

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION  
**WATER WELL AND PUMP RECORD**

Completion is required under authority of Part 127 Act 368 PA 1978  
 Failure to comply is a misdemeanor

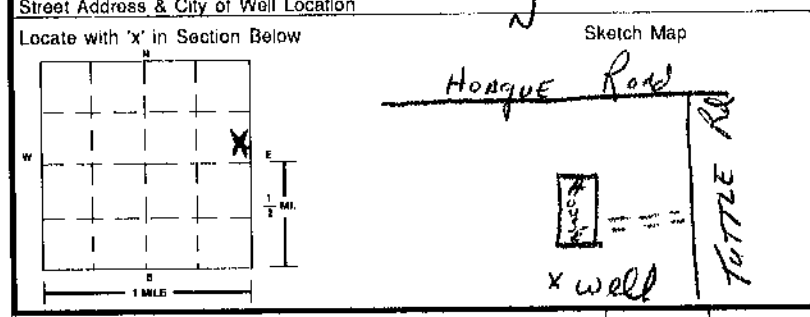
TAX NO:  
**53-005-008-001-70**

PERMIT NO:  
**53-327**

1. LOCATION OF WELL  
 County **MASON** Township Name **FREE SOIL** Fraction **SE 1/4 SE 1/4 NE 1/4** Section No. **8** Town No. **20N** Range No. **16W**

Distance and Direction from Road Intersection  
**On the west side of Tuttle Road south of Hoague Road**

3. OWNER OF WELL **Richard Stillson**  
 Address **10535 N. Tuttle Road Free Soil, MI. 49411**  
 Address Same as Well Location  Yes  No



4. WELL DEPTH: **39** ft. Date Completed **5 / 11 / 99**  
 New Well  Replacement Well

5.  Cable Tool  Rotary  Driven  Dug  
 Hollow Rod  Auger/Bored  Jetted

6. USE:  Household  Type I Public  Type III Public  
 Irrigation  Type IIa Public  Heat Pump  
 Test Well  Type IIb Public

7. CASING:  Steel  Threaded  Plastic  Welded  
 Other \_\_\_\_\_ Height: Above/Below Surface: **1** ft.  
 Diameter: **2** in. to **35** ft. depth Weight: **3.75** lbs./ft.  
 BORE HOLE: **N/A**  Drive Shoe  
 Diameter: \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  Shale Packer  
 Diameter: \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

2. FORMATION DESCRIPTION

FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Coarse Sand	15	15
Solid Gray Clay	10	25
Fine Water Sand	15	40
Still Good	40 - ?	

USE A 2ND SHEET IF NEEDED

8. SCREEN:  Not Installed  Gravel-Packed  
 Type **Stainless Steel** Diameter **1 1/4"**  
 Slope **6** Length: \_\_\_\_\_  
 Set Between **35** ft and **39** ft.  
 FITTINGS:  K-Packer  Bremer Check  
 Blank Above Screen \_\_\_\_\_ ft. Other \_\_\_\_\_

9. STATIC WATER LEVEL:  
**8' 04"** ft. Below Land Surface  Flowing

10. PUMPING LEVEL: Below Land Surface **21** ft. After **2** hrs. Pumping at **15** G.P.M.  
 Plunger  Bailer  Air  Test Pump

11. WELL HEAD COMPLETION:  
 Pitless Adapter  12" Above Grade  
 Basement Offset  Well House

12. WELL GROUTED?  No  Yes From **0** to **38** ft.  
 Neat Cement  Bentonite  Other \_\_\_\_\_  
 No. of Bags **1** Additives \_\_\_\_\_

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:  
 Type **Septic** Distance **50+** ft. Direction **North**  
 Type \_\_\_\_\_ Distance \_\_\_\_\_ ft. Direction \_\_\_\_\_

15. ABANDONED WELL PLUGGED?  Yes  No **N/A**  
 Casing Diameter \_\_\_\_\_ in. Depth \_\_\_\_\_ ft.  
 PLUGGING MATERIAL:  Neat Cement  Bentonite Slurry  
 Cement/Bentonite Slurry  Concrete Grout  Bentonite Chips  
 No. of Bags \_\_\_\_\_ Casing Removed?  Yes  No

