>
<td>118</td>
<td>70-130</td>
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</tr>
<tr>
<td>cis-1,3-Dichloropropene</td>
<td>5.00</td>
<td>5.25</td>
<td></td>
<td></td>
<td>105</td>
<td>70-130</td>
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<tr>
<td>trans-1,3-Dichloropropene</td>
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<td>5.32</td>
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<td>70-130</td>
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<tr>
<td>Ethyl tert-Butyl Ether</td>
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<td>5.10</td>
<td></td>
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<td>102</td>
<td>70-130</td>
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<td>Ethylbenzene</td>
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<td>di-Isopropyl Ether</td>
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<td></td>
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<td>104</td>
<td>70-130</td>
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<tr>
<td>Isopropylbenzene</td>
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<td>5.55</td>
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<td></td>
<td>111</td>
<td>70-130</td>
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<tr>
<td>p-Isopropyltoluene</td>
<td>5.00</td>
<td>6.03</td>
<td></td>
<td></td>
<td>121</td>
<td>70-130</td>
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<tr>
<td>Methyl Tertiary Butyl Ether</td>
<td>5.00</td>
<td>5.26</td>
<td></td>
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<td>105</td>
<td>70-130</td>
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<tr>
<td>Methylene Chloride</td>
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<td>5.63</td>
<td></td>
<td></td>
<td>113</td>
<td>70-130</td>
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<td>Naphthalene</td>
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<td>5.27</td>
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<td>105</td>
<td>70-130</td>
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<td>n-Propylbenzene</td>
<td>5.00</td>
<td>5.95</td>
<td></td>
<td></td>
<td>119</td>
<td>70-130</td>
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</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane</td>
<td>5.00</td>
<td>5.74</td>
<td></td>
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<tr>
<td>Tetrachloroethene</td>
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<td>4.42</td>
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<td>70-130</td>
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<td>Toluene</td>
<td>5.00</td>
<td>5.59</td>
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<tr>
<td>1,1,1-Trichloroethane</td>
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<td>5.40</td>
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<td></td>
<td>108</td>
<td>70-130</td>
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<tr>
<td>1,1,2-Trichloroethane</td>
<td>5.00</td>
<td>6.03</td>
<td></td>
<td></td>
<td>121</td>
<td>70-130</td>
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</tr>
<tr>
<td>Trichloroethene</td>
<td>5.00</td>
<td>5.67</td>
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<td></td>
<td>113</td>
<td>70-130</td>
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<tr>
<td>Trichlorofluoromethane</td>
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<td>2.02</td>
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<td>101</td>
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<tr>
<td>1,2,4-Trimethylbenzene</td>
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<td>5.78</td>
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<td>116</td>
<td>70-130</td>
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<tr>
<td>1,3,5-Trimethylbenzene</td>
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<td>5.83</td>
<td></td>
<td></td>
<td>117</td>
<td>70-130</td>
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<tr>
<td>Vinyl Chloride</td>
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<tr>
<td>Xylene (Total)</td>
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<td>17.06</td>
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<td>114</td>
<td>70-130</td>
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</tbody>
</table>

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

- **Analysis Name:** VOCs S24.2 Kleinfelder Full
- **Batch number:** K190661AA

<table>
<thead>
<tr>
<th>Analysis Name</th>
<th>LCS Spike Added ug/l</th>
<th>LCS Conc ug/l</th>
<th>LCSD Spike Added ug/l</th>
<th>LCSD Conc ug/l</th>
<th>LCS %REC</th>
<th>LCSD %REC</th>
<th>LCS/LCSD Limits</th>
<th>RPD</th>
<th>RPD Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Bromofluorobenzene</td>
<td>85</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-Dichlorobenzene-d4</td>
<td>86</td>
<td>98</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Blank</td>
<td>87</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS</td>
<td>95</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* - Outside of specification

1. The result for one or both determinations was less than five times the LOQ.
2. The unspiked result was more than four times the spike added.
Quality Control Summary

Client Name: Kleinfelder
Reported: 03/11/2019 10:37

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs 524.2 Kleinfelder Full
Batch number: K190661AA

Limits: 80-120 80-120

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
<table>
<thead>
<tr>
<th>Sample Identification</th>
<th>Date Collected</th>
<th>Time Collected</th>
<th>Grab</th>
<th>Composite</th>
<th>Total # of Containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-28 UP</td>
<td>2/28/15</td>
<td>16:05</td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>35-26 UP</td>
<td>2/28/15</td>
<td>16:25</td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>8114 UCR</td>
<td>2/28/15</td>
<td>16:55</td>
<td>x</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Turnaround Time Requested (TAT)**
- Normal
- Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

