



**CONESTOGA-ROVERS
& ASSOCIATES**

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MEMORANDUM

TO: Peter Ramanauskas/EPA
FROM: ^{TK} Thomas Kinney/MC/ds/29/Det.
CC: Dave Favero/RACER
RE: Water Well Search
PCC-Validation
Pontiac, Michigan

REF. No.: 017322
DATE: September 12, 2014

1.0 Introduction

Conestoga-Rovers & Associates (CRA) is providing this memorandum on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust to provide details to the July 9, 2014 water well search completed for the properties surrounding the PCC-Validation (Site) located in Pontiac, Michigan (Figure 1). A well search was requested by the United States Environmental Protection Agency (U.S. EPA) on January 15, 2014, during a meeting at CRA's office. The well search was completed to determine the number of wells in the vicinity of the Site in support of Resource Conservation and Recovery Act (RCRA) Corrective Action being completed for the Site. Section 2.0 provides a brief summary of the well search. Figure 1 provides a Site map with water well locations. Attachment 1 provides copies of the well logs.

2.0 Well Search Activities

On July 9, 2014, CRA visited the Oakland County Environmental Health Department and requested (via FOIA) well logs surrounding the Site within a radius of 2 miles. The well logs were provided by Oakland County and the locations of the wells placed on a map of the Site and surrounding area (Figure 1). In addition to the wells logs provided by the County, a drive-by visual search for wells within the immediate surrounding area of the Site was conducted.

As indicated on Figure 1, it appears two down gradient (west of the Site) water wells are located within 1/2 mile of the Site (80-A and B Bagley and Golf Drive). During the drive-by visual search, an attempt was made to locate the wells (80-A and B Bagley and Golf Drive) but they were not observed. Upon review of the well logs, both were identified as test wells, which are not drinking water wells. In addition, they were installed to depths greater than 100 feet below ground surface. Impacted groundwater at the Site is limited to approximately the upper 15 feet and underlain by a regional clay unit that prevents vertical migration. Lateral groundwater contaminant migration at the Site is discontinuous and not likely to move beyond the Site's borders, except in the northwest portion of the Site where low concentrations of vinyl

chloride (VC) have (historically) been detected in off-Site groundwater (most recent data indicated VC is below all Part 201 Cleanup Criteria). Therefore, it is not expected that groundwater will migrate from the Site to the down gradient test wells 80-A and B (if they still exist) at Bagley and Golf Drive.

3.0 Conclusion

As indicated in Figure 1, there are no water wells in the immediate vicinity of the Site. The closest down gradient water wells are/were test wells located approximately 1/2 mile west of the Site. Based on the distance to water wells in the area and the local hydrogeology, potentially impacted groundwater from the Site will not migrate to the locations of water wells within 2 miles of the Site. In addition, there was no visual evidence of water wells during the drive-by visual search of surrounding properties.

Encl: Figure 1 – Water Well Search
Attachment 1 – Water Well Logs

Figure

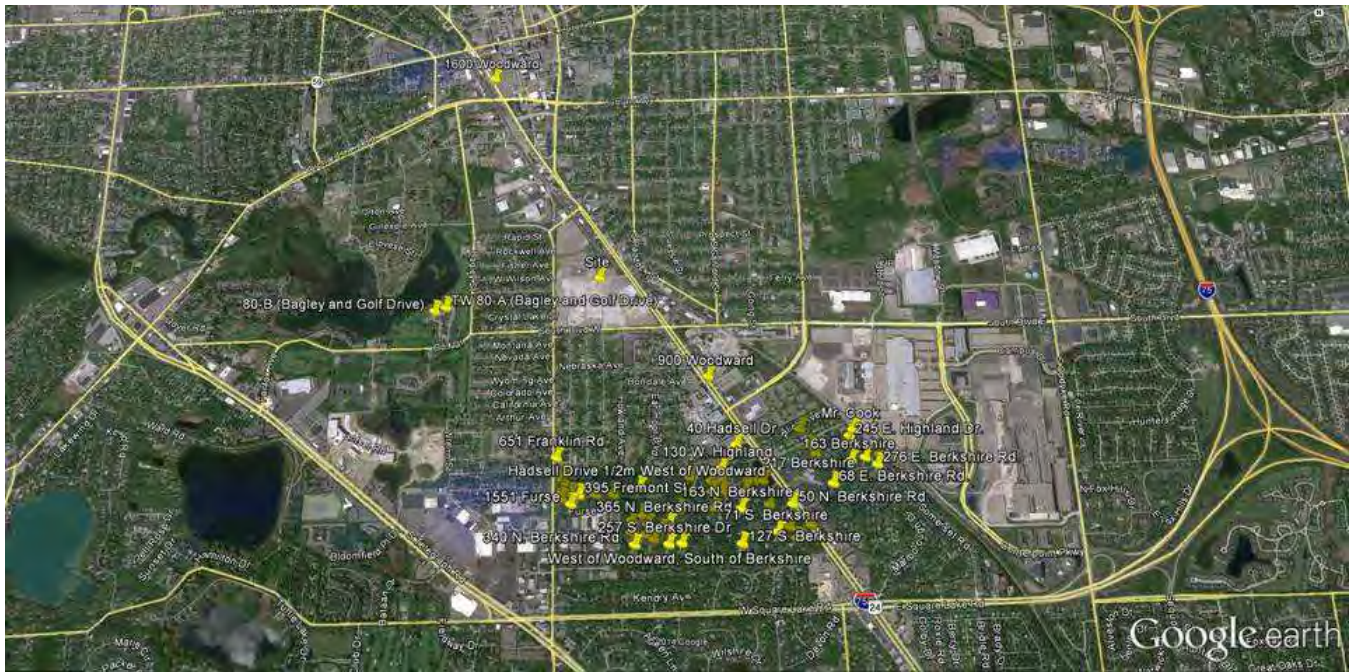


Figure 1
Water Well Search
PCC-Validation
Pontiac Michigan

Attachment 1

Water Well Logs

TAX NO: 1904280001

WATER WELL

PUMP RECORD

PERMIT NO:

124299

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

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

SE 1/4 NE 1/4

Section No.

9

Town No.

2N

Range No.

10E

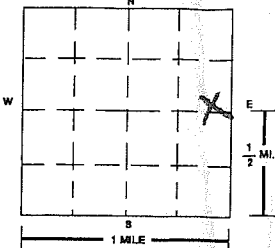
Distance and Direction from Road Intersection

1/2 mile E of Woodward
1/4 mile W of Highland

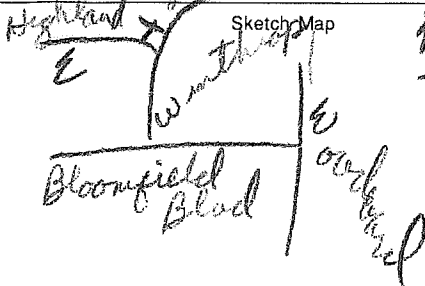
Street Address & City of Well Location

146 Highland E Bloomfield Hills

Locate with 'x' in Section Below



Sketch Map



2. FORMATION DESCRIPTION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Brown Clay & Gravel	22	22
Sandy Gray Clay Wet	6	28
Gray Clay	30	58
ROCK	1	59
Gravel & Sand Dry	11	70
ROCK	1	71
Clay & Gravel	15	86
Clay & Gravel Wet	10	96
Med Sand & Gravel Wet	8	104
Gravel & Sand	16	120

07-12-05

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☐ Yes ☐ No

Casing Diameter _____ in.

Depth _____ ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry☐ Neat 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

Allen Morris

By

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.

REGISTERED BUSINESS NAME

Address

Signed

AUTHORIZED REPRESENTATIVE

REGISTRATION NO.

Date

LOCAL HEALTH DEPT COPY

EQP 2017 (10/02)

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

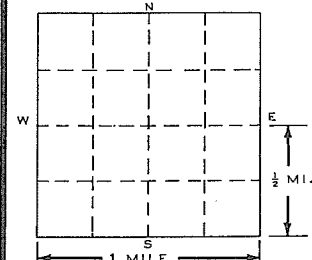
County <u>Oakland</u>	Township Name <u>Pontiac</u>	Fraction <u>N 1/4 S 1/4 E 1/4</u>	Section Number <u>33</u>	Town Number <u>4</u> N/S.	Range Number <u>10</u> E/W.
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Distance And Direction from Road Intersections

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL:

Address
Tim Flour
1825 Kinmount Pontiac

4 WELL DEPTH: (completed) Date of Completion

135 ft. 5/15/795 ☐ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐7 CASING: Threaded ☒ Welded ☐ Height: Above/Below
Diam. Surface 1 ft.4 in. to 129 ft. Depth Weight _____ lbs./ft.
_____ in. to _____ ft. Depth Drive Shoe? Yes ☒ No ☐

8 SCREEN:

Type: S. Steel Dia.: 3"
Slot/Gauze 15 Length 5'
Set between 129 ft. and 135 ft.
Fittings: 2" tailpipe 3" K-packer
3" plug

9 STATIC WATER LEVEL

40 ft. below land surface

10 PUMPING LEVEL below land surface

135 ft. after 0 hrs. pumping 10 g.p.m.

_____ ft. after _____ hrs. pumping _____ g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) _____ Chlorides (Cl) _____

Hardness _____ Other _____

12 WELL HEAD COMPLETION: ☐ In Approved Pit
☐ Pitless Adapter ☒ 31" Above Grade13 Well Grouted? ☒ Yes ☐ No☐ Neat Cement ☒ Bentonite ☐Depth: From 0 ft. to 40 ft.

14 Nearest Source of possible contamination

75 feet S Direction / S. tank TypeWell disinfected upon completion ☒ Yes ☐ No

15 PUMP:

☒ Not installed

Manufacturer's Name _____

Model Number _____ HP _____ Volts _____

Length of Drop Pipe _____ ft. capacity _____ G.P.M.

Type: ☐ Submersible☐ Jet☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.Franzel Well Drilling
REGISTERED BUSINESS NAME0474
REGISTRATION NO.Address 960 Barnes Rd. Fostoria, Mi.Signed Frank Franzen Date 5/15/79
AUTHORIZED REPRESENTATIVE

D
WATER WELL RECORD
ACT 294 PA 1965MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Twp. Pontiac	Fraction SW 1/4 SW 1/4	Section No. 33	Town 3 N. 3 E.	Range 10 E. 4
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Distance And Direction from Road Intersections

OWNER No. _____

4514 Joslyn Road, Pontiac

Street address & City of Well Location

3 OWNER OF WELL:

Mrs BrownAddress **1214 S. Lapeer Road
Lapeer, Mi.**

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

4 WELL DEPTH: (completed)

57

ft.

Date of Completion

4/685 ☐ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☒ Hollow rod ☐ Jetted ☐ Bored ☐ _____6 USE: ☐ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☒ Commercial
☐ Test Well ☐ _____7 CASING: Threaded ☒ Welded ☐
Diam. **2"** in. to **all** ft. Depth Height: **above** surface **4** ft.
Weight _____ lbs./ft.
_____ in. to _____ ft. Depth Drive Shoe? Yes ☐ No ☐

8 SCREEN:

Type: **Johnson** Dia.: **1 1/2**Slot/Gauze: **10** Length: **40**Set between **54** ft. and **58** ft.Fittings: **Bremer check Valve**

9 STATIC WATER LEVEL

50

ft. below land surface

10 PUMPING LEVEL below land surface

35ft. after **3** hrs. pumping **10** g.p.m.

_____ ft. after _____ hrs. pumping _____ g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) _____ Chlorides (Cl) _____
Hardness **not known**12 WELL HEAD COMPLETION: ☐ In Approved Pit
☒ Pitless Adapter ☐ 12" Above Grade

13 GROUTING:

Well Grouted? ☐ Yes ☒ NoMaterial: ☐ Neat Cement ☐ _____

Depth: From _____ ft. to _____ ft.

14 SANITARY: **not known**

Nearest Source of possible contamination

_____ feet _____ Direction _____ Type

Well disinfected upon completion ☐ Yes ☐ No

15 PUMP:

Manufacturer's Name **Myers**Model Number **V50** HP **480- 1/2**Length of Drop Pipe **35** ft. capacity **480** G.P.M.Type: ☐ Submersible ☐ _____
☒ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.**S. Ward and Sons**

REGISTERED BUSINESS NAME

0058

REGISTRATION NO.

Address **7260 Garvin, waterford**Signed _____ Date **4/68**

AUTHORIZED REPRESENTATIVE

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Cabot Twp. Bluff Fraction 1/4 Section No. 4 Town TAN N/S. Range R9E E/W.

Distance And Direction from Road Intersections

OWNER No. _____

3 OWNER OF WELL:

Address _____

Street address & City of Well Location

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

4 WELL DEPTH: (completed) Date of Completion

107 ft. 6/17/675 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug☐ Hollow rod ☐ Jetted ☐ Bored ☐ _____6 USE: ☒ Domestic ☐ Public Supply ☐ Industry☐ Irrigation ☐ Air Conditioning ☐ Commercial☐ Test Well ☐ _____7 CASING: Diam. Threaded ☐ Welded ☒ Height: Above/Below

_____in. to _____ft. Depth surface _____ft.

_____in. to _____ft. Depth Weight _____lbs/ft.

Drive Shoe? Yes ☐ No ☐8 SCREEN: Cook 34Type: 12" P.V.C. Dia.: _____Slot/Gauze 12 Length 3"

Set between _____ft. and _____ft.

Fittings: _____

9 STATIC WATER LEVEL

20 ft. below land surface

10 PUMPING LEVEL below land surface

20 ft. after 2 hrs. pumping 30 g.p.m.

_____ft. after _____hrs. pumping _____g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) _____ Chlorides (Cl) _____

Hardness _____

12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☒ 12" Above Grade

13 GROUTING:

Well Grouted? ☒ Yes ☐ NoMaterial: ☐ Neat Cement ☐ _____

Depth: From _____ft. to _____ft.

14 SANITARY:

Nearest Source of possible contamination

50 feet _____ Direction South TypeWell disinfected upon completion ☒ Yes ☐ No

15 PUMP:

Manufacturer's Name PapworthModel Number 15045 HP 1/2Length of Drop Pipe 40 ft. capacity _____G.P.M.Type: ☒ Submersible ☐ _____☐ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.

REGISTERED BUSINESS NAME

REGISTRATION NO. 6177Address 614 N. Main St.Signed [Signature] Date 6/17/67

AUTHORIZED REPRESENTATIVE

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland Twp. Shiawassee Fraction W 1/4 15 1/4 Section No. 7 Town Town N/S. Range R 12 E/W.

Distance And Direction from Road Intersections

OWNER No.

3 OWNER OF WELL:

Address

Street address & City of Well Location

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

4 WELL DEPTH: (completed) Date of Completion

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐

6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐

7 CASING: Threaded ☐ Welded ☒ Height: Above/Below
Diam. _____ in. to _____ ft. Depth _____ surface _____ ft.
Weight _____ lbs./ft.
_____ in. to _____ ft. Depth _____ Drive Shoe? Yes ☐ No ☐

8 SCREEN: 12 Dia.: 3"
Type: _____ Length: 3"
Slot/Gauze _____ Set between _____ ft. and _____ ft.
Fittings: _____

9 STATIC WATER LEVEL
16 ft. below land surface

10 PUMPING LEVEL below land surface
10 ft. after 1/2 hrs. pumping 35 g.p.m.
_____ ft. after _____ hrs. pumping _____ g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) _____ Chlorides (Cl) _____

Hardness _____

12 WELL HEAD COMPLETION: ☐ In Approved Pit
☒ Pitless Adapter ☒ 12" Above Grade

13 GROUTING:
Well Grouted? ☒ Yes ☒ No
Material: ☐ Neat Cement ☐
Depth: From _____ ft. to _____ ft.

14 SANITARY:
Nearest Source of possible contamination
50 feet _____ Direction SE Type
Well disinfected upon completion ☒ Yes ☐ No

15 PUMP:
Manufacturer's Name Parker
Model Number 25044 HP 1/2
Length of Drop Pipe _____ ft. capacity _____ G.P.M.
Type: ☒ Submersible ☐
☐ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.