14. PUMP:  Not Installed  Pump Installation Only  
 Manufacturer's Name \_\_\_\_\_  
 Model Number \_\_\_\_\_ HP \_\_\_\_\_ Volts \_\_\_\_\_  
 Length of Drop Pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ G.P.M.  
 TYPE:  Submersible  Jet  Other \_\_\_\_\_  
 PRESSURE TANK:  
 Manufacturer's Name \_\_\_\_\_  
 Model Number \_\_\_\_\_ Capacity \_\_\_\_\_ Gallons \_\_\_\_\_

16. REMARKS: (Elevation, Source of Data, etc.)

17. DRILLING MACHINE OPERATOR:  
 Employee  Subcontractor  
 Name **William Kovalcik**  
**Helper - Gary Cameron**

18. WATER WELL CONTRACTOR'S CERTIFICATION:  
 This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
**CAMERON BROTHERS INC** 1960  
 REGISTERED BUSINESS NAME REGISTRATION NO.  
 Address **8736 N. U.S. 31 FREE SOIL, MI. 49411**  
 Signed **Dan Cameron** Date **5-14-99**  
 AUTHORIZED REPRESENTATIVE

MICH DEPT OF ENVIRONMENTAL QUALITY  
 RECEIVED  
 JUN - 7 1999  
 MAY 21 1999  
 D.H.D. #10

MICHIGAN DEPARTMENT OF PUBLIC HEALTH  
**WATER WELL AND PUMP RECORD**

TAX NO:

PERMIT NO:

15505

1. LOCATION OF WELL

County Mason

Township Name Freesoil

Fraction W 1/4 NE 1/4 1/4

Section No. 8

Town No. 20N

Range No. 16W

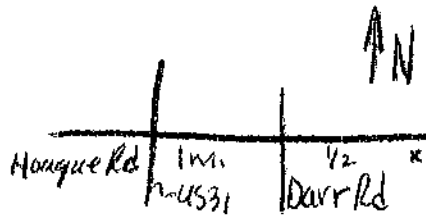
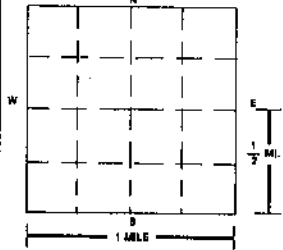
Distance and Direction from Road Intersection

1/2 mile E of Darr Rd on S side of Hoague Rd

Street Address & City of Well Location

Locate with 'x' in Section Below

Sketch Map



2. FORMATION DESCRIPTION

THICKNESS OF STRATUM      DEPTH TO BOTTOM OF STRATUM

<u>Sand</u>	<u>10</u>	<u>10</u>
<u>Clay</u>	<u>10</u>	<u>20</u>
<u>Sand</u>	<u>15</u>	<u>35</u>
<u>Hard Clay</u>	<u>19</u>	<u>54</u>
<u>Sand</u>	<u>16</u>	<u>70</u>
<u>Sand &amp; Stone</u>		

**RECEIVED**

AUG 11 1998

D.H.D. #10

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?  Yes  No N/A

Casing Diameter \_\_\_\_\_ in.      Depth \_\_\_\_\_ ft.

PLUGGING MATERIAL:  Neat Cement  Bentonite Slurry

Cement/Bentonite Slurry  Concrete Grout  Bentonite Chips

No. of Bags \_\_\_\_\_      Casing Removed?  Yes  No

16. REMARKS: (Elevation, Source of Data, etc.)

17. DRILLING MACHINE OPERATOR:

Employee  Subcontractor

Name Ed Benson

3. OWNER OF WELL

Address The Roger Smalley  
1359 E Hoague Rd  
Freesoil, Mi 48941

Address Same as Well Location  Yes  No

4. WELL DEPTH: 76 ft.      Date Completed 7/10/98

New Well  Replacement Well

5.  Cable Tool  Rotary  Driven  Dug

Hollow Rod  Auger/Bored  Jetted

6. USE:  Household  Type I Public  Type III Public

Irrigation  Type IIa Public  Heat Pump

Test Well  Type IIb Public

7. CASING:  Steel  Threaded  Plastic  Welded  Other

Height: Above/Below Surface: 1 ft.