**Date results are needed:**

**Rush results requested by (please circle):**
- Phone
- Fax
- E-mail

**Phone #:** ________________________  **Fax #:** ________________________  **E-mail address:** ________________________

**Data Package Options** (please circle if required)
- Type I (validation/NJ reg) TX-TRRP-13
- Type II (Tier II) MA MCP CT RCP
- Type III (Reduced NJ) State-specific QC (MS/MSD/Dup)? Yes No
- Type IV (CLP SOW) (If yes, indicate QC sample and submit triplicate volume)
- Type VI (Raw Data Only) Internal COC required? Yes No

**Remarks:**

**Relinquished by:**
- Date: 3/19 16:55
- Time: 16:55
- Received by: Date: 3/19 16:55
- Time: 16:55

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425  717-666-2300

Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.
Sample Administration Receipt Documentation Log

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method: ELLE Courier  Arrival Timestamp: 03/01/2019 16:55
Number of Packages: 1  Number of Projects: 1
State/Province of Origin: MD

Arrival Condition Summary

Shipping Container Sealed: Yes | Sample IDs on COC match Containers: Yes
Custody Seal Present: Yes | Sample Date/Times match COC: Yes
Custody Seal Intact: Yes | VOA Vial Headspace ≥ 6mm: No
Samples Chilled: Yes | Total Trip Blank Qty: 0
Paperwork Enclosed: Yes | Air Quality Samples Present: No
Samples Intact: Yes
Missing Samples: No
Extra Samples: No
Discrepancy in Container Qty on COC: No

Unpacked by Melvin Sanchez (8943) at 20:12 on 03/01/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

<table>
<thead>
<tr>
<th>Cooler #</th>
<th>Thermometer ID</th>
<th>Corrected Temp</th>
<th>Therm. Type</th>
<th>Ice Type</th>
<th>Ice Present?</th>
<th>Ice Container</th>
<th>Elevated Temp?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DT146</td>
<td>1.8</td>
<td>DT</td>
<td>Wet</td>
<td>Y</td>
<td>Bagged</td>
<td>N</td>
</tr>
</tbody>
</table>

2425 New Holland Pike
Lancaster, PA 17605-2425
### Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMQL</td>
<td>Below Minimum Quantitation Level</td>
</tr>
<tr>
<td>C</td>
<td>degrees Celsius</td>
</tr>
<tr>
<td>cfu</td>
<td>colony forming units</td>
</tr>
<tr>
<td>CP Units</td>
<td>cobalt-chloroplatinate units</td>
</tr>
<tr>
<td>F</td>
<td>degrees Fahrenheit</td>
</tr>
<tr>
<td>g</td>
<td>gram(s)</td>
</tr>
<tr>
<td>IU</td>
<td>International Units</td>
</tr>
<tr>
<td>kg</td>
<td>kilogram(s)</td>
</tr>
<tr>
<td>L</td>
<td>liter(s)</td>
</tr>
<tr>
<td>lb.</td>
<td>pound(s)</td>
</tr>
<tr>
<td>m3</td>
<td>cubic meter(s)</td>
</tr>
<tr>
<td>meq</td>
<td>milliequivalents</td>
</tr>
<tr>
<td>mg</td>
<td>milligram(s)</td>
</tr>
<tr>
<td>mL</td>
<td>milliliter(s)</td>
</tr>
<tr>
<td>MPN</td>
<td>Most Probable Number</td>
</tr>
<tr>
<td>N.D.</td>
<td>non-detect</td>
</tr>
<tr>
<td>ng</td>
<td>nanogram(s)</td>
</tr>
<tr>
<td>NTU</td>
<td>nephelometric turbidity units</td>
</tr>
<tr>
<td>pg/L</td>
<td>picogram/liter</td>
</tr>
<tr>
<td>RL</td>
<td>Reporting Limit</td>
</tr>
<tr>
<td>TNTC</td>
<td>Too Numerous To Count</td>
</tr>
<tr>
<td>µg</td>
<td>microgram(s)</td>
</tr>
<tr>
<td>µL</td>
<td>microliter(s)</td>
</tr>
<tr>
<td>umhos/cm</td>
<td>micromhos/cm</td>
</tr>
<tr>
<td>MCL</td>
<td>Maximum Contamination Limit</td>
</tr>
</tbody>
</table>