REGISTERED BUSINESS NAME

REGISTRATION NO. 0127Address 75 N. Main St.Signed W. M. H.Date 5-7-67

AUTHORIZED REPRESENTATIVE



NORTHERN COMPANY

LANSING

☒ TEST☐ PERMANENT

Job No. LA-1305

WELL LOG No. 80-C CITY Pontiac

County Oakland

Owner City of Pontiac

Township Pontiac

Section 32

Location

State Michigan

From Land Description NW $\frac{1}{4}$, SE $\frac{1}{4}$, SW $\frac{1}{4}$, T3N, R10C

From Street or Road

FORMATION FOUND - DESCRIBE FULLY	FROM NATURAL GROUND LEVEL			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
Top Soil Turning to Brown Clay	0	5	5	
Hard Brown Clay	5	15	10	
Sand w/Little Gravel and Clay	15	20	5	
Gray Silty Sand	20	35	15	
Gray Clay Mixed w/Little Gravel	35	40	5	
Hard Gray Clay	40	45	5	
Hard Gray Clay w/Little Gravel	45	50	5	
Hard Gray Clay w/Little Sand and Gravel	50	55	5	
Gray Clay w/Little Gravel	55	60	5	
Sand, Gravel, and Little Clay	60	70	10	
Sand and Little Gravel	70	80	10	
Sand and Small Gravel	80	100	20	
Fine Sand w/Little Small Gravel	100	110	10	12'
Fine Sand	110	147	37	
Gray Clay	147	157	10	
Hard Rock	157	158	1	
Gray Clay	158	160	2	

Hole 4 $\frac{1}{2}$ " Dia Drilled by: { Cable Tool _____ Rotary X Jetting _____
Reverse Circ. _____ Bucket _____ Auger _____

Rotary Hole Grouted: Neat Cement _____ Drilling Mud B-3 Other _____

Casing 2" OD From ± 24" above ground to 100 feet below ground. Weight _____ Pounds per foot

Screen 1 $\frac{1}{4}$ " Set from 100 to 110 feet Make Johnson Type CS Slot .025

Pumping test None GPM drawdown to _____ feet after _____ hours pumping

TAX NO:

MICHIGAN DEPARTMENT OF PUBLIC HEALTH
ABANDONED WELL PLUGGING RECORD

PERMIT NO:

1. LOCATION OF WELL
County: Oakland Township Name: Pontiac Fraction: NW 1/4 SE 1/4 SW 1/4 Section No.: 32 Town No.: 3 N/S: N/S Range No.: 10 E/W: E/W

Distance and Direction from Road Intersection
800 Golf Drive
Green Acres & City of Pontiac Golf Course

12 OWNER OF WELL
Address: City of Pontiac
450 Wide Track Dr. East
Pontiac, MI 48227
Address Same as Well Location ☐ Yes ☒ No

2. WELL DEPTH: 110 ft.

3. Date Plugging Completed: 2 / 27 / 97

13. DROP PIPE/PUMPING EQUIPMENT REMOVED
☒ Yes ☐ No (Explain in COMMENTS)

4. USE: ☐ Single Family ☐ Type I Public ☐ Heat Pump
☐ Irrigation ☐ Type II Public ☐
☒ Test Well ☐ Type III Public

5. REASON FOR ABANDONING WELL
☐ Municipal Water Hookup ☐ New Well Drilled
☐ Other: no longer needed ☐ Unrepairable

6. CASING: see comments
12 in. dia. to ? ft. depth.
12 in. dia. to ? ft. depth

7. CASING MATERIAL
☐ Steel ☐ Other
☒ Plastic

8. CASING STATUS AFTER PLUGGING
☐ Buried ft. below grade ☐ Removed
☒ Above Grade 12 in.

9. FLOWING WELL: ☐ Yes ☒ No

10. SITE SKETCH:
Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.

11. COMMENTS
We did not drill this well so we don't know how much well screen and thus casing is in the well-all we know is the well depth is 110'

NOTE: **Plugging from well bottom up to ground surface is required.**

15. LOST CIRCULATION ZONE MATERIALS USED ☐ Yes ☐ No
Type Quantity Placed from ft. to ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.)
Show type of plugging materials and interval plugged.

MATERIAL

FEET BELOW GRADE

17. WATER WELL CONTRACTOR'S CERTIFICATION:
This well was plugged under my jurisdiction and this report is true to the best of my knowledge and belief.
O.O. Corsaut, Inc. 0025
REGISTERED BUSINESS NAME REGISTRATION NO.
Address 15101 W. 11 Mile Oak Park, MI 48237
Signed [Signature] Date 3/25/97
AUTHORIZED REPRESENTATIVE

Authority: Act 369 PA 1978
Completion: Required
Penalty: Conviction of a violation of any provision is a misdemeanor.

WATER WELL RECORD
ACT 294 PA 1965MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Township Name Pontiac City	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number 32.33	Town Number 3W N/S.	Range Number 10N E/W.
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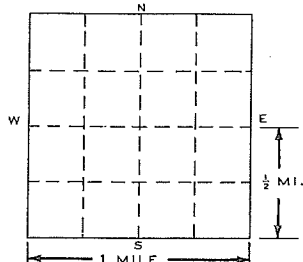
Distance And Direction from Road Intersections

40' East of old well #4 - in Southwest corner of property approx. 1400' south of Bldg. No. 29

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL:

**G.M.C. Truck & Coach Div.
Address 660 South Blvd. East
Pontiac, Mich.**

4 WELL DEPTH: (completed) Date of Completion

266 ft. **10-20-78**

☐ Cable tool	☒ Rotary	☐ Driven	☐ Dug
☐ Hollow rod	☒ Jetted	☐ Bored	

6 USE: ☐ Domestic	☐ Public Supply	☒ Industry
☐ Irrigation	☐ Air Conditioning	☐ Commercial
☐ Test Well		

7 CASING: Threaded ☐ Welded ☒ Height: Above/Below

_____ in. to _____ ft. Depth	Surface 1 ft.
_____ in. to _____ ft. Depth	Weight _____ lbs./ft.
	Drive Shoe? Yes ☒ No ☐

8 SCREEN: Type: **Stainless Steel** Dia.: **18" & 16"**

Slot/Gauze 150 & 60	Length 41'
Set between 266 ft. and 236 ft.	
Fittings: 126 & 116	
	Standard

9 STATIC WATER LEVEL

92 ft. below land surface

10 PUMPING LEVEL below land surface

106 ft. after 2 hrs. pumping	1000 g.p.m.
_____ ft. after _____ hrs. pumping	_____ g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) _____	Chlorides (Cl) _____
Hardness _____	Other _____

12 WELL HEAD COMPLETION: ☐ In Approved Pit
☐ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No

☐ Neat Cement	☐ Bentonite	
Depth: From _____ ft. to _____ ft.		

14 Nearest Source of possible contamination

_____ feet	Direction _____	Type _____
Well disinfected upon completion ☐ Yes ☐ No		

15 PUMP:

☒ Not installed
Manufacturer's Name _____
Model Number _____ HP _____ Volts _____
Length of Drop Pipe _____ ft. capacity _____ G.P.M.
Type: ☐ Submersible
☐ Jet ☐ Reciprocating

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Fill	0	5'
Clay	5'	9'
Sand	9'	11'
Clay	11'	49'
Hardpan	49'	119'
gravel & sand	119'	126'
Hardpan	126'	154'
Fine gravel	154'	175'
Hard pan	175'	205'
Clay & stones	205'	219'
Sand	219'	226'
Sand & Gravel	226'	266'

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

17 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.

Dunbar Drilling Inc.	0163
	REGISTRATION NO.

Address **307 Broadway, Swanton, Ohio 43552**

Signed Dale R. Dunbar	Date 10-31-78
AUTHORIZED REPRESENTATIVE Dale R. Dunbar, President	

NORTHERN COMPANY

LANSTNG

☒ TEST

☐ PERMANENT

Job No. LA-1302

WELL LOG No. 80-B CITY Pontiac

County Oakland

Owner City of Pontiac

Township Pontiac

Section 32

Location

State Michigan

From Land Description SW¹/₄, SE¹/₄, SW¹/₄, T3N, R10E

From Street or Road - 825' West of Bagley Road - 300' North of Golf Drive.

[illegible]

Hole 7 7/8 "Dia Drilled by: { Cable Tool _____ Rotary X Jetting _____
Reverse Circ. _____ Bucket _____ Auger _____

Rotary Hole Grouted: Neat Cement _____ Drilling Mud B-3 Other _____

Casing 2 "OD From + 24 "above ground to 111 feet below ground. Weight _____ Pounds per foot

Screen 1 1/4 " Set from 111 to 115 feet Make Johnson Type CS Slot 10

Pumping test None GPM drawdown to _____ feet after _____ hours pumping



NORTHERN COMPANY

LANSING

☒ TEST☐ PERMANENT

Job No. LA-1302

WELL LOG No. TW 80-A CITY Pontiac

County Oakland

Owner City of Pontiac

Township Pontiac

Section 32

Location

State Michigan

From Land Description SW $\frac{1}{4}$, SW $\frac{1}{4}$, SE $\frac{1}{4}$, T3N, R10EFrom Street or Road $\pm$ 600' West of Bagley Street, & $\pm$ 400' North of Golf Drive.

FORMATION FOUND - DESCRIBE FULLY	FROM NATURAL GROUND LEVEL			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
Top Soil and Gravelly Clay	0	5	5	
Gravelly Clay	5	15	10	
Gravelly Clay and Sand	15	20	5	
Sand and Gravel w/Little Clay	20	25	5	
Clay	25	30	5	
Clay and Gravel	30	35	5	
Gravelly Clay	35	40	5	
Clay	40	50	10	
Gravelly Clay	50	55	5	
Sand w/Little Clay	55	70	15	
Sand and Gravel, w/Little Clay	70	85	15	
Sand w/Little Clay	85	90	5	
Sand	90	95	5	
Sand w/Little Clay	95	100	5	
Sand and Coal	100	110	10	30
Sand w/Little Strips of Clay	110	115	5	
Sand w/Little Clay	115	120	5	
Clay w/Sand Strips	120	130	10	
Mushy Clay	130	140	10	

Hole 7 7/8 " Dia Drilled by: { Cable Tool _____ Rotary X _____ Jetting _____
Reverse Circ. _____ Bucket _____ Auger _____

Rotary Hole Grouted: Neat Cement _____ Drilling Mud B-3 _____ Other _____

Casing 2 " OD From $\pm$ 24 " above ground to 105 feet below ground. Weight _____ Pounds per foot

Screen 1 1/4 " Set from 105 to 110 feet Make Johnson Type CS Slot .025

Pumping test None _____ GPM drawdown to _____ feet after _____ hours pumping

LANSTING

☒ TEST

☐ PERMANENT

Job No. LA-1302

WELL LOG No. TW 80-A CITY Pontiac

County Oakland

Owner City of Pontiac

Township Pontiac

Section 32

Location

State Michigan

From Land Description SW $\frac{1}{4}$, SW $\frac{1}{4}$, SE $\frac{1}{4}$, T3N, R10E

From Street or Road $\pm 600'$ West of Bagley Street, & $\pm 400'$ North of Golf Drive.

[illegible]

Hole 7 7/8 "Dia Drilled by: { Cable Tool _____ Rotary X _____ Jetting _____
Reverse Circ. _____ Bucket _____ Auger _____

Rotary Hole Grouted: Neat Cement _____ Drilling Mud B-3 Other _____

Casing 2 "OD From + 24 "above ground to 105 feet below ground. Weight _____ Pounds per foot

Screen 1 1/4 " Set from 105 to 110 feet Make Johnson Type CS Slot .025

Pumping test None GPM drawdown to _____ feet after _____ hours pumping

Water Well And Pump Record

Completion is required under authority of Part 127 Act 368 PA 1978.



Import ID:

Failure to comply is a misdemeanor.

Tax No: 19-04-327-004		Permit No: 108-12-000050		County: Oakland		Township: Bloomfield		
Well ID: 63000044840				Town/Range:	Section:	Well Status:	WSSN:	Source ID/Well No:
				02N 10E	4	Active		
				Distance and Direction from Road Intersection: 1/2 mile west of berkshire and woodward				
Elevation:				Well Owner: tony mcguckin				
Latitude: 42.606953				Well Address:		Owner Address:		
Longitude: -83.280925				325 n berkshire rd		1751 harmon road		
Method of Collection: GPS Std Positioning Sys SA Off				bloomfield hills, MI 48302		auburn hills, MI 48326		

Drilling Method: Rotary	Well Use: Household	Pump Installed: Yes	Pump Installation Only: No
Well Depth: 154.00 ft.	Well Use: Household	Pump Installation Date: 1/17/2014	HP: 1.50
Well Type: New	Date Completed: 1/14/2014	Manufacturer: Franklin Electric	Pump Type: Submersible
Casing Type: PVC plastic	Height: 1.00 ft. above grade	Model Number: 25sdqp1.5	Pump Capacity: 25 GPM
Casing Joint: Solvent welded/glued		Drop Pipe Length: 128.00 ft.	Pump Voltage: 230
Casing Fitting:		Drop Pipe Diameter: 1.25 in.	Drilling Record ID:
		Draw Down Seal Used: No	
Diameter: 5.00 in. to 140.00 ft. depth SDR: 21.00		Pressure Tank Installed: Yes	
		Pressure Tank Type: Diaphragm/bladder	
Borehole: 9.00 in. to 152.00 ft. depth		Manufacturer: Flex-Lite-Flexcon	
		Model Number: fl-7	Tank Capacity: 22.0 Gallons
		Pressure Relief Valve Installed: Yes	

Static Water Level: 80.00 ft. Below Grade
Well Yield Test: Yield Test Method: Air
Pumping level 154.00 ft. after 2.00 hrs. at 40 GPM

Screen Installed: Yes		Filter Packed: Yes
Screen Diameter: 3.50 in.		Blank: 2.00 ft. Above
Screen Material Type: Stainless steel-slotted		
Slot	Length	Set Between
12.00	8.00 ft.	140.00 ft. and 148.00 ft.
10.00	4.00 ft.	148.00 ft. and 152.00 ft.

Flttings: Neoprene packer

Well Grouted: Yes		Grouting Method: Grout pipe outside casing	
Grouting Material	Bags	Additives	Depth
Bentonite slurry	17.00	Retarder	0.00 ft. to 140.00 ft.

Wellhead Completion: 12 inches above grade

Nearest Source of Possible Contamination:		
Type	Distance	Direction
Septic tank	60 ft.	South

[illegible]

Geology Remarks:

Drilling Machine Operator Name: brian keller
Employment: Employee
Pump Installer: jon keller
Contractor Type: Water Well Drilling Contractor Reg No: 47-1924
Business Name: Keller Well Drilling Inc
Business Address: 5615 Chilton, Howell, MI, 48843

Water Well Contractor's Certification
This well/pump was constructed under my supervision and I hereby certify that the work complies with Part 127 Act 368 PA 1978 and the well code,
Dave Kent 1/28/14
Signature of Registered Contractor Date

General Remarks:

Other Remarks:

RECEIVED

JAN 28 2014

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

6320 0275

WATER WELL AND PUMP RECORD

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

PERMIT NUMBER

108-10-000022

TAX NUMBER

19-04-401-018

LATITUDE

LONGITUDE

COUNTY

OAKLAND

TOWNSHIP

BLOOMFIELD

DISTANCE & DIRECTION FROM ROAD
INTERSECTIONNORTH OF SQ LK RD
NORTH SIDE OF
BERKSHIRE

WELL STREET ADDRESS, CITY/ZIP

180 N BERKSHIRE
BLOOMFIELD HILLS
MI. 48302

WSSN

SOURCE ID/
WELL NO.

SECTION

TOWN NO.

RANGE NO.

4

3 N

10 E

WELL OWNER

ADDRESS

CITY/ZIP

MICHAEL BALDRIDGE
180 N BERKSHIRE
BLOOMFIELD HILLS, MI. 48302DRILLING METHOD ☒ Rotary ☐ Cable Tool ☐ Hollow Rod☐ Jetted ☐ Auger/Bored ☐ Other☐ Rotary w/Casing Hammer ☐ Cable Tool w/Casing HammerWELL
DEPTH

WELL USE

☒ Household ☐ Type I Public☐ Heat Pump-Supply ☐ Irrigation ☐ Type II Public☐ Heat Pump-Return ☐ Industrial ☐ Type III Public☐ Other ☐ Test Well

130 ft.

DATE COMPLETED

WELL TYPE ☐ New ☒ Replacement☐ Dry Hole ☐ Boring (Uncased) ☐ DeepeningCASING Type ☒ Plastic ☐ Steel-Black ☐ Steel-Galvanized☐ OtherJoint ☒ Glued ☐ Spline ☐ Welded ☐ Threaded

Diameter 5 in. to 120 ft. depth 21 SDR

in. to ft. depth SDR

Height Above Grade 1 ft. Fittings ☐ Drive Shoe ☐ Shale Packer

BOREHOLE Diameter 8 1/4 in. to 120 ft. depth

in. to ft. depth

STATIC WATER LEVEL

85 ft. Below Grade

☐ Flowing Flow Rate Before Control _____ G.P.M.

WELL YIELD TEST

Pumping Level 130 ft. After 1/2 hrs. Pumping at 50 G.P.M.

☒ Air ☐ Bailor ☐ Plunger ☐ Test PumpSCREEN ☐ Not Installed ☒ Filter-Packed Diameter 5 in.Material ☐ Stainless Steel ☒ Plastic ☐ Other

Slot 105 Length 10 ft. From 120 ft. To 130 ft.