Diameter: \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth      Weight: 11.0 lbs./ft.

BORE HOLE: \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Drive Shoe  Shale Packer

8. SCREEN:  Not Installed  Gravel-Packed

Type WOP      Diameter 4

~~Slot~~ Gauge 10      Length: 6

Set Between 70 ft. and 76 ft.

FITTINGS:  K-Packer  Bremer Check

Blank Above Screen 2 ft. Other \_\_\_\_\_

9. STATIC WATER LEVEL: 25 ft. Below Land Surface  Flowing

10. PUMPING LEVEL: Below Land Surface \_\_\_\_\_ ft. After 1 hrs. Pumping at 20 G.P.M.

Plunger  Bailer  Air  Test Pump

11. WELL HEAD COMPLETION:  Pitless Adapter  12" Above Grade

Basement Offset  Well House

12. WELL GROUTED?  No  Yes      From 0 to all ft.

Neat Cement  Bentonite  Other \_\_\_\_\_

No. of Bags 3      Additives \_\_\_\_\_

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type Syptic      Distance 75 ft. Direction S

Type \_\_\_\_\_      Distance \_\_\_\_\_ ft. Direction \_\_\_\_\_

14. PUMP:  Not Installed  Pump Installation Only

Manufacturer's Name  Gould

Model Number \_\_\_\_\_      HP 1/2      Volts 240

Length of Drop Pipe 55 ft.      Capacity 10 G.P.M.

TYPE:  Submersible  Jet  Other \_\_\_\_\_

PRESSURE TANK:

Manufacturer's Name Amintrol

Model Number lux 203      Capacity 30 Gallons 20

15. WATER WELL CONTRACTOR'S CERTIFICATION:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Ed Benson Well Drilling 51-1603

REGISTERED BUSINESS NAME      REGISTRATION NO.

Address PO Box 127 - 14645 Kings Rd Kalamazoo

Signed Ed Benson      Date 7/11/98

AUTHORIZED REPRESENTATIVE

**WATER WELL AND PUMP RECORD**

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Failure to comply is a misdemeanor

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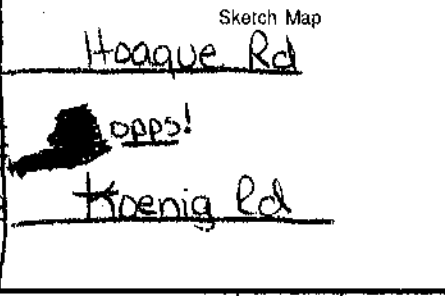
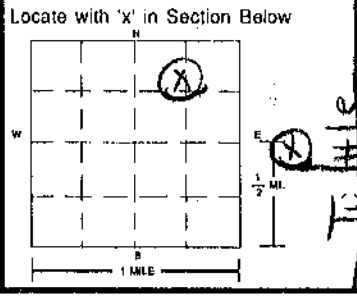
PERMIT NO:  
**13281**

1. LOCATION OF WELL  
County **Mason**

Township Name **Freesoil** Fraction **SES 1/4 NE 1/4** Section No. **08** Town No. **20N** Range No. **16W**

Distance and Direction from Road Intersection  
**Between Koenig & Hoague rds, W. Side. On Tuttle**

3. OWNER OF WELL **Rick Tarnowski**  
Address **9331 N. US31  
Freesoil, MI 49411**  
Address Same as Well Location  Yes  No



2. FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Red Clay/Fine Sand	04	04
Med. Course Sand	21	25
Med. Course Sand/Fine Gravel	20	45
Red Clay/Fine Gravel/Med. Course Sand	05	50
Med. Course Sand	14	64
Red Clay/Fine Gravel/Med. Course Sand	11	75
Med. Course Sand	11	86