- **ppm** parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
- **ppb** parts per billion

**Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.
## Data Qualifiers

<table>
<thead>
<tr>
<th>Qualifier</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>Result confirmed by reanalysis</td>
</tr>
<tr>
<td>D1</td>
<td>Indicates for dual column analyses that the result is reported from column 1</td>
</tr>
<tr>
<td>D2</td>
<td>Indicates for dual column analyses that the result is reported from column 2</td>
</tr>
<tr>
<td>E</td>
<td>Concentration exceeds the calibration range</td>
</tr>
<tr>
<td>K1</td>
<td>Initial Calibration Blank is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>K2</td>
<td>Continuing Calibration Blank is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>K3</td>
<td>Initial Calibration Verification is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>K4</td>
<td>Continuing Calibration Verification is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>J (or G, I, X)</td>
<td>Estimated value &gt;= the Method Detection Limit (MDL or DL) and &lt; the Limit of Quantitation (LOQ or RL)</td>
</tr>
<tr>
<td>P</td>
<td>Concentration difference between the primary and confirmation column &gt;40%. The lower result is reported.</td>
</tr>
<tr>
<td>P^</td>
<td>Concentration difference between the primary and confirmation column &gt; 40%. The higher result is reported.</td>
</tr>
<tr>
<td>U</td>
<td>Analyte was not detected at the value indicated</td>
</tr>
<tr>
<td>V</td>
<td>Concentration difference between the primary and confirmation column &gt;100%. The reporting limit is raised due to this disparity and evident interference.</td>
</tr>
<tr>
<td>W</td>
<td>The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.</td>
</tr>
<tr>
<td>Z</td>
<td>Laboratory Defined - see analysis report</td>
</tr>
</tbody>
</table>

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.
ANALYSIS REPORT

Prepared by:
Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:
Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

Report Date: March 19, 2019 15:31

Project: 07923998 8816 Fingerboard Road

Account #: 12153
Group Number: 2031958
PO Number: 20193752.001A
State of Sample Origin: MD

Electronic Copy To SUNOCO c/o Kleinfelder Attn: Venelda Williams
Electronic Copy To Sunoco c/o Kleinfelder Attn: Jennifer Kozak
Electronic Copy To Kleinfelder Attn: Mark Schaaf

Respectfully Submitted,

Megan A. Moeller
Senior Specialist

(717) 556-7261

To view our laboratory’s current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/. Historical copies may be requested through your project manager.
## SAMPLE INFORMATION

<table>
<thead>
<tr>
<th>Client Sample Description</th>
<th>Sample Collection Date/Time</th>
<th>ELLE#</th>
</tr>
</thead>
<tbody>
<tr>
<td>8826 UCR Grab Water</td>
<td>03/04/2019 14:45</td>
<td>1001070</td>
</tr>
</tbody>
</table>

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.
### Analysis Report

**Sample Description:** 8826 UCR Grab Water  
8819 Fingerboard Road, MD  
DUNS# 07923998

**Kleinfelder**  
ELLE Sample #: PW 1001070  
ELLE Group #: 2031958  
Matrix: Water

**Project Name:** 07923998 8816 Fingerboard Road

**Submittal Date/Time:** 03/05/2019 17:27  
**Collection Date/Time:** 03/04/2019 14:45

<table>
<thead>
<tr>
<th>CAT No.</th>
<th>Analysis Name</th>
<th>CAS Number</th>
<th>Result ug/l</th>
<th>Limit of Quantitation ug/l</th>
<th>Dilution Factor</th>
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</thead>
<tbody>
<tr>
<td>03648</td>
<td>Acetone</td>
<td>67-64-1</td>
<td>&lt; 5.0</td>
<td>5.0</td>
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<td>Acrolein</td>
<td>107-02-8</td>
<td>&lt; 50</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>03648</td>
<td>Acrylonitrile</td>
<td>107-13-1</td>
<td>&lt; 10</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>03648</td>
<td>t-Amyl Methyl Ether</td>
<td>994-05-8</td>
<td>&lt; 0.5</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>03648</td>
<td>Benzene</td>
<td>71-43-2</td>
<td>&lt; 0.5</td>
<td>0.5</td>
<td>1</td>
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Sample Description: 8826 UCR Grab Water
8819 Fingerboard Road, MD
DUNS# 07923998