Slot Length ft. From ft. To ft.

INSTALLATION ☐ Telescoped ☒ AttachedFITTINGS ☐ Neoprene Packer ☐ Bremer CheckBLANK ☐ above ft. Other

WELL GROUTED From 120 ft. To 0 ft.

☒ Bentonite Slurry ☐ Bentonite Dry Granular ☐ Neat Cement☐ Neat Cement with Bentonite ☐ Concrete No. of Bags 10Additives ☐ Lost Circulation Material ☐ Accelerator ☒ RetarderMETHOD ☒ Grout pipe outside casing ☐ Driven dry grout☐ Grout pipe inside casing ☐ Displacement plugWELLHEAD COMPLETION ☒ Pitless Adapter ☒ 12 in. Above Grade☐ Basement Offset ☐ Well House

NEAREST SOURCE OF POSSIBLE CONTAMINATION

Type SEPTIC Distance 65 ft. Direction N

Type Distance ft. Direction

ABANDONED WELL PLUGGED ☒ Yes ☐ No

Latitude Longitude

Casing Diameter 4 in. Depth 131 ft.

PLUGGING MATERIAL ☐ Neat Cement ☐ Bentonite Slurry☐ Cement/Bentonite Slurry ☐ Concrete Grout ☒ Bentonite ChipsNumber of Bags 16 Casing Removed? ☐ Yes ☒ NoREMARKS REMOVED ALL PUMPING EQUIP.
CUT OFF OLD WELL 1' BELOW G/L

108-10-0000-23

Owner Address Same As Well Address? ☒ Yes ☐ NoPUMP ☐ Not Installed ☐ Pump Installation Only

Manufacturer GRUNDFOS

Pump Type ☒ Submersible ☐ Jet ☐ Other

Model Number 105QE 250 HP 1 Volts 220

Pump Capacity 16 G.P.M. ☐ Drawdown Seal Installed

Length of Drop Pipe 120 ft. Diameter of Drop Pipe 1 in.

PRESSURE TANK ☐ Not Installed ☐ BuriedType ☒ Diaphragm/Bladder ☐ Galvanized

Manufacturer TITROL Model WY101

Total Tank Capacity 1 gal. ☒ Pressure Relief Valve Installed

Formation Description

Thickness of
StratumDepth to
Bottom of
Stratum

BROWN SAND

10

10

BROWN CLAY

8

18

GRAY CLAY

42

60

BROWN GRAVEL CLAY

40

100

GRAY GRAVEL

5

105

GRAY STONEY CLAY

10

115

GRAY GRAVEL

15

130

RECEIVED

AUG 25 2010

USE 2ND SHEET IF NECESSARY

DRILLING MACHINE OPERATOR ☐ Employee ☒ Subcontractor

Name MATT

PUMP INSTALLER (If different from drilling machine operator.)

Name RAY LAUNE WELL DRILLING

WATER WELL CONTRACTOR'S CERTIFICATION

This well/pump was constructed under my supervision and I hereby certify that the work complies with Part 127 Act 368 PA 1978 and the well code.

RAY LAUNE WELL DRILLING 630140

Registered Business Name

Registration No.

Address 8155 OAKHILL

City/State/ZIP CLARKSTON, MI. 48348

Signature of Registered Contractor

Date 8/17/10

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

A-108-08-000007 63178437

WATER WELL AND PUMP RECORD

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

PERMIT NUMBER

108-08-000006

WSSN & SOURCE ID/WELL NUMBER

TAX NUMBER

19-04-476-057

LATITUDE

LONGITUDE

COUNTY

Oakland

TOWNSHIP

Bloomfield

DISTANCE & DIRECTION FROM ROAD
INTERSECTION

WELL STREET ADDRESS, CITY/ZIP

127 S. Berkshire

FRACTION

NW 1/4 SW 1/4 SE 1/4

SECTION

4

TOWN NO.

2N

RANGE NO.

10E

WELL OWNER

Lubina Lapchak

ADDRESS

127 S. Berkshire

CITY/ZIP

Bloomfield, MI 48302

Owner Address Same As Well Address?

☒ Yes ☐ No

DRILLING METHOD

☐ Cable Tool☒ Rotary☐ Auger/Bored☐ Hollow Rod☐ Jetted☐ Other

WELL DEPTH

138 ft.

WELL USE

☒ Household☐ Type I Public☐ Test Well☐ Irrigation☐ Type II Public☐ Heat Pump☐ Industrial☐ Type III Public☐ Other

DATE COMPLETED

4 15 08

WELL TYPE

☐ New☒ Replacement☐ Dry Hole

CASING

☐ Steel-Black☒ Plastic☐ Steel-Galvanized☐ Welded☐ Threaded☐ Other

Diameter 5 in. to 130 ft. depth 21 SDR

in. to ft. depth SDR

BOREHOLE

Diameter 8 1/2 in. to 185 ft. depth

in. to ft. depth

Height

Casing Fittings

Above/Below Surface 1 ft.

☐ Drive Shoe☐ Shale Packer

STATIC WATER LEVEL

77 ft. Below Land Surface ☐ Flowing

PUMPING LEVEL (Below Land Surface)

79 ft. After 1 hrs. Pumping at 20 G.P.M.

☐ Air ☐ Bailer ☐ Plunger ☒ Test Pump

SCREEN

☐ Not Installed☒ Filter-Packed

Material Type PVC Diameter 4 in.

Slot 10 Length 8 ft.

Set Between 130 ft. and 138 ft.

FITTINGS

☒ Neoprene Packer☐ Bremer Check

BLANK

☐ above ft. Other

WELL GROUTED

☒ Yes☐ No

From 0 ft. to 120 ft.

☐ Neat Cement☒ Bentonite Slurry☐ Bentonite Dry Granular☐ Other No. of Bags 10 Additives e-z mud

WELLHEAD COMPLETION

☒ Pitless Adapter☐ 12 in. Above Grade☐ Basement Offset☐ Well House

NEAREST SOURCE OF POSSIBLE CONTAMINATION

Type septic Distance 85 ft. Direction NW

Type Distance ft. Direction

ABANDONED WELL PLUGGED

☒ Yes ☐ No

Casing Diameter 4 in. Depth 76 ft.

PLUGGING MATERIAL

☐ Neat Cement☐ Bentonite Slurry☐ Cement/Bentonite Slurry☐ Concrete Grout☒ Bentonite ChipsNumber of Bags 10 Casing Removed? ☐ Yes ☒ No

DRILLING MACHINE OPERATOR

☐ Employee☒ Subcontractor

Name James Zelony 63-1879

PUMP INSTALLER (if different from drilling machine operator.)

Name Bill Corsaut & Rick Thornont

REMARKS

PUMP

☐ Not Installed☐ Pump Installation Only

Manufacturer

Goulds

Pump Type

☒ Submersible☐ Jet☐ Other

Model Number 18SB10-422 HP 1 Volts 230

Pump Capacity 10 G.P.M. Drawdown Seal Installed ☐

Length of Drop Pipe 101 ft. Diameter of Drop Pipe 1 in.

PRESSURE TANK

☐ Not Installed☐ Buried

Type

☐ Diaphragm/Bladder☐ Other existing

Manufacturer

Antrol

Model

WX-252

Total Tank Capacity 86 gal. Pressure Relief Valve Installed ☒

Formation Description

Thickness of
StratumDepth to
Bottom of
Stratum

Top soil

3'

3'

Brown sand & gravel

32'

35'

Blue clay

16'

51'

Brown water sand & gravel

51'

102'

Brown water sand & gravel 17'

119'

Brown & gray w. sand &

gravel

19'

138'

05-29-08P03:29 RCVD

USE 2ND SHEET IF NECESSARY

WATER WELL CONTRACTOR'S CERTIFICATION

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

O.O. Corsaut, Inc.

0025

Registered Business Name

Registration No.

Address 15101 W. 11 Mile Rd.

City/State/Zip Oak Park, MI 48237

Signature of Registered Contractor

Date

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

WATER WELL AND PUMP RECORD

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

PERMIT NUMBER

108-09-000012

WSSN & SOURCE ID/WELL NUMBER

TAX NUMBER

19-04-376-007

LATITUDE

LONGITUDE

COUNTY

Oakland

TOWNSHIP

Bloomfield

DISTANCE & DIRECTION FROM ROAD
INTERSECTIONWest of Woodward 1/2 mi
South of Berkshire
50 ft

WELL STREET ADDRESS, CITY/ZIP

Woodward

Berkshire Well

FRACTION

1/4

1/4

1/4

SECTION

TOWN NO.

RANGE NO.

WELL OWNER

John Yamin

ADDRESS

217 Berkshire

CITY/ZIP

Bloomfield, MI 48302

Owner Address Same As Well Address?

☐ Yes ☐ No

DRILLING METHOD

☐ Cable Tool☒ Rotary☐ Auger/Bored☐ Hollow Rod☐ Jetted☐ Other

PUMP

☐ Not Installed☐ Pump Installation Only

Manufacturer

Berkley

WELL DEPTH

131 ft.

WELL USE

☒ Household☐ Type I Public☐ Test Well☐ Irrigation☐ Type II Public☐ Heat Pump☐ Industrial☐ Type III Public☐ OtherPump Type ☒ Submersible ☐ Jet ☐ Other

Model Number B10X05221 HP 42 Volts 230

Pump Capacity 10 G.P.M. Drawdown Seal Installed ☐

Length of Drop Pipe 100 ft. Diameter of Drop Pipe 1 in.

DATE COMPLETED

5/7/09

WELL TYPE

☐ New☒ Replacement☐ Dry Hole

CASING

☐ Steel-Black☒ Plastic☐ Steel-Galvanized☐ Welded☐ Threaded☐ Other

Diameter 5 in. to 123 ft. depth 21 SDR

in. to ft. depth SDR

PRESSURE TANK

☒ Not Installed☐ BuriedType ☒ Diaphragm/Bladder ☐ Other

Manufacturer Perma Air Model PAD 20

Total Tank Capacity 20 gal. Pressure Relief Valve Installed ☐

BOREHOLE

Diameter 8 1/2 in. to 131 ft. depth

in. to ft. depth

Height

Casing Fittings

Above/Below Surface ft. ☐ Drive Shoe ☐ Shale Packer

STATIC WATER LEVEL

80 ft. Below Land Surface ☐ Flowing

PUMPING LEVEL (Below Land Surface)

118 ft. After 1 hrs. Pumping at 30 G.P.M.

☒ Air ☐ Baller ☐ Plunger ☐ Test Pump

SCREEN

☐ Not Installed☒ Filter-Packed

Material Type Stainless Diameter 3 in.

Slot 2-12 Length 8 ft.

Set Between 123 ft. and 131 ft.

FITTINGS

☒ Neoprene Packer☐ Bremer Check

BLANK

☐ above 2 ft. Other

WELL GROUTED

☐ Yes ☐ No

From 0 ft. to 116 ft.

☐ Neat Cement☒ Bentonite Slurry☐ Bentonite Dry Granular☐ Other No. of Bags 10 Additives EZ-Mud

WELLHEAD COMPLETION

☒ Pitless Adapter☒ 12 in. Above Grade☐ Basement Offset ☐ Well House

NEAREST SOURCE OF POSSIBLE CONTAMINATION

Type Septic Distance 60 ft. Direction S

Type Distance ft. Direction

ABANDONED WELL PLUGGED

☒ Yes ☐ No

Casing Diameter 4 in. Depth 128 ft.

PLUGGING MATERIAL

☐ Neat Cement☐ Bentonite Slurry☐ Cement/Bentonite Slurry ☐ Concrete Grout ☒ Bentonite ChipsNumber of Bags 14 Casing Removed? ☐ Yes ☒ No

DRILLING MACHINE OPERATOR

☐ Employee ☐ Subcontractor

Name Al Edwards 5/7/09

PUMP INSTALLER (If different from drilling machine operator.)

Name

REMARKS

Also 3" well next to it was
not abandoned plugged it with
10 bags Bentonite chips

USE 2ND SHEET IF NECESSARY

WATER WELL CONTRACTOR'S CERTIFICATION

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

Kirklin Well Drilling

2047

Registered Business Name

Registration No.

Address 4718 Dawson Rd

City/State/Zip Lapeer, MI 48446

Signature of Registered Contractor

Date 6/4/09



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

ABANDONED WELL PLUGGING RECORD

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

TAX NO:

19-04-301-014

PERMIT NO:

108-06-000038

1. LOCATION OF WELL

County

Oakland

Township Name

Reisterstown

Fraction

1/4 1/4 1/4

Section No.

4

Town No.

T2 NS

Range No.

R10 EW

Distance and Direction from Road Intersection

East side of Franklin Rd
directly across from Filbert Ave.

Street Address & City of Well Location

691 Franklin Rd
Reisterstown, MD 21134

12 OWNER OF WELL

Address

Greenfield Tech. Park
Box 8007
Reisterstown, MD 21134

Address Same as Well Location ☐ Yes ☒ No

2. WELL DEPTH:

ft.

3. Date Plugging Completed

/ /

13. DROP PIPE/PUMPING EQUIPMENT REMOVED

☐ Yes ☐ No (Explain in COMMENTS)

4. USE:

- ☐ Single Family ☐ Type I Public ☐ Heat Pump
☐ Irrigation ☐ Type II Public ☐
☐ Test Well ☐ Type III Public

14. PLUGGING MATERIAL:

Bentonite Chips from _____ ft. to _____ ft. _____ 50# bags
Bentonite Pellets from _____ ft. to _____ ft. _____ 50# bags
Bentonite Grout from _____ ft. to _____ ft. _____ 50# bags
Neat Cement from _____ ft. to _____ ft. _____ 94# bags
Cement Grout from _____ ft. to _____ ft. _____ 94# bags
Other _____

5. REASON FOR ABANDONING WELL

- ☐ Municipal Water Hookup ☐ New Well Drilled
☐ Other _____ ☐ Unrepairable

6. CASING:

_____ in. dia. to _____ ft. depth.
_____ in. dia. to _____ ft. depth

7. CASING MATERIAL

- ☐ Steel ☐ Other _____
☐ Plastic

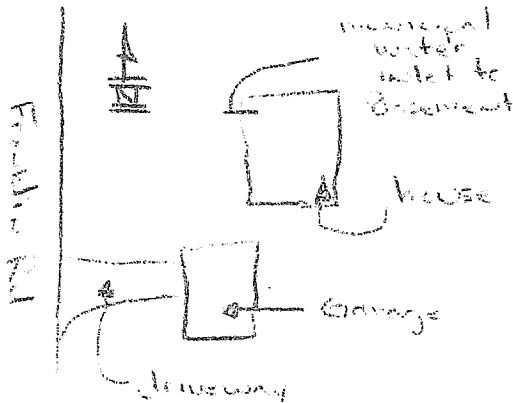
8. CASING STATUS AFTER PLUGGING

- ☐ Buried _____ ft. below grade ☐ Removed
☐ Above Grade _____ in.

9. FLOWING WELL: ☐ Yes ☐ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



11. COMMENTS

691 Franklin Rd. No well was
found dwelling was
utilizing public water
supply

15. LOST CIRCULATION ZONE MATERIALS USED ☐ Yes ☐ No

Type _____ Quantity _____ Placed from _____ ft. to _____ ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.)

Show type of plugging materials and interval plugged.

MATERIAL

FEET BELOW GRADE

02-16-07A10:57 RCVD

17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

S. White & Son Inc.
REGISTERED BUSINESS NAME

0058

REGISTRATION NO.

Address 6158 E. Washington Clarkston MI

Signed: Robert M. Ward

Date: 2/16/97

AUTHORIZED REPRESENTATIVE

NOTE: Plugging from well bottom up to ground surface is required.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

63006984

ABANDONED WELL PLUGGING RECORD

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

PERMIT NO:

TAX NO:

19-04-302-003

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

SW 1/4 Sec 14 T2 N/S R1E E/W

Section No.

1

Town No.

N/S

Range No.