4. WELL DEPTH: **86** ft. Date Completed **08 / 26 / 97**  New Well  Replacement Well

5.  Cable Tool  Rotary  Driven  Dug  
 Hollow Rod  Auger/Bored  Jetted

6. USE:  Household  Type I Public  Type III Public  
 Irrigation  Type IIa Public  Heat Pump  
 Test Well  Type IIb Public

7. CASING:  Steel  Threaded  Plastic  Welded  
 Other **Sirlock**  
Diameter: **5** in. to **80** ft. depth  
BORE HOLE: Diameter: **9** in. to **86** ft. depth

Height: Above/Below Surface: **1** ft  
Weight: **SDR21** lbs/ft  
 ~~DMK~~ Shoe closed  Shale Packer

8. SCREEN:  Not Installed  Gravel-Packed  
Type **Flush S.S.** Diameter **3"**  
Slot **20** Length: **6'**  
Set Between **80** ft. and **86** ft.  
FITTINGS:  K-Packer  Bremer Check  
 Blank Above Screen **2** ft. Other

9. STATIC WATER LEVEL: **12** ft. Below Land Surface  Flowing

10. PUMPING LEVEL: Below Land Surface **Air Development**  
**20** ft. After **1** hrs. Pumping at **16** G.P.M.  
 Plunger  Bailor  Air  Test Pump

11. WELL HEAD COMPLETION:  
 Pitless Adaptor  12" Above Grade  
 Basement Offset  Well House

12. WELL GROUTED?  No  Yes From **75** to **0** ft.  
 Neat Cement  Bentonite  Other  
No. of Bags **6.5** Additives **EZ MUD**

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:  
Type **Septic** Distance **50+** ft. Direction **North**

15. ABANDONED WELL PLUGGED?  Yes  No  
Casing Diameter \_\_\_\_\_ in. Depth \_\_\_\_\_ ft.  
PLUGGING MATERIAL:  Neat Cement  Bentonite Slurry  
 Cement/Bentonite Slurry  Concrete Grout  Bentonite Chips  
No. of Bags \_\_\_\_\_ Casing Removed?  Yes  No

14. PUMP:  Not Installed  Pump Installation Only  
Manufacturer's Name **Grundfos**  
Model Number **16S07-422** HP **.75** Volts **230**  
Length of Drop Pipe **40** ft. Capacity **16** G.P.M.  
TYPE:  Submersible  Jet  Other  
PRESSURE TANK:  
Manufacturer's Name **Well Rite**  
Model Number **WR200-02** Capacity **62** Gallons **62**

16. REMARKS: (Elevation, Source of Data, etc.)  
**Grouted from bottom to top with 1" trimie pipe, pumped with grout pump.**

17. DRILLING MACHINE OPERATOR:  
 Employee  Subcontractor  
Name **Richard A. Peterosn**

18. WATER WELL CONTRACTOR'S CERTIFICATION:  
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
**Peterson's Well Drilling** **51-0539**  
REGISTERED BUSINESS NAME REGISTRATION NO.  
Address **RR#2 Box 23 Irons, MI 49644**  
Signed **Roy C Peterson** Date **Aug 26, 97**  
AUTHORIZED REPRESENTATIVE

**WATER WELL AND PUMP RECORD**

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PERMIT NUMBER

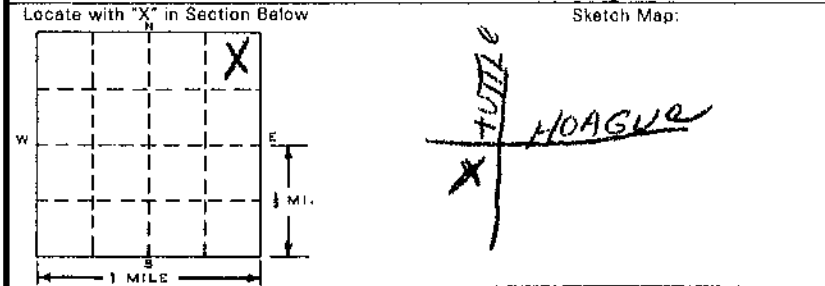
<b>1 LOCATION OF WELL</b>					
County <b>Mason</b>	Township Name <b>Freesoil</b>	Fraction <b>NE 1/4 NE 1/4</b>	Section Number <b>8</b>	Town Number <b>20N N/S</b>	Range Number <b>16W E/W</b>