Project Name: 07923998 8816 Fingerboard Road

Submittal Date/Time: 03/05/2019 17:27
Collection Date/Time: 03/04/2019 14:45

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<th>Analysis Name</th>
<th>CAS Number</th>
<th>Result</th>
<th>Limit of Quantitation</th>
<th>Dilution Factor</th>
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### Laboratory Sample Analysis Record

<table>
<thead>
<tr>
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<th>Analysis Name</th>
<th>Method</th>
<th>Trial#</th>
<th>Batch#</th>
<th>Analysis Date and Time</th>
<th>Analyst</th>
<th>Dilution Factor</th>
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<td>K190711AA</td>
<td>03/12/2019 20:55</td>
<td>Don V Viray</td>
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</table>
Quality Control Summary

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

<table>
<thead>
<tr>
<th>Analysis Name</th>
<th>Result ug/l</th>
<th>LOQ ug/l</th>
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<tr>
<td>Acrolein</td>
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<td>50</td>
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<tr>
<td>Acrylonitrile</td>
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<tr>
<td>t-Amyl Methyl Ether</td>
<td>&lt; 0.5</td>
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<tr>
<td>Benzene</td>
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</tr>
<tr>
<td>Bromodichloromethane</td>
<td>&lt; 0.5</td>
<td>0.5</td>
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<tr>
<td>Bromoform</td>
<td>&lt; 0.5</td>
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<td>Bromomethane</td>
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</tr>
<tr>
<td>2-Butanone</td>
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<td>5.0</td>
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<tr>
<td>t-Butyl Alcohol</td>
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<tr>
<td>n-Butylbenzene</td>
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<tr>
<td>sec-Butylbenzene</td>
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<tr>
<td>tert-Butylbenzene</td>
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<td>Methyl Tertiary Butyl Ether</td>
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<td>n-Propylbenzene</td>
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* Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
# is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.
### Quality Control Summary

Client Name: Kleinfelder  
Reported: 03/19/2019 15:31

#### Method Blank (continued)

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#### LCS/LCSD

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<td>105</td>
<td>70-130</td>
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<td>113</td>
<td>70-130</td>
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<td>Carbon Tetrachloride</td>
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<tr>
<td>1,2-Dichlorobenzene</td>
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<td>5.82</td>
<td></td>
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<td>116</td>
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<tr>
<td>1,3-Dichlorobenzene</td>
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<td>70-130</td>
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<tr>
<td>1,4-Dichlorobenzene</td>
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<td>5.85</td>
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</tr>
</tbody>
</table>

* Outside of specification  
(1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.  
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.
## Quality Control Summary

Client Name: Kleinfelder  
Reported: 03/19/2019 15:31

### LCS/LCSD (continued)

<table>
<thead>
<tr>
<th>Analysis Name</th>
<th>LCS Spike Added ug/l</th>
<th>LCS Conc ug/l</th>
<th>LCSD Spike Added ug/l</th>
<th>LCSD Conc ug/l</th>
<th>LCS %REC</th>
<th>LCSD %REC</th>
<th>LCSD Limits</th>
<th>RPD</th>
<th>RPD Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1-Dichloroethene</td>
<td>5.00</td>
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<tr>
<td>cis-1,1-Dichloroethene</td>
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<td>trans-1,2-Dichloroethene</td>
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<td>70-130</td>
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<td>1,2-Dichloropropene</td>
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<tr>
<td>trans-1,3-Dichloropropene</td>
<td>5.00</td>
<td>5.05</td>
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<td>Ethyl t-Butyl Ether</td>
<td>5.00</td>
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<td>Ethylene</td>
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<td>di-Isopropyl Ether</td>
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<td>p-Isopropyltoluene</td>
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<td>Methyl Tertiary Butyl Ether</td>
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<td>5.19</td>
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<td>70-130</td>
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<td>Methylene Chloride</td>
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<td>Naphthalene</td>
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<td>n-Propylbenzene</td>
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<td>Tetrachloroethylene</td>
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<td>70-130</td>
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<td>Toluene</td>
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<tr>
<td>Trichloroethylene</td>
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<td>70-130</td>
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<td>70-130</td>
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<td>Vinyl Chloride</td>
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<td>Xylene (Total)</td>
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<td>70-130</td>
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</tbody>
</table>