R1E E/W

Distance and Direction from Road Intersection

220 ft south of Franklin Rd.
50 ft east of Franklin Rd

Street Address & City of Well Location

1441 Franklin Rd Bloomfield

12. OWNER OF WELL

Address

Bloomfield Technical Park
P.O. Box 80007
Rochester MI 48306

Address Same as Well Location

☐ Yes ☒ No

2. WELL DEPTH:

see comments

3. Date Plugging Completed

2 / 1 / 06

13. DROP PIPE/PUMPING EQUIPMENT REMOVED

☐ Yes ☒ No (Explain in COMMENTS)

4. USE:

- ☒ Single Family ☐ Type I Public ☐ Heat Pump
☐ Irrigation ☐ Type II Public ☐
☐ Test Well ☐ Type III Public

5. REASON FOR ABANDONING WELL

- ☐ Municipal Water Hookup ☐ New Well Drilled
☒ Other Industrial development ☐ Unrepairable

6. CASING:

4 in. dia. to ft. depth.
in. dia. to ft. depth

7. CASING MATERIAL

- ☒ Steel ☐ Other
☐ Plastic

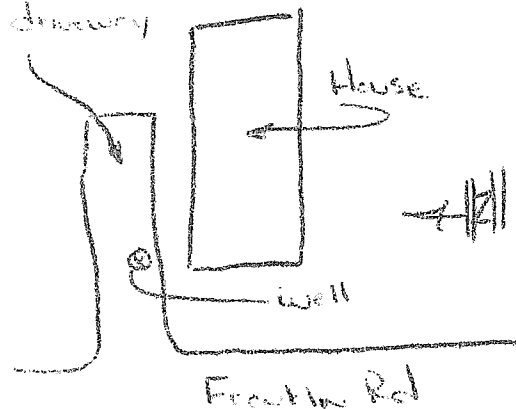
8. CASING STATUS AFTER PLUGGING

- ☒ Buried 4 ft. below grade ☐ Removed
☐ Above Grade in.

9. FLOWING WELL: ☐ Yes ☐ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



11. COMMENTS

2 pipe jet assembly used
steel well was constructed
with poly pipe that was
force down well.
Therefore exact well
depth unknown

15. LOST CIRCULATION ZONE MATERIALS USED

☐ Yes ☒ No
Type Quantity Placed from ft. to ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.)
Show type of plugging materials and interval plugged.

MATERIAL Bentonite Chips 4 FEET BELOW GRADE

17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

S. Wood - Saw Tax
REGISTERED BUSINESS NAME

0050
REGISTRATION NO.

Address 450 E Washington Chickadee

Signed S. Wood
AUTHORIZED REPRESENTATIVE

Date 2/1/06

NOTE: Plugging from well bottom up to ground surface is required.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

63006689

TAX NO:

19-04-302-011

ABANDONED WELL PLUGGING RECORD

Completion is required under authority of Part 127 Act 368 PA 1978

Failure to comply is a misdemeanor

PERMIT NO:

102-06-000042

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

SE 1/4 NW 1/4 SW 1/4

Section No.

4

Town No.

12 N/S

Range No.

12 E/W

Distance and Direction from Road Intersection

600 yds east of Fruit Hill Rd
125 ft north of Furse

Street Address & City of Well Location

350 Furse Bloomfield

12 OWNER OF WELL

Address Bloomfield Technology, Inc.
P.O. Box 5007
Rochester MI 48308

Address Same as Well Location ☐ Yes ☒ No

2. WELL DEPTH:

104 ft.

3. Date Plugging Completed

8 / 1 / 06

13. DROP PIPE/PUMPING EQUIPMENT REMOVED

☒ Yes ☐ No (Explain in COMMENTS)

4. USE:

☒ Single Family ☐ Type I Public ☐ Heat Pump
☐ Irrigation ☐ Type II Public
☐ Test Well ☐ Type III Public

14. PLUGGING MATERIAL:

Bentonite Chips from 104 ft. to 0 ft. 20 50# bags
Bentonite Pellets from 0 ft. to 0 ft. 50# bags
Bentonite Grout from 0 ft. to 0 ft. 50# bags
Neat Cement from 0 ft. to 0 ft. 94# bags
Cement Grout from 0 ft. to 0 ft. 94# bags
Other

5. REASON FOR ABANDONING WELL

☐ Municipal Water Hookup ☐ New Well Drilled
☐ Other ☒ Unrepairable

6. CASING:

5 in. dia. to 104 ft. depth.
in. dia. to ft. depth

7. CASING MATERIAL

☐ Steel ☐ Other
☒ Plastic

8. CASING STATUS AFTER PLUGGING

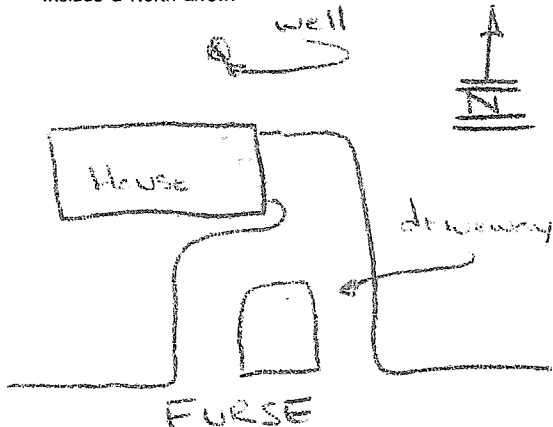
☐ Buried ft. below grade ☐ Removed
☒ Above Grade 12 in.

9. FLOWING WELL:

☐ Yes ☒ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



11. COMMENTS

15. LOST CIRCULATION ZONE MATERIALS USED

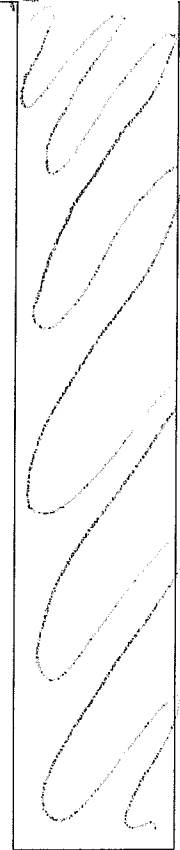
Type Quantity Placed from ft. to ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.)

Show type of plugging materials and interval plugged.

MATERIAL Bentonite Chips

1 FEET BELOW GRADE



104 ft.

17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

S. Whelan's Son, Inc.
REGISTERED BUSINESS NAME

0058
REGISTRATION NO.

Address 6454 E Whelanstown, Okemos

Signed [Signature] Date 8/1/06
AUTHORIZED REPRESENTATIVE

NOTE: Plugging from well bottom up to ground surface is required.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

63004679

TAX NO: 17-04-302-009

ABANDONED WELL PLUGGING RECORD

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

PERMIT NO: 108-06-000035

1. LOCATION OF WELL County: <u>Oakland</u>	Township Name: <u>Bloomfield</u>	Fraction: <u>SE 1/4 NW 1/4 SW 1/4</u>	Section No.: <u>1</u>	Town No.: <u>72</u> N/S	Range No.: <u>10</u> E/W
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Distance and Direction from Road Intersection
500 ft. E. of Road 150 ft. north of Forest St.
Street Address & City of Well Location
370 Forest Bloomfield

12. OWNER OF WELL
Address: Bloomfield Technology, Inc.
P.O. Box 80107
Rockester MI 48308
Address Same as Well Location ☐ Yes ☒ No

2. WELL DEPTH: 120 ft.
3. Date Plugging Completed: 8/1/06

13. DROP PIPE/PUMPING EQUIPMENT REMOVED
☒ Yes ☐ No (Explain in COMMENTS)

4. USE: ☒ Single Family ☐ Type I Public ☐ Heat Pump
☐ Irrigation ☐ Type II Public ☐
☐ Test Well ☐ Type III Public

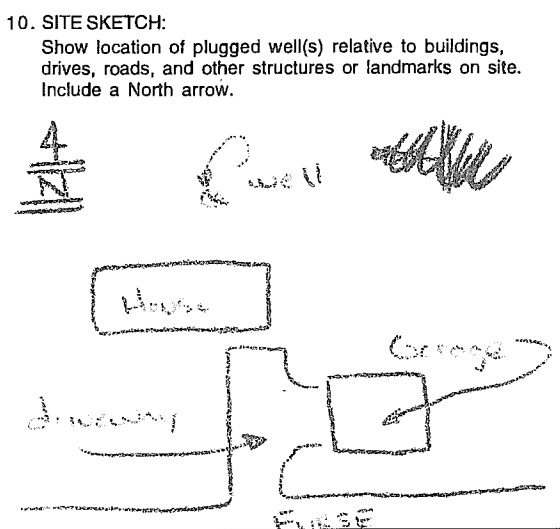
14. PLUGGING MATERIAL:
Bentonite Chips from 120 ft. to 0 ft. 14 50# bags
Bentonite Pellets from ft. to ft. 50# bags
Bentonite Grout from ft. to ft. 50# bags
Neat Cement from ft. to ft. 94# bags
Cement Grout from ft. to ft. 94# bags
Other

5. REASON FOR ABANDONING WELL ☐ New Well Drilled
☐ Municipal Water Hookup ☐ Unrepairable
☒ Other industrial development

6. CASING: 4 in. dia. to 120 ft. depth.
 in. dia. to ft. depth
7. CASING MATERIAL ☒ Steel ☐ Other
☐ Plastic

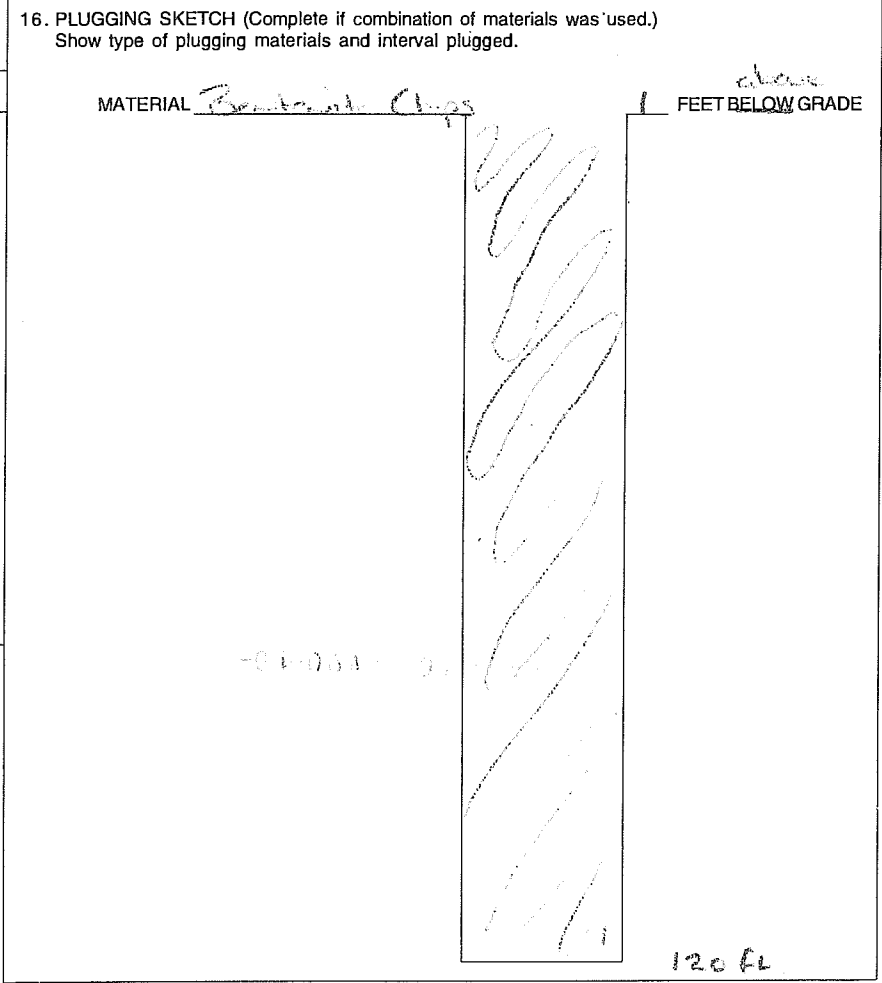
8. CASING STATUS AFTER PLUGGING
☐ Buried ft. below grade ☐ Removed
☒ Above Grade 12 in.

9. FLOWING WELL: ☐ Yes ☒ No



11. COMMENTS

15. LOST CIRCULATION ZONE MATERIALS USED ☐ Yes ☒ No
Type Quantity Placed from ft. to ft.



17. WATER WELL CONTRACTOR'S CERTIFICATION:
This well was plugged under my jurisdiction and this report is true to the best of my knowledge and belief.
REGISTERED BUSINESS NAME: Whitaker, Son, Inc. REGISTRATION NO.: 0055
Address: 615 E. Whitaker, Clarkston
Signed: [Signature] AUTHORIZED REPRESENTATIVE Date: 8/2/06

NOTE: Plugging from well bottom up to ground surface is required.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

ABANDONED WELL PLUGGING RECORD

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

63006690

TAX NO:

19-04-307-005

PERMIT NO:

108-06-000041

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

NW 1/4 NW 1/4 SW 1/4

Section No.

1

Town No.

108

Range No.

108

Distance and Direction from Road Intersection

200 yds east of Franklin Rd
100 ft South of Fremont St.

Street Address & City of Well Location

405 Fremont Bloomfield

12. OWNER OF WELL

Address

Bloomfield Technology Park
P.O. Box 80467
Rochester MI 48306

Address Same as Well Location ☐ Yes ☒ No

2. WELL DEPTH:

110 ft.

3. Date Plugging Completed

8 / 1 / 06

4. USE:

- ☒ Single Family ☐ Type I Public ☐ Heat Pump
☐ Irrigation ☐ Type II Public ☐
☐ Test Well ☐ Type III Public

5. REASON FOR ABANDONING WELL

- ☐ Municipal Water Hookup ☐ New Well Drilled
☐ Other ☒ Unrepairable

6. CASING:

4 in. dia. to 110 ft. depth.
in. dia. to ft. depth

7. CASING MATERIAL

- ☒ Steel ☐ Other
☐ Plastic

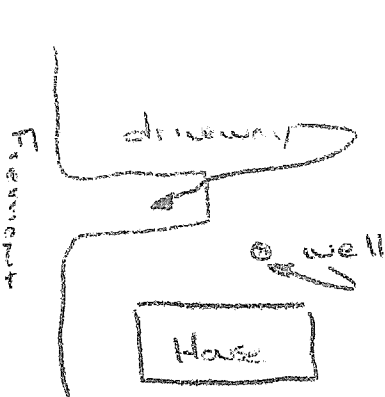
8. CASING STATUS AFTER PLUGGING

- ☐ Buried ft. below grade ☐ Removed
☒ Above Grade 12 in.

9. FLOWING WELL: ☐ Yes ☒ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



11. COMMENTS

NOTE: Plugging from well bottom up to ground surface is required.

15. LOST CIRCULATION ZONE MATERIALS USED ☐ Yes ☒ No

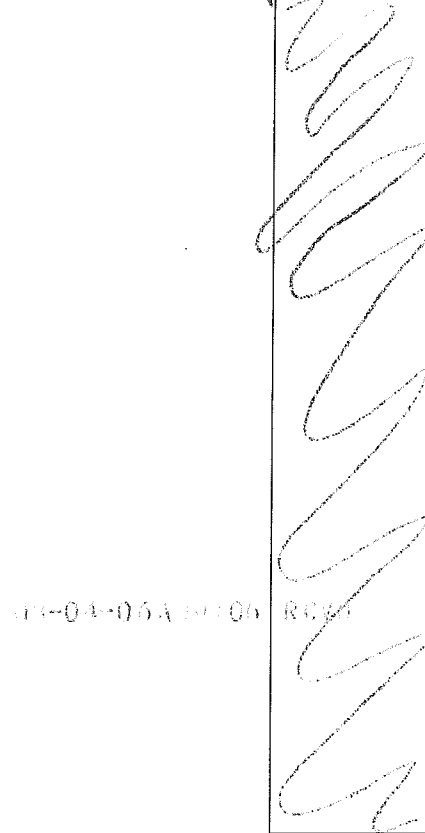
Type Quantity Placed from ft. to ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.) Show type of plugging materials and interval plugged.

MATERIAL

Bentonite Chips

1 FEET BELOW GRADE



17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address

Signed

Date



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

ABANDONED WELL PLUGGING RECORD

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

PERMIT NO:

TAX NO:

15-04-302-102

108-06-000044

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

SW 1/4 NW 1/4 SW 1/4

Section No.

4

Town No.

T2 N/S

Range No.

10E

Distance and Direction from Road Intersection

170ft south of Elmwood St
75ft east of Franklin Rd

Street Address & City of Well Location

1431 Franklin Rd Bloomfield

12. OWNER OF WELL

Address

Scientific Technology Park
PO Box 80477
Bloomfield, MI 48308

Address Same as Well Location

☐ Yes ☒ No

2. WELL DEPTH:

36 ft.

3. Date Plugging Completed

8/1/06

4. USE: ☒ Single Family

☐ Type I Public

☐ Heat Pump

☐ Irrigation

☐ Type II Public

☐ Test Well

☐ Type III Public

5. REASON FOR ABANDONING WELL

☐ Municipal Water Hookup

☐ New Well Drilled

☐ Other

☐ Unrepairable

6. CASING:

4 1/2 in. dia. to 36 ft. depth.

in. dia. to ft. depth

7. CASING MATERIAL

☒ Steel

☐ Other

☐ Plastic

8. CASING STATUS AFTER PLUGGING

☒ Buried ft. below grade

☐ Removed

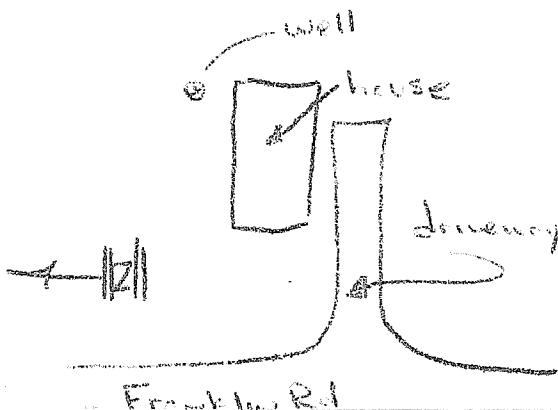
☐ Above Grade in.