Distance And Direction From Road Intersection  
**On S.W. Corner of Hoague Rd. & Tuttle Rd**

**1563 Hoague Rd.**

Street Address & City of Well Location  
**Freesoil, MI 49411**

**3 OWNER OF WELL:**  
**John Kench**  
Address **1563 Hoague Rd. Freesoil, MI 49411**  
Address Same As Well Location?  Yes  No



**4 WELL DEPTH:** **31** FT. Date Completed **9/29/89**  
 New Well  
 Replacement Well

**6**  Cable tool  Rotary  Driven  Dug  
 Hollow rod  Auger  Jetted

**6 USE**  Domestic  Type I Public  Type III Public  
 Irrigation  Type IIa Public  Heat pump  
 Test Well  Type IIb Public

**7 CASING:**  Steel  Threaded  Plastic  Welded  
 Diameter \_\_\_\_\_ Height: Above/Below Surface **1** ab. ft.  
**2** in. to **27** ft. depth Weight **3.75** lbs./ft.  
 GROUTED DRILL HOLE DIAMETER \_\_\_\_\_  
 Drive Shoe  Yes  No **Closed**

2 FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Top Soil & Sand	2.0	2.0
Fine Dry Sand	7.0	9.0
Med Coarse Water Sand	13.0	22.0
Fine Water Sand & Clay	5.0	27.0
Med Coarse Water Sand	4.0	31.0
Med Coarse Water Sand		

**8 SCREEN:**  Not Installed  
 Type **Stainless** Diameter **1-1/4"**  
 Slot/Gauze **7 slt** Length **54x38**  
 Set between **27** ft. and **31** ft.  
 FITTINGS:  K-Packer  Lead Packer  Bromer Check  
 Blank above screen \_\_\_\_\_ ft. Other \_\_\_\_\_

**9 STATIC WATER LEVEL:**  
**9** ft. below land surface  Flow

**10 PUMPING LEVEL:** below land surface  
 \_\_\_\_\_ ft. after **Rig** hrs. pumping at **15** G.P.M.  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. pumping at \_\_\_\_\_ G.P.M.

**11 WELL HEAD COMPLETION:**  Pitless adapter  2" above grade  
 Basement offset  Approved pit

**12 WELL GROUTED?**  No  Yes From **0** to **27** ft.  
 Neat cement  Bentonite  Other \_\_\_\_\_  
 No. of bags of cement \_\_\_\_\_ Additives \_\_\_\_\_

**13 Nearest source of possible contamination**  
 Type **Septic** Distance **50+** ft. Direction **W**  
 Well disinfected upon completion?  Yes  No  
 Was old well plugged?  Yes  No

**14 PUMP:**  Not Installed  Pump Installation Only  
 Manufacturer's name **Cust. Peabody Barnes**  
 Model number \_\_\_\_\_ HP **1/2** Volts **115**  
 Length of Drop Pipe **25** ft. capacity **12** G.P.M.  
 TYPE:  Submersible  Jet  
 PRESSURE TANK:  
 Manufacturer's name \_\_\_\_\_  
 Model number \_\_\_\_\_ Capacity \_\_\_\_\_ Gallons

15. Remarks, elevation, source of data, etc.

**16 WATER WELL CONTRACTOR'S CERTIFICATION:**  
 This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  
**Lyle Reese & Son, Inc.** **0438**

17. Rig Operator's Name:  
**Randy Smith**

REGISTERED BUSINESS NAME: \_\_\_\_\_ REGISTRATION NO. \_\_\_\_\_  
 Address **2054 E. US-10 Custer, MI 49405**  
 Signed **Lyle A. Reese** Date **9/29/89**  
 AUTHORIZED REPRESENTATIVE

**Authority:** Act 368 PA 1978  
**Completion:** Required  
**Penalty:** Conviction of a violation of any provision is a misdemeanor.