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

#### Analysis Name: VOCs 524.2 Kleinfelder Full  
Batch number: K190711AA

<table>
<thead>
<tr>
<th>Surrogate</th>
<th>4-Bromofluorobenzene ug/l</th>
<th>1,2-Dichlorobenzene-d4 ug/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001070</td>
<td>89</td>
<td>97</td>
</tr>
<tr>
<td>Blank</td>
<td>89</td>
<td>101</td>
</tr>
<tr>
<td>LCS</td>
<td>98</td>
<td>103</td>
</tr>
</tbody>
</table>

Limits: 80-120 80-120

* - Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.
<table>
<thead>
<tr>
<th>Sample Identification</th>
<th>Date Collected</th>
<th>Time Collected</th>
<th>Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>8826 ukl</td>
<td>3/4/19</td>
<td>1445</td>
<td>X</td>
</tr>
<tr>
<td></td>
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<td>X</td>
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<tr>
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</tbody>
</table>

**Turnaround Time Requested (TAT) (please circle):**
- Normal
- Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

**Rush results requested by (please circle):**
- Phone
- Fax
- E-mail

**Data Package Options (please circle if required):**
- Type I (validation/NJ reg) TX-TRRP-13
  - SDG Complete? Yes
- Type II (Tier II) MA MCP CT RCP
  - State-specific QC (MS/MSD/Dup)? Yes
- Type III (Reduced NJ)
- Type IV (CLP SOW)
  - Internal COC required? Yes
- Type VI (Raw Data Only)

**For Lab Use Only**

**Preservation Codes**
- For Lanc

**Remarks**
Sample Administration
Receipt Documentation Log

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method: ELLE Courier  Arrival Timestamp: 03/05/2019 17:27
Number of Packages: 2  Number of Projects: 2
State/Province of Origin: MD

Arrival Condition Summary

Shipping Container Sealed: Yes  Sample IDs on COC match Containers: Yes
Custody Seal Present: No  Sample Date/Times match COC: Yes
Samples Chilled: Yes  VOA Vial Headspace ≥ 6mm: No
Paperwork Enclosed: Yes  Total Trip Blank Qty: 0
Samples Intact: Yes  Air Quality Samples Present: No
Missing Samples: No  
Extra Samples: No  
Discrepancy in Container Qty on COC: No

Unpacked by Melvin Sanchez (8943) at 21:12 on 03/05/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle)  IR = Infrared (Surface Temp)  All Temperatures in °C.

<table>
<thead>
<tr>
<th>Cooler #</th>
<th>Thermometer ID</th>
<th>Corrected Temp</th>
<th>Therm. Type</th>
<th>Ice Type</th>
<th>Ice Present?</th>
<th>Ice Container</th>
<th>Elevated Temp?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DT131</td>
<td>3.4</td>
<td>DT</td>
<td>Wet</td>
<td>Y</td>
<td>Bagged</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>DT131</td>
<td>1.0</td>
<td>DT</td>
<td>Wet</td>
<td>Y</td>
<td>Bagged</td>
<td>N</td>
</tr>
</tbody>
</table>
The following defines common symbols and abbreviations used in reporting technical data:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMQL</td>
<td>Below Minimum Quantitation Level</td>
</tr>
<tr>
<td>C</td>
<td>degrees Celsius</td>
</tr>
<tr>
<td>cfu</td>
<td>colony forming units</td>
</tr>
<tr>
<td>CP Units</td>
<td>cobalt-chloroplatinate units</td>
</tr>
<tr>
<td>F</td>
<td>degrees Fahrenheit</td>
</tr>
<tr>
<td>g</td>
<td>gram(s)</td>
</tr>
<tr>
<td>IU</td>
<td>International Units</td>
</tr>
<tr>
<td>kg</td>
<td>kilogram(s)</td>
</tr>
<tr>
<td>L</td>
<td>liter(s)</td>
</tr>
<tr>
<td>lb.</td>
<td>pound(s)</td>
</tr>
<tr>
<td>m3</td>
<td>cubic meter(s)</td>
</tr>
<tr>
<td>meq</td>
<td>milliequivalents</td>
</tr>
<tr>
<td>mg</td>
<td>milligram(s)</td>
</tr>
<tr>
<td>mL</td>
<td>milliliter(s)</td>
</tr>
<tr>
<td>MPN</td>
<td>Most Probable Number</td>
</tr>
<tr>
<td>N.D.</td>
<td>non-detect</td>
</tr>
<tr>
<td>ng</td>
<td>nanogram(s)</td>
</tr>
<tr>
<td>NTU</td>
<td>nephelometric turbidity units</td>
</tr>
<tr>
<td>pg/L</td>
<td>picogram/liter</td>
</tr>
<tr>
<td>RL</td>
<td>Reporting Limit</td>
</tr>
<tr>
<td>TNTC</td>
<td>Too Numerous To Count</td>
</tr>
<tr>
<td>µg</td>
<td>microgram(s)</td>
</tr>
<tr>
<td>µL</td>
<td>microliter(s)</td>
</tr>
<tr>
<td>umhos/cm</td>
<td>micromhos/cm</td>
</tr>
<tr>
<td>MCL</td>
<td>Maximum Contamination Limit</td>
</tr>
</tbody>
</table>