9. FLOWING WELL:

☐ Yes ☒ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



11. COMMENTS

NOTE: Plugging from well bottom up to ground surface is required.

15. LOST CIRCULATION ZONE MATERIALS USED

Type Quantity Placed from ft. to ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.)
Show type of plugging materials and interval plugged.

MATERIAL

FEET BELOW GRADE

17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address

Signed

AUTHORIZED REPRESENTATIVE

Date

LOCAL HEALTH DEPT. COPY

EQP 2044 (03/1999)



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

ABANDONED WELL PLUGGING RECORD

Completion is required under authority of Part 127 Act 368 PA 1978

Failure to comply is a misdemeanor

6300 6691

TAX NO:

19-04-302-006

PERMIT NO:

108-06-000043

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

N 1/4 Sec 14 T2 N 1/4 R2 W

Section No.

4

Town No.

T2

Range No.

R2

W

Distance and Direction from Road Intersection

250 yds east of Franklin Rd
120 ft south of Fremont

Street Address & City of Well Location

395 Fremont Bloomfield

12 OWNER OF WELL

Address Bloomfield Technology Park
P.O. Box 80667
Richster MI 48306

Address Same as Well Location ☐ Yes ☒ No

2. WELL DEPTH:

111 ft.

3. Date Plugging Completed

8 / 1 / 06

13. DROP PIPE/PUMPING EQUIPMENT REMOVED

☒ Yes ☐ No (Explain in COMMENTS)

4. USE:

- ☒ Single Family ☐ Type I Public ☐ Heat Pump
☐ Irrigation ☐ Type II Public ☐
☐ Test Well ☐ Type III Public

14. PLUGGING MATERIAL:

Bentonite Chips from 111 ft. to 0 ft. 13 50# bags
Bentonite Pellets from ft. to ft. 50# bags
Bentonite Grout from ft. to ft. 50# bags
Neat Cement from ft. to ft. 94# bags
Cement Grout from ft. to ft. 94# bags
Other

5. REASON FOR ABANDONING WELL

- ☐ Municipal Water Hookup ☐ New Well Drilled
☒ Other Industrial development ☐ Unrepairable

6. CASING:

4 in. dia. to 111 ft. depth.
in. dia. to ft. depth

7. CASING MATERIAL

- ☒ Steel ☐ Other
☐ Plastic

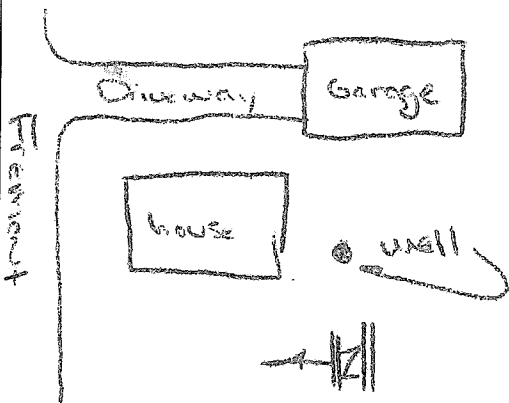
8. CASING STATUS AFTER PLUGGING

- ☐ Buried ft. below grade ☐ Removed
☒ Above Grade 12 in.

9. FLOWING WELL: ☐ Yes ☒ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



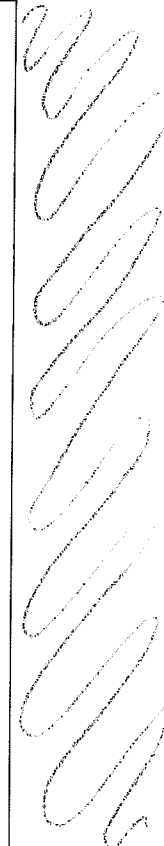
11. COMMENTS

15. LOST CIRCULATION ZONE MATERIALS USED ☐ Yes ☒ No

Type Quantity Placed from ft. to ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.) Show type of plugging materials and interval plugged.

MATERIAL Bentonite Chips 1 FEET above BELOW GRADE



111 ft.

17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

REGISTERED BUSINESS NAME

Address 4152 E Washington Clarkston

Signed [Signature] AUTHORIZED REPRESENTATIVE

Date 8/2/06

NOTE: Plugging from well bottom up to ground surface is required.



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

6300 6672

ABANDONED WELL PLUGGING RECORD

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

PERMIT NO:

102-06-000037

TAX NO:

13-04-302-001

1. LOCATION OF WELL

County

Oakland

Township Name

Blanchard

Fraction

1/4 Sec 1/4 E 1/4

Section No.

1

Town No.

T2 NS

Range No.

R10 EW

Distance and Direction from Road Intersection

70ft east of Franklin Rd
20ft south of Franklin St

Street Address & City of Well Location

1421 Franklin Rd, Blanchard

12. OWNER OF WELL

Address

Blanchard Twp
Blanchard MI 48306

Address Same as Well Location

☐ Yes ☒ No

2. WELL DEPTH:

126 ft.

3. Date Plugging Completed

8/1/06

13. DROP PIPE/PUMPING EQUIPMENT REMOVED

☒ Yes ☐ No (Explain in COMMENTS)

4. USE: ☒ Single Family

☐ Type I Public

☐ Heat Pump

☐ Irrigation

☐ Type II Public

☐ Test Well

☐ Type III Public

5. REASON FOR ABANDONING WELL

☐ New Well Drilled

☐ Municipal Water Hookup

☐ Unrepairable

☒ Other: industrial discharge

14. PLUGGING MATERIAL:

Bentonite Chips from 126 ft. to 0 ft. 14 50# bags

Bentonite Pellets from 0 ft. to 0 ft. 50# bags

Bentonite Grout from 0 ft. to 0 ft. 50# bags

Neat Cement from 0 ft. to 0 ft. 94# bags

Cement Grout from 0 ft. to 0 ft. 94# bags

Other

6. CASING:

4 in. dia. to 126 ft. depth.

4 in. dia. to 126 ft. depth

7. CASING MATERIAL

☒ Steel ☐ Other

☐ Plastic

8. CASING STATUS AFTER PLUGGING

☐ Buried 0 ft. below grade

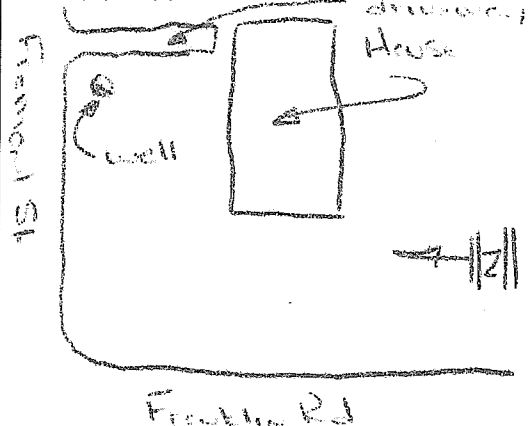
☐ Removed

☒ Above Grade 12 in.

9. FLOWING WELL: ☐ Yes ☒ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



15. LOST CIRCULATION ZONE MATERIALS USED

Type Quantity Placed from 0 ft. to 0 ft.

16. PLUGGING SKETCH (Complete if combination of materials was used.)

Show type of plugging materials and interval plugged.

MATERIAL Bentonite Chips

FEET BELOW GRADE

1ft above

08-04-06A09:06 RCVD

17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

S. Wood & Son Inc.

REGISTERED BUSINESS NAME

0058

REGISTRATION NO.

Address 4152 E Washington, Clarkston

Signed

AUTHORIZED REPRESENTATIVE

Date

8/2/06

NOTE: Plugging from well bottom up to ground surface is required.

LOCAL HEALTH DEPT. COPY

EOP 2044 (03/1999)



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

ABANDONED WELL PLUGGING RECORD

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

6300 6071

TAX NO:

19-04-301-000

PERMIT NO:

19-06-000040

1. LOCATION OF WELL

County

Cass

Township Name

Franklin

Fraction

NW 1/4 Sec 14 T14N R14E

Section No.

14

Town No.

N/S

Range No.

E/W

Distance and Direction from Road Intersection

1/2 mi. south of Frank St.
75 ft east of Franklin

Street Address & City of Well Location

1075 Franklin Rd, Pontiac

12. OWNER OF WELL

Address

Edinfield Technology Park
10. Box 80677
Rochester, MI 48308

Address Same as Well Location ☐ Yes ☒ No

2. WELL DEPTH:

100 ft.

3. Date Plugging Completed

8/1/06

4. USE: ☒ Single Family

☐ Type I Public

☐ Heat Pump

☐ Irrigation

☐ Type II Public

☐ Test Well

☐ Type III Public

5. REASON FOR ABANDONING WELL

☐ Municipal Water Hookup

☐ New Well Drilled

☐ Unrepairable

☒ Other

industrial development

6. CASING:

4 in. dia. to 100 ft. depth.

in. dia. to ft. depth

7. CASING MATERIAL

☒ Steel ☐ Other

☐ Plastic

13. DROP PIPE/PUMPING EQUIPMENT REMOVED

☒ Yes ☐ No (Explain in COMMENTS)

14. PLUGGING MATERIAL:

Bentonite Chips from 100 ft. to 0 ft. 50# bags

Bentonite Pellets from ft. to ft. 50# bags

Bentonite Grout from ft. to ft. 50# bags

Neat Cement from ft. to ft. 94# bags

Cement Grout from ft. to ft. 94# bags

Other

8. CASING STATUS AFTER PLUGGING

☒ Buried ft. below grade

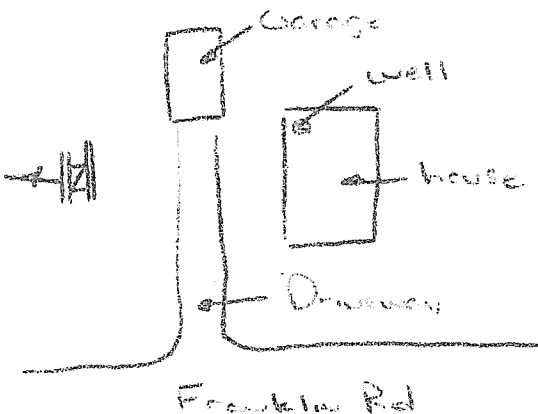
☐ Removed

☐ Above Grade in.

9. FLOWING WELL: ☐ Yes ☒ No

10. SITE SKETCH:

Show location of plugged well(s) relative to buildings, drives, roads, and other structures or landmarks on site. Include a North arrow.



11. COMMENTS

Pumping system was not intact. Abandon open 4" steel casing located in Basement floor. There was no evidence of any water leaks in or out of basement.

NOTE: Plugging from well bottom up to ground surface is required.

15. LOST CIRCULATION ZONE MATERIALS USED ☐ Yes ☒ No

Type Quantity Placed from ft. to ft.

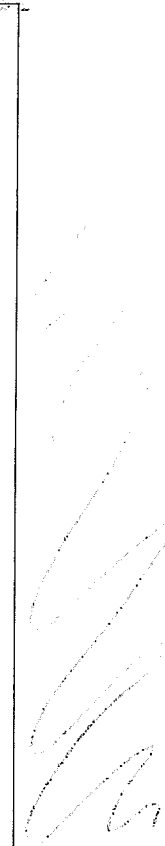
16. PLUGGING SKETCH (Complete if combination of materials was used.)

Show type of plugging materials and interval plugged.

MATERIAL

Bentonite Chips

FEET BELOW GRADE



100 ft.

17. WATER WELL CONTRACTOR'S CERTIFICATION:

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

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address

Signed

AUTHORIZED REPRESENTATIVE

Date

8/3/06

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

WATER WELL AND PUMP RECORD

Completion is required under authority of Part 127 Act 368 PA 1978.
Failure to comply is a misdemeanor.6300 2419
PERMIT NUMBER

124336

WSSN & SOURCE ID/WELL NUMBER

TAX NUMBER

19-04-376-005

LATITUDE

N. 42.60617

LONGITUDE

W 83.28189

COUNTY

OAKLAND

TOWNSHIP

BLOOMFIELD

DISTANCE & DIRECTION FROM ROAD
INTERSECTION

WELL STREET ADDRESS, CITY/ZIP

340 N. BERKSHIRE

FRACTION

NW 1/4 SE 1/4 SW 1/4

SECTION

4

TOWNSHIP

35010

RANGE NO.

10E

WELL OWNER

KASHYAP SAHA

ADDRESS

35708 Indigo

CITY/ZIP

Sterling Heights, MI 48310

Owner Address Same As Well Address?

☐ Yes ☒ No

DRILLING METHOD

☐ Cable Tool☒ Rotary☐ Auger/Bored☐ Hollow Rod☐ Jetted☐ Other

WELL DEPTH

128 ft.

WELL USE

☒ Household☐ Type I Public☐ Test Well☐ Irrigation☐ Type II Public☐ Heat Pump☐ Industrial☐ Type III Public☐ Other

DATE COMPLETED

4/18/06

WELL TYPE

☒ New☐ Replacement☐ Dry Hole

CASING

☐ Steel-Black☒ Plastic☐ Steel-Galvanized☒ Welded☐ Threaded☐ OtherDiameter 5 in. to 118 ft. depth 21 SDR
in. to ft. depth SDR

BOREHOLE

Diameter 8 1/2 in. to 130 ft. depth
in. to ft. depth

Height

Casing Fittings

Above/Below Surface 1 ft.

☐ Drive Shoe☐ Shale Packer

STATIC WATER LEVEL

64 ft. Below Land Surface ☐ Flowing

PUMPING LEVEL (Below Land Surface)

65 ft. After 1 hrs. Pumping at 30 G.P.M.

☒ Air 100+☐ Bailer☐ Plunger☒ Test Pump

SCREEN

☐ Not Installed☒ Filter-Packed

Material Type slotted casing Diameter 5 in.

Slot 25 Length 10 ft.

Set Between 118 ft. and 128 ft.

FITTINGS

☐ Neoprene Packer☐ Bremer Check

BLANK

☐ above ft. Other

WELL GROUTED

☒ Yes☐ No

From 0 ft. to 110 ft.

☐ Neat Cement☒ Bentonite Slurry☐ Bentonite Dry Granular☐ Other No. of Bags 13 Additives

WELLHEAD COMPLETION

☒ Pitless Adapter☒ 12 in. Above Grade☐ Basement Offset☐ Well House

NEAREST SOURCE OF POSSIBLE CONTAMINATION

Type septic Distance 100+ ft. Direction N

Type Distance ft. Direction

ABANDONED WELL PLUGGED

☐ Yes☐ No

Casing Diameter in. Depth ft.

PLUGGING MATERIAL

☐ Neat Cement☐ Bentonite Slurry☐ Cement/Bentonite Slurry☐ Concrete Grout☐ Bentonite ChipsNumber of Bags Casing Removed? ☐ Yes ☐ No

DRILLING MACHINE OPERATOR

☐ Employee☐ Subcontractor

Name Ray

PUMP INSTALLER (If different from drilling machine operator.)

Name

REMARKS

PUMP

☐ Not Installed☐ Pump Installation Only

Manufacturer

GOULDS

Pump Type

☒ Submersible☐ Jet☐ Other

Model Number 185B15422 HP 1 1/2 Volts 230

Pump Capacity 18 G.P.M. Drawdown Seal Installed ☐

Length of Drop Pipe 68 ft. Diameter of Drop Pipe 1 in.

PRESSURE TANK

☐ Not Installed☐ Buried

Type

☒ Diaphragm/Bladder☐ Other

Manufacturer

Goulds

Model

T250

Total Tank Capacity 82.5 gal. Pressure Relief Valve Installed ☒

Formation Description

Thickness of
StratumDepth to
Bottom of
Stratum

BROWN CLAY

8

8

Blue CLAY w/GRAVEL

60

68

MED GRAY GRAVEL

60

128

04-25-06P04:03

USE 2ND SHEET IF NECESSARY

WATER WELL CONTRACTOR'S CERTIFICATION

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

VanTine Well DRILLING 632053

Registered Business Name

Registration No.

Address 2008 Hummer Lk. Rd.

City/State/Zip OXFORD, MI 48371

Ray E. VanTine

4-18-06

Signature of Registered Contractor

Date

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

WATER WELL AND PUMP RECORD

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

PERMIT NUMBER

0123714

WSSN & SOURCE ID/WELL NUMBER

TAX NUMBER

19-04-426-009

LATITUDE

LONGITUDE

COUNTY

OAKLAND

TOWNSHIP

BLOOMFIELD

DISTANCE & DIRECTION FROM ROAD
INTERSECTION1/4 MILE NORTH OF
SQUARE 45 RD ON
WOODWARD @
N BETHSHIRE

WELL STREET ADDRESS, CITY/ZIP

50 NORTH
BETHSHIRE
BLOOMFIELD, MI.
48301

FRACTION

SE 1/4 SE 1/4 SE 1/4

SECTION

4

TOWN NO.

3N

RANGE NO.

10E

WELL OWNER

ROHIT GAUDHE
ADDRESS 47132 MANHATTAN
CITY/ZIP NOVI, MI. 48302Owner Address Same As Well Address? ☐ Yes ☒ No

DRILLING METHOD

☐ Cable Tool☒ Rotary☐ Auger/Bored☐ Hollow Rod☐ Jetted☐ Other

WELL DEPTH

147 ft.

WELL USE

☒ Household☐ Type I Public☐ Test Well☐ Irrigation☐ Type II Public☐ Heat Pump☐ Industrial☐ Type III Public☐ Other

DATE COMPLETED

11/3/05

WELL TYPE

☒ New☐ Replacement☐ Dry Hole

CASING

☐ Steel-Black☒ Plastic☐ Steel-Galvanized☒ Welded☐ Threaded☐ Other

Diameter 5 in. to 137 ft. depth 21 SDR

in. to ft. depth SDR

BOREHOLE

Diameter 8 3/4 in. to 147 ft. depth

in. to ft. depth

Height

Above/Below Surface 1 ft. Casing Fittings

STATIC WATER LEVEL

75 ft. Below Land Surface ☐ Flowing

PUMPING LEVEL (Below Land Surface)

147 ft. After 1/2 hrs. Pumping at 75 G.P.M.

☒ Air ☐ Bailer ☐ Plunger ☐ Test Pump

SCREEN

☐ Not Installed☒ Filter-Packed

Material Type PVC SAND CUT Diameter 5 in.

Slot 1015 Length 10 ft.

Set Between 137 ft. and 147 ft.

FITTINGS

☐ Neoprene Packer☐ Bremer Check

BLANK

☐ above ft. Other

WELL GROUTED

☒ Yes ☐ No

From 137 ft. to 0 ft.

☐ Neat Cement☒ Bentonite Slurry☐ Bentonite Dry Granular☐ Other No. of Bags 14 Additives EZ MUD

WELLHEAD COMPLETION

☒ Pitless Adapter☒ 12 in. Above Grade☐ Basement Offset☐ Well House

NEAREST SOURCE OF POSSIBLE CONTAMINATION

Type SEPTIC Distance 70+ ft. Direction SW

Type Distance ft. Direction

ABANDONED WELL PLUGGED

☐ Yes ☐ No

Casing Diameter in. Depth ft.

PLUGGING MATERIAL

☐ Neat Cement☐ Bentonite Slurry☐ Cement/Bentonite Slurry☐ Concrete Grout☐ Bentonite Chips

Number of Bags

Casing Removed?

☐ Yes ☐ No

DRILLING MACHINE OPERATOR

☐ Employee☒ Subcontractor

Name MATT

PUMP INSTALLER (If different from drilling machine operator.)

Name RAY LARONE WELL DRILLING

REMARKS

PUMP

☐ Not Installed☐ Pump Installation Only

Manufacturer

Gould BF 20 CONTROLLER

Pump Type

☒ Submersible☐ Jet☐ Other

Model Number 336520 HP 2 Volts 220

Pump Capacity 30 G.P.M. Drawdown Seal Installed ☐

Length of Drop Pipe 126 ft. Diameter of Drop Pipe 1 1/4 in.

PRESSURE TANK

☒ Not Installed ☐ Buried

Type

☒ Diaphragm/Bladder ☐ Other

Manufacturer Gould

Model 25

Total Tank Capacity 5 gal. Pressure Relief Valve Installed ☒

Formation Description

Thickness of Stratum

Depth to Bottom of Stratum

BROWN CLAY

15

15

BROWN GRAVEL

10

25

GRAY CLAY

85

110

GRAY SAND & CLAY

20

130

GRAY CLAY

5

135

GRAY GRAVEL

12

147

12-08-05A09:13 RCVD

USE 2ND SHEET IF NECESSARY

WATER WELL CONTRACTOR'S CERTIFICATION

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

RAY LARONE WELL DRILLING 630140

Registered Business Name

Registration No.

Address 8155 OAKHILL

City/State/Zip CLARKSTON MI. 48348

Signature of Registered Contractor Ray Larone

Date 11/3/05

WATER WELL AND PUMP RECORD

Completion is required under authority of Part 127 Act 368 PA 1978

Failure to comply is a misdemeanor

PERMIT NO:

26274

TAX NO:

19-04-376-001

1. LOCATION OF WELL

County

OAKLAND

Township Name

Bloomfield

Fraction

1/4 1/4 1/4

Section No.

4

Town No.

214

Range No.

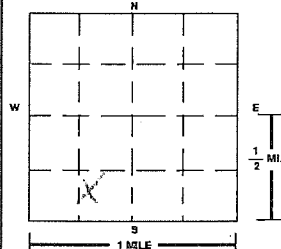
106

Distance and Direction from Road Intersection

300 N BARKSHIRE
BLOOMFIELD TWP

Street Address & City of Well Location

Locate with 'x' in Section Below



Sketch Map

2. FORMATION DESCRIPTION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

BROWN CLAY	10	10
GRAY CLAY / brown gravel	34	44
GRAY / brown CLAY	14	80
BROWN GRAVEL	30	110
GRAY GRAVEL	30	140

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☐ Yes ☐ No

Casing Diameter _____ in.

Depth _____ ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry☐ Concrete Grout☐ Bentonite Slurry☐ Bentonite Chips

No. of Bags _____

Casing Removed?

☐ Yes ☐ No

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

17. DRILLING MACHINE OPERATOR:

☐ Employee ☒ Subcontractor

Name ROE FLEWING

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.

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address

Signed

AUTHORIZED REPRESENTATIVE

Date

3. OWNER OF WELL

Address

MILLER VINTAGE
1144 WOODBURN
FLANDERS, MI 48120Address Same as Well Location ☐ Yes ☒ No

4. WELL DEPTH:

Date Completed

☒ New Well☐ Replacement Well☐ 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: 5 in. to 10 ft. depth

Weight: 30 lbs/ft.

in. to ft. depth

BORE HOLE:

Diameter: 8 1/2 in. to 10 ft. depth

☐ Drive Shoe

in. to ft. depth

☐ Shale Packer8. SCREEN: ☐ Not Installed ☒ Gravel-Packed

Type PVC

Diameter 3"

Slot/Gauze

Length: 8'

Set Between 134 ft. and 151 ft.

FITTINGS:

☐ K-Packer☐ Bremer Check☒ Blank Above Screen 2 ft. Other

9. STATIC WATER LEVEL:

23 ft. Below Land Surface

☐ Flowing

10. PUMPING LEVEL: Below Land Surface

91 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 131 ft.

☐ Neat Cement☒ Bentonite☐ Other

No. of Bags 11

Additives 64 MDD

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type 304L STAINLESS STEEL Distance 60 ft. Direction S

Type 304L STAINLESS STEEL Distance 60 ft. Direction S

14. PUMP:

☐ Not Installed☐ Pump Installation Only

Manufacturer's Name KED JACKET

Model Number 10121208

HP 1

Volts 120

Length of Drop Pipe 90 ft.

Capacity 18 G.P.M.

TYPE:

☒ Submersible☐ Jet☐ Other

PRESSURE TANK:

Manufacturer's Name WELLS WHITE

Model Number 10121208

Capacity 12

Gallons 10

[illegible]

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Township Name Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number 4	Town Number 2 N ^W .	Range Number 10 E ^W .
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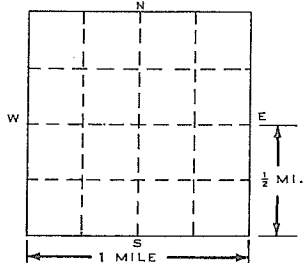
Distance And Direction from Road Intersections

136 W. Highland

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



2 FORMATION

THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Brown clay	12'
Brown clay & sand	20'
Grey Clay & gravel	12'
Gravel some clay	8'
Black sand some clay	3'
Hardpan (gravel & clay)	9'
Dry brown gravel & sand	23'
Dry gravel & sand	2'
Brown gravel & some clay & sand	2'
Gravel & sand (hardpan)	6'
Wet gravel & sand	3'
Coarse gravel & sand	18'
Med. brown sand	5'
Grey med gravel & sand	7'
Very fine sand	2'

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

3 OWNER OF WELL:

Charles W. WolfeAddress **Jana L. Wolfe****136 W. Highland****Bloomfield Hills Michigan 48013**

4 WELL DEPTH: (completed) Date of Completion

137 ft. **1/26/81**5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☒ Domestic ☐ Public Supply ☐ Industry☐ Irrigation ☐ Air Conditioning ☐ Commercial☐ Test Well ☐7 CASING: Threaded ☒ Welded ☐

Height: Above/Below

Diam. Surface **5'6"** ft.**4** in. to **137'6"** ft. DepthWeight **11** lbs./ft.**4** in. to **137'6"** ft. DepthDrive Shoe? Yes ☐ No ☐8 SCREEN: **Johnson stainless**Type: **steel** Dia.: **4"**Slot/Gauze **15** Length **5'**Set between **132** ft. and **137** ft.Fittings:
3"x18" nipple

9 STATIC WATER LEVEL

95 ft. below land surface

10 PUMPING LEVEL below land surface

123 ft. after **2** hrs. pumping **20+** g.p.m.**123** ft. after **2** hrs. pumping **20+** g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) _____ Chlorides (Cl) _____

Hardness _____ Other _____

12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From _____ ft. to _____ ft.

14 Nearest Source of possible contamination

_____ feet _____ Direction **Unknown** TypeWell disinfected upon completion ☐ Yes ☐ No15 PUMP: ☐ Not installedManufacturer's Name **Red Jacket**Model Number **75R1-CR12BC** HP **3/4** Volts **230**Length of Drop Pipe **122** ft. capacity **11** G.P.M.Type: ☒ Submersible☐ Jet ☐ Reciprocating

17 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.

O.O. Corsaut, Inc.**0025**

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address **15101 W. 11 Mile Rd. Oak Park, MI 48237**

Signed

AUTHORIZED REPRESENTATIVE

Date **2/2/81**

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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: 19-04-401-013

PERMIT NO: 25817 ✓

1. LOCATION OF WELL

County OAKLAND

Township Name BLOOMFIELD

Fraction NW 1/4 NE 1/4

Section No. 4

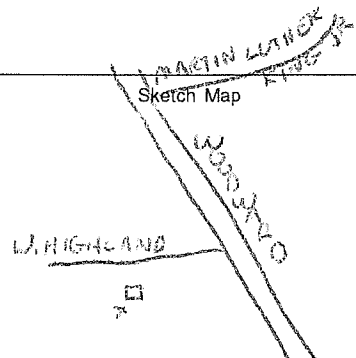
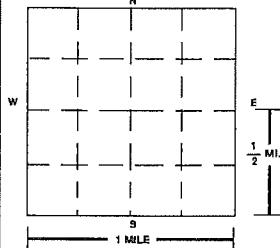
Town No. 2

Range No. 10

Distance and Direction from Road Intersection

Street Address & City of Well Location

Locate with 'X' in Section Below



2. FORMATION DESCRIPTION

THICKNESS OF STRATUM

DEPTH TO BOTTOM OF STRATUM

BROWN CLAY	12	12
BROWN SAND / CLAY	10	22
GREY CLAY	17	39
GREY CLAY / GRAVEL	7	46
GREY SAND	15	61
GREY CLAY	17	78
GREY SAND	6	84
GREY CLAY	5	89
GREY SAND	15	104

06-17-02P02:29 RVD

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☐ Yes ☐ No

Casing Diameter _____ in.

Depth _____ ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry

☐ Neat 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 BRIAN

3. OWNER OF WELL YVONNE JACQUES

Address

55 W. Highland Dr.
Bloomfield Hills, MI 48302

Address Same as Well Location ☒ Yes ☐ No

4. WELL DEPTH:

Date Completed

☒ New Well

104 ft.

5/30/02

☐ 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

Height: Above/Below

☒ Plastic ☐ Welded

Surface: 1 ft

☐ Other

Diameter: 5 in. to 100 ft. depth

Weight: 30221 lbs./ft.

_____ in. to _____ ft. depth

BORE HOLE:

Diameter: 8 1/2 in. to 104 ft. depth

☐ Drive Shoe

_____ in. to _____ ft. depth

☐ Shale Packer

8. SCREEN: ☐ Not Installed

☐ Gravel-Packed

Type Stainless Steel

Diameter 3 5/8

Slot/Gauze 20

Length: 4'

Set Between 100 ft. and 104 ft.

FITTINGS: ☒ K-Packer

☐ Bremer Check

☒ Blank Above Screen 1 ft. Other

9. STATIC WATER LEVEL:

65 ft. Below Land Surface

☐ Flowing

10. PUMPING LEVEL: Below Land Surface

80 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 95 ft.

☐ Neat Cement

☒ Bentonite

☐ Other

No. of Bags 6

Additives

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type Sewer

Distance 40 ft.

Direction N

Type

Distance

ft. Direction

14. PUMP: ☐ Not Installed

☐ Pump Installation Only

Manufacturer's Name Star-rite

Model Number 20SP4E02

HP 1

Volts 230

Length of Drop Pipe 80 ft.

Capacity 20 G.P.M.

TYPE: ☒ Submersible ☐ Jet ☐ Other

PRESSURE TANK:

Manufacturer's Name Star-rite

Model Number SR85

Capacity 85 Gallons

85

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.

James Layman

1926

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address 10275 Eagle Rd. Davisburg

Signed James Layman

Date 5-5-02

AUTHORIZED REPRESENTATIVE

LOCAL HEALTH DEPT. COPY

EQP 2017 (12/96)

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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: 19-04-429 002

PERMIT NO: 25702 ✓

1. LOCATION OF WELL

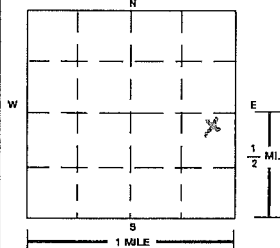
County Oakland Township Name Blount Fraction NE 1/4 NE 1/4 Sec 14 Section No. 4 Town No. 2N Range No. 10E

Distance and Direction from Road Intersection

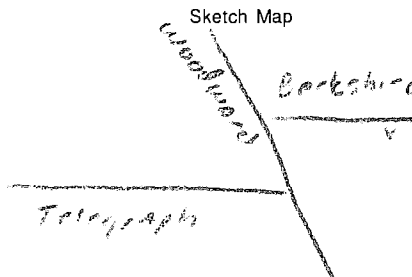
E of Woodward

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

Brown clay	25	25
Gravel	40	65
Blue clay	60	125
Gravel	15	140
Note		
O.C. Took		
Water Sample		
06-03-02A09:32 RCVD		
USE A 2ND SHEET IF NEEDED		

15. ABANDONED WELL PLUGGED?

☐ Yes ☐ No

Casing Diameter 4 in. Depth 140 ft.

PLUGGING MATERIAL:

☒ Cement/Bentonite Slurry ☐ Neat Cement ☒ Bentonite Slurry ☐ Concrete Grout ☐ Bentonite Chips
No. of Bags 5 Casing Removed? ☐ Yes ☐ No

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

17. DRILLING MACHINE OPERATOR:

☒ Employee ☐ Subcontractor

Name Bob

3. OWNER OF WELL THREES

Address 68 E. Berkshire
Blount

Address Same as Well Location ☒ Yes ☐ No

4. WELL DEPTH:

140 ft.

Date Completed

5-14-02

☐ 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: 5 in. to 140 ft. depth

Weight: 500 lbs./ft.

in. to ft. depth

BORE HOLE:

Diameter: 8 in. to 140 ft. depth

☐ Drive Shoe

☐ Shale Packer

in. to ft. depth

8. SCREEN:

☐ Not Installed

☒ Gravel-Packed

Type Stainless

Diameter 3

Slot/Gauze 10

Length: 4

Set Between 136 ft. and 140 ft.

FITTINGS:

☒ K-Packer

☐ Bremer Check

☐ Blank Above Screen ft. Other

9. STATIC WATER LEVEL:

60 ft. Below Land Surface

☐ Flowing

10. PUMPING LEVEL: Below Land Surface

80 ft. After 1 hrs. Pumping at 40 G.P.M.