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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## Data Qualifiers

<table>
<thead>
<tr>
<th>Qualifier</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>Result confirmed by reanalysis</td>
</tr>
<tr>
<td>D1</td>
<td>Indicates for dual column analyses that the result is reported from column 1</td>
</tr>
<tr>
<td>D2</td>
<td>Indicates for dual column analyses that the result is reported from column 2</td>
</tr>
<tr>
<td>E</td>
<td>Concentration exceeds the calibration range</td>
</tr>
<tr>
<td>K1</td>
<td>Initial Calibration Blank is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>K2</td>
<td>Continuing Calibration Blank is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>K3</td>
<td>Initial Calibration Verification is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>K4</td>
<td>Continuing Calibration Verification is above the QC limit and the sample result is ND</td>
</tr>
<tr>
<td>J (or G, I, X)</td>
<td>Estimated value &gt;= the Method Detection Limit (MDL or DL) and &lt; the Limit of Quantitation (LOQ or RL)</td>
</tr>
<tr>
<td>P</td>
<td>Concentration difference between the primary and confirmation column &gt;40%. The lower result is reported.</td>
</tr>
<tr>
<td>P^</td>
<td>Concentration difference between the primary and confirmation column &gt; 40%. The higher result is reported.</td>
</tr>
<tr>
<td>U</td>
<td>Analyte was not detected at the value indicated</td>
</tr>
<tr>
<td>V</td>
<td>Concentration difference between the primary and confirmation column &gt;100%. The reporting limit is raised due to this disparity and evident interference.</td>
</tr>
<tr>
<td>W</td>
<td>The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.</td>
</tr>
<tr>
<td>Z</td>
<td>Laboratory Defined - see analysis report</td>
</tr>
</tbody>
</table>

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.
WATER WELL ABANDONMENT-SEALING REPORT FORM

DATE WELL ABANDONED: 8/16/16 (month/day/year)

PERMIT NUMBER OF ABANDONED WELL: PR 94 4632

PERMIT NUMBER OF REPLACEMENT WELL:

PERSON ABANDONING WELL: Masters Amelle

WELL DRILLER'S LICENSE NUMBER: 104

OWNER'S NAME: Kiplinger Washington Editors

WELL LOCATION:

COUNTY: Frederick

NEAREST TOWN: Frederick

TAX MAP BLOCK: 0054

SUBDIVISION: 0000

SECTION: --

STREET ADDRESS: 3514 Urbana Pike

LATITUDE: 39.325976

LONGITUDE: 77.352111

TYPE OF WELL BEING ABANDONED:

x DRILLED

JETTED

BORED

HAND DUG

OTHER (specify)

USE CODE:

x DOMESTIC

MUNICIPAL/PUBLIC

IRRIGATION

INDUSTRIAL

TEST/OBSERVATION

GEOTHERMAL

TYPE OF CASING:

x STEEL

PLASTIC

CONCRETE

OTHER (specify)

SIZE OF CASING: 6" INCHES IN DIAMETER

DEPTH OF WELL: 200 FEET DEEP

WAS ANY CASING REMOVED? x YES NO

If yes, length removed, in feet: 3

WAS CASING RIPPED OR PERFORATED? YES x NO

LOG OF SEALING MATERIAL

MATERIAL: Cement

FEET: 0 3

200

VOLUME OF MATERIAL USED

PORTLAND CEMENT

BENSEAL

GALLONS WATER

100

MWD/MSP MGD

SIGNATURE: Master Amelle

LICENSE#:

CIRCLE ONE DATE

ORIGINAL