☐ Plunger

☐ Bailor

☒ Air

☐ Test Pump

11. WELL HEAD COMPLETION:

☒ Pitless Adapter

☐ 12" Above Grade

☐ Basement Offset

☐ Well House

12. WELL GROUTED?

☐ No

☒ Yes

From 130 to 0 ft.

☐ Neat Cement

☒ Bentonite

☐ Other

No. of Bags 13

Additives EZ-mix

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type Septic Distance 50 ft. Direction SE

Type Distance ft. Direction

14. PUMP:

☐ Not Installed

☐ Pump Installation Only

Manufacturer's Name Sta-Bite

Model Number SK100 HP 1 Volts 220

Length of Drop Pipe 70 ft. Capacity 16 G.P.M.

TYPE: ☒ Submersible ☐ Jet ☐ Other

PRESSURE TANK:

Manufacturer's Name Well & Tool

Model Number WXT51 Capacity 62 Gallons 20

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.

Joe Manner well Drilling 1928

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address 4425 S. Commerce - Comm

Signed Joe T. Manner

Date 5-23-02

AUTHORIZED REPRESENTATIVE

JV

WATER WELL AND PUMP RECORD

TAX NO: 17-01-327-007

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

PERMIT NO: 26132

1. LOCATION OF WELL

County

OAKLAND

Township Name

Bloomfield

Fraction

1/4 1/4 1/4

Section No.

4

Town No.

2N

Range No.

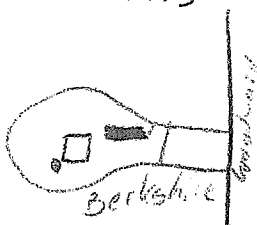
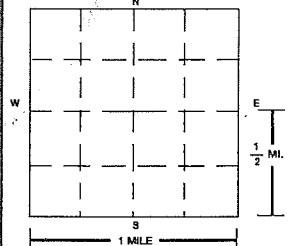
10E

Distance and Direction from Road Intersection

Street Address & City of Well Location 365 N. BERSHIRE

Locate with 'x' in Section Below

Bloomfield Hts Sketch Map 48303



2. FORMATION DESCRIPTION

THICKNESS OF STRATUM

DEPTH TO BOTTOM OF STRATUM

brown clay	20	20
Sand And Gravel	50	70
Grey clay	25	95
Gravel	5	100
Grey clay	10	115
Water bearing sand	28	143

03-30-2004

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☐ Yes ☐ No

Casing Diameter _____ in.

Depth _____ ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry

☐ Neat 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 CHAIRS F6531ER

3. OWNER OF WELL BOB VAN VOORHIES

Address 365 N. BERSHIRE

Address Same as Well Location ☐ Yes ☒ No

4. WELL DEPTH:

Date Completed

143 ft. 11/10/03

☒ New Well

☐ Replacement Well

☐ 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

Diameter: 5 in. to 13 ft. depth

in. to ft. depth

BORE HOLE:

Diameter: 8 in. to 14 ft. depth

in. to ft. depth

Height: Above/Below

Surface: 9 ft

Weight: 2.96 lbs./ft.

☐ Drive Shoe

☐ Shale Packer

8. SCREEN: ☐ Not Installed

☒ Gravel-Packed

Type 5.5

Diameter 3

Slot/Gauze 5-15

Length: 8

Set Between 143 ft. and 135 ft.

FITTINGS: ☒ K-Packer

☐ Bremer Check

☒ Blank Above Screen 2 pvc ft. Other

9. STATIC WATER LEVEL:

100 ft. Below Land Surface

☐ Flowing

10. PUMPING LEVEL: Below Land Surface

143 ft. After 2 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 130 ft.

☐ Neat Cement

☒ Bentonite

☐ Other

No. of Bags 14 Additives EZ MUD

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type Septic

Distance 60+ ft.

Direction N

Type

Distance

Direction

14. PUMP:

☐ Not Installed

☐ Pump Installation Only

Manufacturer's Name FAIRBANKS

Model Number 18A

HP 1

Volts 220

Length of Drop Pipe 125 ft.

Capacity 10 G.P.M.

TYPE: ☒ Submersible

☐ Jet

☐ Other

PRESSURE TANK:

Manufacturer's Name PERMAIR

Model Number RAD 86

Capacity 35 Gallons

85

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.

TIM KIRKLIN WELL DRILLING 2007
REGISTERED BUSINESS NAME REGISTRATION NO.

Address 2047 BRAY RD. ATTICA

Signed

Date

AUTHORIZED REPRESENTATIVE

EQP 2017 (10/02)

LOCAL HEALTH DEPT. COPY

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:

19-04-476-011

PERMIT NO:

26036

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

NW 1/4 SE 1/4 SW 1/4

Section No.

4

Town No.

2N

Range No.

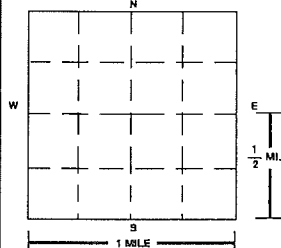
10E

Distance and Direction from Road Intersection

43 S. Berkshire

Street Address & City of Well Location

Locate with 'X' in Section Below



Sketch Map

2. FORMATION DESCRIPTION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Yellow clay

15'

15'

Yellow sand

18'

33'

Blue clay

60'

93'

Large gravel

15'

118'

Water sand (course)

10'

128'

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☒ Yes ☐ No

Casing Diameter 4 in.

Depth 128 ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry☐ Neat Cement☐ Bentonite Slurry

No. of Bags 12

☐ Concrete Grout☒ Bentonite Chips

Casing Removed?

☐ Yes ☒ No

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

sub-cont: Gil Sunde Well Drilling
#1170

17. DRILLING MACHINE OPERATOR:

☐ Employee ☒ Subcontractor

Name Drian Sunde

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.

O.O. Corsaut, Inc.

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address 15101 W. 11 Mile Oak Park, MI 48237

Signed

Date

AUTHORIZED REPRESENTATIVE

0025

EQP 2017 (12/96)

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Township Name Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number 4	Town Number 2 N.W.	Range Number 10 E.W.
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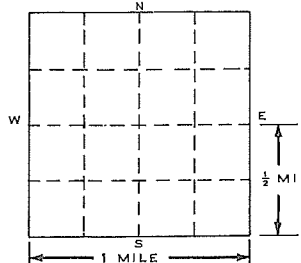
Distance And Direction from Road Intersections

1421 Franklin

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Black top

5'

5'

Yellow Sand

7'

12'

Gray Clay and Gravel

13'

25'

Dry Gravel and Sand

9'

34'

Gray Clay and Gravel (soft)

36'

70'

Gray clay and Gravel (Hard)

19'

89'

Hard Clay and Gravel

3'

92'

Gravel and Sand some clay(hardpan)10'

10'

102'

Hardpan (Gravel and Sand)

9'

111'

Rock

1'

112'

Gravel and Sand (dry-Coarse)

8'

120'

Dry Hard Gravel

2'6"

122'6"

Coarse Gravel and Sand

3'

125'6"

Gravel and Sand (No heave)

6"

126'

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

3 OWNER OF WELL:

Mr. Perry Mc ConnerAddress **1421 Franklin****Pontiac, Michigan 48053****Bloomfield Hills, Michigan 48013****126** ft. **4-21-80**

☒ Cable tool	☐ Rotary	☐ Driven	☐ Dug
☐ Hollow rod	☐ Jetted	☐ Bored	☐

6 USE: ☒ Domestic	☐ Public Supply	☐ Industry
☐ Irrigation	☐ Air Conditioning	☐ Commercial
☐ Test Well	☐	☐

7 CASING: Threaded ☒ Welded ☐ Height: Above groundDiam. **4** in. to **124** ft. DepthWeight **11** lbs./ft.Drive Shoe? Yes ☐ No ☐8 SCREEN: **Johnson Stainless**Type: **Steel** Dia.: **4"**Slot/Screen **35** Length **5'**Set between **121** ft. and **126** ft.Fittings: **3" x 14" Nipple**

9 STATIC WATER LEVEL

79 ft. below land surface

10 PUMPING LEVEL below land surface

105 ft. after ___ hrs. pumping **28+** g.p.m.

___ ft. after ___ hrs. pumping ___ g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) **0.6** Chlorides (Cl) **51**Hardness **306** Other ___

12 WELL HEAD COMPLETION:

☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐

Depth: From ___ ft. to ___ ft.

14 Nearest Source of possible contamination **Unknown**

___ feet Direction ___ Type

Well disinfected upon completion ☒ Yes ☐ No15 PUMP: ☐ Not installedManufacturer's Name **Myers**Model Number **SL1521-1514** HP **1/2** Volts **230**Length of Drop Pipe **105** ft. capacity **19** G.P.M.Type: ☒ Submersible☐ Jet ☐ Reciprocating

17 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.

O. O. Corsaut, Inc.

REGISTERED BUSINESS NAME

0025

REGISTRATION NO.

Address **15101 W. 11 Mile Road, Oak Park 48237**Signed **O. O. Corsaut** Date **May 22, 1980**

AUTHORIZED REPRESENTATIVE

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County <u>Oakland</u>	Twp. <u>Bloomfield</u>	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section No. <u>4</u>	Town <u>T 2 N.</u>	Range <u>R 10 E.</u>
-----------------------	------------------------	--	----------------------	--------------------	----------------------

Distance And Direction from Road Intersections

OWNER No. 257 S. Berkshire
Bloomfield Hills

Street address

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Yellow Clay

10'

10'

Blue Clay

21'

31'

Stoney Hardpan

29'

60'

Yellow Sand Hardpan (Very Fine)

18'

78'

Hardpan

2'

80'

Hardpan Mixed with Gravel (Dry)

20'

100'

Stoney Hardpan

19'

119'

Gravel (Coarse)

5'

126'

3 OWNER OF WELL:

Address

George Latvo

257 S. ~~Berkshire~~ Berkshire
Bloomfield Hills, Michigan

4 WELL DEPTH: (completed) Date of Completion

128 ~~128~~ ft.

12-17-66

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐7 CASING: Threaded ☒ Welded ☐
Diam. 4 in. to 122'-7" ft. Depth Height: ABOVE / Below
surface 6" ft.
Weight 11 lbs./ft.
Drive Shoe? Yes ☒ No ☐8 SCREEN: Steel
Type Johnson Stainless Dia.: 4"
Slot 50 Length 5'
Set between 123 ft. and 128 ft.
Fittings: 3" x 15" nipple9 STATIC WATER LEVEL
106 ft. below land surface10 PUMPING LEVEL below land surface
116 ft. after 8 hrs. pumping 15 g.p.m.
ft. after hrs. pumping g.p.m.11 WATER QUALITY in Parts Per Million:
Iron (Fe) Chlorides (Cl)
Hardness NONE12 WELL HEAD COMPLETION: ☐ In Approved Pit
☒ Pitless Adapter ☐ 12" Above Grade13 GROUTING:
Well Grouted? ☐ Yes ☒ No
Material: ☐ Neat Cement ☐
Depth: From ft. to ft.14 SANITARY:
Nearest Source of possible contamination
feet Direction Type
Well disinfected upon completion ☒ Yes ☐ No15 PUMP:
Manufacturer's Name Fairbanks Morse
Model Number 48 7509 HP 3/4
Length of Drop Pipe 105 ft. capacity 14 1/2 G.P.M.
Type: ☒ Submersible ☐
☐ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.O. O. Corcoran Co.
REGISTERED BUSINESS NAME0025
REGISTRATION NO.Address 15101 W. 11 Mile Road, Oak ParkSigned O. O. Corcoran Date Jan. 25, 1966
AUTHORIZED REPRESENTATIVE

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County OAKLAND	Twp. BLOOMFIELD	Fraction NW 1/4 Sec 14 T14N R14W	Section No. 4	Town 3 N.W.	Range 9 E.W.
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Distance And Direction from Road Intersections

**2000' NORTH OF SPUR REPAIR RD
2000' WEST OF WOODWARD AVE**OWNER No. Street address & City of Well Location **275 BERSHIRE RD BLOOMFIELD HILLS MICH**

2

FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM**Brown Sandy Clay****72'****72'****Gray Clay with imbedded****gravel and numerous****boulders.****194'****214'****water bearing sand****and gravel****9'****275'**

3 OWNER OF WELL:

EVERETT POTEETAddress **275 BERSHIRE RD**

4 WELL DEPTH: (completed)

Date of Completion

275' ft.**1-25-1971**5 ☐ Cable tool☒ Rotary☐ Driven☐ Dug☐ Hollow rod☐ Jetted☐ Bored6 USE: ☒ Domestic☐ Public Supply☐ Industry☐ Irrigation☐ Air Conditioning☐ Commercial☐ Test Well

7 CASING:

Threaded ☒ Welded ☐

Height: Above/Below

Diam.

4 in. to 271 ft. Depth

surface 12" ft.

Weight 117 lbs/ft.

Drive Shoe? Yes ☒ No ☐

8 SCREEN:

STAINLESS STEEL

Type: JOHNSON

Dia.: 4"

Slot/Gauge 35"

Length 4'

Set between ft. and ft.

Fittings:

3" x 12" nipple & coupling

9 STATIC WATER LEVEL

96 ft. below land surface

10 PUMPING LEVEL below land surface

130 ft. after 6 hrs. pumping 20 g.p.m.

ft. after hrs. pumping g.p.m.

DRAW DOWN - 12'

11 WATER QUALITY in Parts Per Million:

Iron (Fe) Chlorides (Cl)

Hardness

12 WELL HEAD COMPLETION: ☐ In Approved Pit☐ Pitless Adapter ☐ 12" Above Grade

13 GROUTING:

Well Grouted? ☒ Yes ☐ NoMaterial: ☐ Neat Cement ☒ Drilling Mud

Depth: From ft. to ft. to surface

14 SANITARY:

Nearest Source of possible contamination

150 feet NORTH Direction to fill

Well disinfected upon completion ☒ Yes ☐ No

15 PUMP:

Manufacturer's Name **RED JACKET**Model Number **R75-N1-12BCHP 3/4**Length of Drop Pipe **147** ft. capacity **11** G.P.M. **40** H.P.Type: ☒ Submersible☐☐ Jet☐ Reciprocating

16 Remarks, elevation, source of dato, etc.

17 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.

REGISTERED BUSINESS NAME **Hayfield Well & Pump Co** REGISTRATION NO. **0110**Address **27093 First St Farmington Mich**Signed **Hayfield Well & Pump Co** Date **1-30-1971**

WATER WELL AND PUMP RECORD

--	--	--	--	--	--	--	--	--	--

PERMIT NUMBER

1 LOCATION OF WELL		County Oakland		Township Name Bloomfield		Fraction SE 1/4 NW 1/4 SW 1/4		Section Number 4		Town Number 2 N/S		Range Number 10 E/W	
Distance And Direction From Road Intersection 1/8 mile E of Franklin N side of Furse 380 Furse - Bloomfield Hills													
Street Address & City of Well Location 380 Furse - Bloomfield Hills													
Locate with "X" in Section Below Franklin Furse X				3 OWNER OF WELL: Jim Burns Address 380 Furse Bloomfield Hills 48013 Address Same As Well Location? ☒ Yes ☐ No									
				4 WELL DEPTH: Date Completed MO. DAY YEAR ☐ New Well ☒ Replacement Well 104 FT. 10 17 89									
2 FORMATION DESCRIPTION				THICKNESS OF STRATUM		DEPTH TO BOTTOM OF STRATUM		5 ☐ 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 ☐					
Clay				55		55		7 CASING: Diameter ☐ Steel ☐ Threaded ☒ Plastic ☐ Welded 5 in. to 100 ft. depth Grouted Drill Hole Diameter 9 in. to 100 ft. depth _____ in. to _____ ft. depth					
								Height: Above/Below Surface 1 ft. Weight 2.926 lbs./ft. Drive Shoe ☐ Yes ☒ No					
Brown gravel				15		70		8 SCREEN: ☐ Not Installed Type stainless Diameter 3" Slot/Gauge 18 Length 4' Set between 100 ft. and 104 ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☐ Blank above screen _____ ft. Other _____					
								9 STATIC WATER LEVEL: 45 ft. below land surface ☐ Flow					
Clay				13		83		10 PUMPING LEVEL: below land surface 85 ft. after 1 hrs. pumping at 30 G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.					
								11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit					
Waterbearing gravel				21		104		12 WELL GROUTED? ☐ No ☒ Yes From 0 to 100 ft. ☐ Neat cement ☒ Bentonite ☐ Other _____ No. of bags of cement _____ Additives _____					
								13 Nearest source of possible contamination Type septic Distance 65 ft. Direction W Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☒ Yes ☐ No					
USE A 2ND SHEET IF NEEDED								14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name Red Jacket Model number 75CWN1 HP 3/4 Volts 230 Length of Drop Pipe 85 ft. capacity 15 G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name Well-X-Trol Model number 203 Capacity 9 Gallons					
								15. Remarks, elevation, source of data, etc.					
17. Rig Operator's Name: John Conklin								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. Bellinger Well Drilling 1757 REGISTERED BUSINESS NAME 4020 S. Lapeer Rd. Metamora, MI 48455 REGISTRATION NO. _____ Address _____ Signed Phil A. Bellinger Date 10/28/89 AUTHORIZED REPRESENTATIVE					
								Authority: Act 368 PA 1978 Completion: Required Penalty: Conviction of a violation of any provision is a					

ENTERED AUG 12 1977

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Township Name Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number 4	Town Number 2 N. W.	Range Number 10 E. W.
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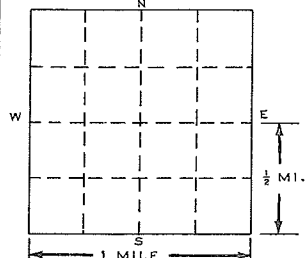
Distance And Direction from Road Intersections

351 Furse, Bloomfield Twp.

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL:

Mr. James Wright
Address **651 Franklin Road**
Pontiac, Michigan 48053

4 WELL DEPTH: (completed) Date of Completion

120 ft. **6-16-77**

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐

6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐

7 CASING: Threaded ☒ Welded ☐ Height: Above/Below

Diam. **4** in. to **120** ft. Depth Surface **3** ft.
Weight **11** lbs./ft.
Drive Shoe? Yes ☐ No ☒

8 SCREEN:

Johnson Stainless
Type: **Steel** Dia.: **4"**
Slot/Gauze **50** Length **5'**
Set between **115** ft. and **120** ft.
Fittings: **3" x 18" Nipple**

9 STATIC WATER LEVEL

82 ft. below land surface

10 PUMPING LEVEL below land surface

112 ft. after **6** hrs. pumping **20+** g.p.m.

ft. after hrs. pumping g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) **1.4** Chlorides (Cl) **34**Hardness **306** Other

12 WELL HEAD COMPLETION:

☐ In Approved Pit☐ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No

☐ Neat Cement ☐ Bentonite ☐
Depth: From ft. to ft.

14 Nearest Source of possible contamination

Unknown
feet Direction Type
Well disinfected upon completion ☒ Yes ☐ No

15 PUMP:

☐ Not installed
Manufacturer's Name **Red Jacket**
Model Number **R50N1-9BC** HP **1/2** Volts **230**
Length of Drop Pipe **105** ft. capacity **9** G.P.M.
Type: ☒ Submersible
☐ Jet ☐ Reciprocating

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

17 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.

O. O. Corsaut, Inc.
REGISTERED BUSINESS NAME

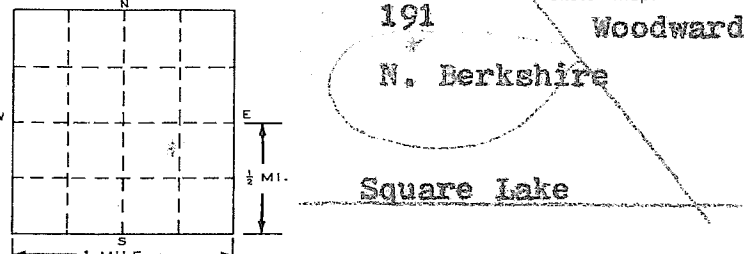
0025
REGISTRATION NO.

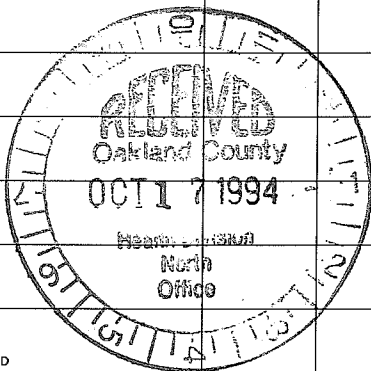
Address **15101 W. 11 Mile Road, Oak Park 48237**

Signed **O. O. Corsaut** Date **Aug. 5, 1977**
AUTHORIZED REPRESENTATIVE

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		3 OWNER OF WELL:																															
County Oakland	Township Name Bloomfield	Fraction NE 1/4 NW 1/4 SE 1/4	Section Number 4																														
		Town Number 2	Range Number 10																														
		N/S E/W																															
Distance And Direction From Road Intersection N.W of Square Lake & Woodward Ave. 191 N. Berkshire Street Address & City of Well Location Locate with "X" in Section Below 		Clay Smith 191 N. Berkshire Bloomfield Hills, Mi. 4836 Address Same As Well Location? ☒ Yes ☐ No																															
2 FORMATION DESCRIPTION		4 WELL DEPTH:																															
	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	Date Completed MO. DAY YEAR 6 15 94 ☐ New Well ☒ Replacement Well 146 FT. ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Auger ☐ Jetted																														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="width:35%;">Top soil</td><td style="width:15%; text-align: center;">1</td><td style="width:15%; text-align: center;">1</td></tr> <tr><td>Brown sand</td><td style="text-align: center;">6</td><td style="text-align: center;">7</td></tr> <tr><td>Gray clay & gravel</td><td style="text-align: center;">24</td><td style="text-align: center;">31</td></tr> <tr><td>Gray clay & gravel (hard)</td><td style="text-align: center;">43</td><td style="text-align: center;">74</td></tr> <tr><td>Brown clay & gravel (hard)</td><td style="text-align: center;">36</td><td style="text-align: center;">110</td></tr> <tr><td>Brown sand & gravel</td><td style="text-align: center;">31</td><td style="text-align: center;">141</td></tr> <tr><td>Coarse brown gravel</td><td style="text-align: center;">2</td><td style="text-align: center;">143</td></tr> <tr><td>Gray sand</td><td style="text-align: center;">3</td><td style="text-align: center;">146</td></tr> <tr><td colspan="3" style="height: 40px;"> </td></tr> <tr><td colspan="3">Old well plugged with 13 bags hole plug</td></tr> </table>	Top soil	1	1	Brown sand	6	7	Gray clay & gravel	24	31	Gray clay & gravel (hard)	43	74	Brown clay & gravel (hard)	36	110	Brown sand & gravel	31	141	Coarse brown gravel	2	143	Gray sand	3	146				Old well plugged with 13 bags hole plug					6 USE: ☒ Domestic ☐ Type I Public ☐ Type III Public ☐ Irrigation ☐ Type IIa Public ☐ Heat pump ☐ Test Well ☐ Type IIb Public 7 CASING: ☒ Steel ☐ Threaded ☐ Welded Diameter 5 in. to 146 ft. depth Grouted Drill Hole Diameter _____ in. to _____ ft. depth _____ in. to _____ ft. depth Height: Above/Below Surface 2 ft. Weight 15 lbs./ft. Drive Shoe ☒ Yes ☐ No
Top soil	1	1																															
Brown sand	6	7																															
Gray clay & gravel	24	31																															
Gray clay & gravel (hard)	43	74																															
Brown clay & gravel (hard)	36	110																															
Brown sand & gravel	31	141																															
Coarse brown gravel	2	143																															
Gray sand	3	146																															
Old well plugged with 13 bags hole plug																																	
15. Remarks, elevation, source of data, etc. 17. Rig Operator's Name: David Cameron #1990		8 SCREEN: ☐ Not Installed Type Stainless steel Diameter 5" Slot/Gauze 18 Length 4" Set between 142 ft. and 146 ft. FITTINGS: ☒ Packer ☐ Lead Packer ☐ Bremer Check ☒ Blank above screen 3 ft. Other 6'5" long 9 STATIC WATER LEVEL: _____ 95 ft. below land surface ☐ Flow 10 PUMPING LEVEL: below land surface _____ 95 ft. after 2 hrs. pumping at 30 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 140 ft. ☐ Neat cement ☐ Bentonite ☒ Other Benseal No. of bags of cement 4 Additives _____ 13 Nearest source of possible contamination Type septic Distance 72 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 Red Jacket Model number 75CNW1-12BC 3/4 Hp 230 Volts 12 Length of Drop Pipe 120 ft. capacity _____ G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name Sears Model number _____ Capacity _____ Gallons																															
USE A 2ND SHEET IF NEEDED		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. John Cameron & Son 0414 REGISTERED BUSINESS NAME REGISTRATION NO. Address 1800 Butterfield Rd. Troy, Mi. 4806 Signed [Signature] Date 6/22/94 AUTHORIZED REPRESENTATIVE		Authority: Completion: Penalty: Act 368 PA 1978 Required Conviction of a violation of any provision is a misdemeanor.																															



WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County **Oakland** Twp. **Bloomfield** Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ Section No. **4** Town **2 N 4** Range **10 E 4**

Distance And Direction from Road Intersections

OWNER No. _____

**Lot 37 Berkshire (1 Blk N. of Square Lake
Road & 1/4 Mile W. of Woodward
Street address & City of Well Location**

3 OWNER OF WELL:

**Homes by Weinberger
Address 3901 Highland
Pontiac, Michigan**

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM**Sandy Gravelly Yellow Clay****20'****20'****Sandy Hardpan****27'****47'****Yellow Sandy Hardpan****10'****57'****Gravelly Hardpan Yellow****2'****59'****Yellow Sandy Hardpan****81'****140'****Yellow Sandy Hardpan****5'****145'****W/Tinge of Gray****Yellow Sand & Gravel****4'****149'****Hardpan W/little Gray Color****Water Sand & Gravel****4'****153'****Sand & Gravel Hardpan****2'****155'**

4 WELL DEPTH: (completed) Date of Completion

155 ft. 4-26-67

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐

6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐

7 CASING: Threaded ☒ Welded ☐ Height: Above/Below
Diam. **4** in. to **150-9"** ft. Depth surface **1** ft.
Weight **11** lbs./ft.
Drive Shoe? Yes ☒ No ☐

8 SCREEN: **Johnson Stainless**Type: **Screen** Dia.: **4"**Slot/Grate **20** Length **5'**Set between **150** ft. and **155** ft.Fittings: **3" x 17" nipple**

9 STATIC WATER LEVEL

113 ft. below land surface

10 PUMPING LEVEL below land surface

135 ft. after **12** hrs. pumping **22** g.p.m.

_____ ft. after _____ hrs. pumping _____ g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) **5.0** Chlorides (Cl) **102.6**Hardness **427.5**12 WELL HEAD COMPLETION: ☐ In Approved Pit☒ Pitless Adapter ☐ 12" Above Grade

13 GROUTING:

Well Grouted? ☐ Yes ☒ NoMaterial: ☐ Neat Cement ☐

Depth: From _____ ft. to _____ ft.

14 SANITARY: **THE UNKNOWN**

Nearest Source of possible contamination

_____ feet _____ Direction _____ Type

Well disinfected upon completion ☐ Yes ☒ No

15 PUMP:

Manufacturer's Name **Jacuzzi**Model Number **1554CS2** HP **1 1/2**Length of Drop Pipe **136** ft. capacity **40** G.P.M.Type: ☒ Submersible ☐
☐ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.

O. O. Corraut Inc.

REGISTERED BUSINESS NAME

0025

REGISTRATION NO.

Address **15101 W. 11 Mile Road, Oak Park 48237**Signed **O. O. Corraut** Date **Aug. 29, 1967**

AUTHORIZED REPRESENTATIVE

TAX NO:

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

PERMIT NO: ✓

WATER WELL AND PUMP RECORD

1. LOCATION OF WELL

County

Oakland

Township Name

Bloomfield

Fraction

NW 1/4 SE 1/4 1/4

Section No.

4

Town No.

2N

Range No.

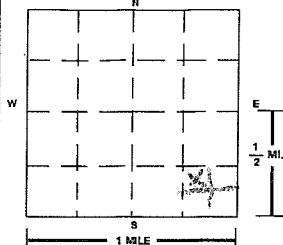
10E

Distance and Direction from Road Intersection

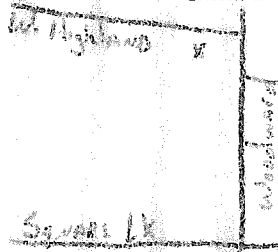
Woodward North of Sparrow 1/4 mile to W. Highway
1st house on left. 411 HIGHLAND RD

Street Address & City of Well Location

Locate with 'x' in Section Below



Sketch Map



2. FORMATION DESCRIPTION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Blue clay: gravel

65

65

Gravels: sand

68

133

Fine sands

15

148

SAND coarse

13

161

OAKLAND COUNTY
HEALTH DIVISION

DEC 12 P 3 31

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☐ Yes ☒ No

Casing Diameter _____ in.

Depth _____ ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry☐ Neat 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 ☐ SubcontractorName Ray Labore

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.

Ray Labore Well Drilling

REGISTERED BUSINESS NAME

Address 8155 Oak Hill Blvd. MI 48348Signed Ray Labore

AUTHORIZED REPRESENTATIVE

Date 5/10/92

Authority: Act 368 PA 1978

Completion: Required

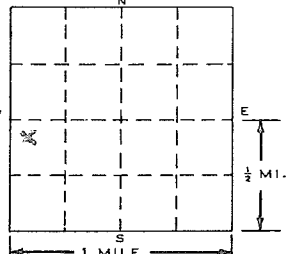
Penalty: Conviction of a violation of any provision is a misdemeanor.

LOCAL HEALTH DEPT. COPY

WATER WELL AND PUMP RECORD

PART 127 ACT 368, P.A. 1978

PERMIT NUMBER

1 LOCATION OF WELL		County <u>OAKLAND</u>		Township Name <u>Bloomfield</u>		Fraction <u>NW 1/4</u>		Section Number <u>4</u>		Town Number <u>2</u> N/S		Range Number <u>10</u> E/W	
Distance And Direction From Road Intersection <u>300 FT EAST OF FRANKLIN</u> <u>100 SOUTH OF FREMONT</u>						3 OWNER OF WELL: <u>JUDITH HINDALLA</u> Address <u>395 FREMONT</u> <u>PONTIAC</u> Address Same As Well Location? ☒ Yes ☐ No							
Street Address & City of Well Location Locate with "X" in Section Below						4 WELL DEPTH: (completed) <u>111</u> ft. Date of Completion <u>NOV 2-85</u>							
Sketch Map: 						5 ☐ 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 ☐ Welded ☐ Plastic ☐ Height: Above/Below Surface <u>1</u> ft. Weight <u>11</u> lbs./ft. Drive Shoe ☒ Yes ☐ No							
2 FORMATION DESCRIPTION						8 SCREEN: ☐ Not Installed Type <u>SS</u> Diameter <u>4"</u> Slot/Gauze <u>12</u> Length <u>4'</u> Set between <u>107</u> ft. and <u>111</u> ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☒ Blank above screen <u>2</u> ft. Other							
THICKNESS OF STRATUM						9 STATIC WATER LEVEL: <u>75</u> ft. below land surface ☐ Flow							
DEPTH TO BOTTOM OF STRATUM						10 PUMPING LEVEL: below land surface <u>85</u> ft. after <u>1</u> hrs. pumping at <u>25</u> G.P.M. <u></u> ft. after <u></u> hrs. pumping at <u></u> G.P.M.							
SANDY CLAY						11 WELL HEAD COMPLETION: ☒ Pitless adapter ☒ 12" above grade ☐ Basement offset ☐ Approved pit							
SAND						12 WELL GROUTED? ☐ No ☒ Yes From <u></u> to <u></u> ft. ☐ Neat cement ☒ Bentonite ☐ Other <u>CUTTINGS</u> No. of bags of cement <u></u> Additives <u></u>							
CLAY						13 Nearest source of possible contamination <u>SEPTIC TANK</u> Distance <u>52</u> ft. Direction <u>EAST</u> Well disinfected upon completion? ☒ Yes ☐ No							
SAND - SOME CLAY						14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name <u>RED JACKET</u> Model number <u>2 WIRE</u> HP <u>1/2</u> Volts <u>230</u> Length of Drop Pipe <u>102</u> ft. capacity <u>10</u> G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name <u>203 WELL TROL</u> Model number <u>203</u> Capacity <u>9</u> Gallons							
SAND						15. Remarks, elevation, source of data, etc.							
CLAY						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. <u>ARD'S PUMP & WELL SERVICE 1584</u> REGISTERED BUSINESS NAME <u>5635 COOLEY LK RD</u> REGISTRATION NO. <u></u> Address <u>Donald A. Ard</u> Date <u>NOV 5, 85</u> Signed <u></u> AUTHORIZED REPRESENTATIVE							

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION

TAX NO: **19-04-426-005**

WATER WELL AND PUMP RECORD

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

PERMIT NO:

25183 ✓

1. LOCATION OF WELL

County

OAKLAND

Township Name

BLOOMFIELD

Fraction

3/10 1/4 N 1/4 S 1/4

Section No.

4

Town No.

2 N

Range No.

10 E

Distance and Direction from Road Intersection

1/8 m. N. of Square Lk Rd. W/ off Woodward

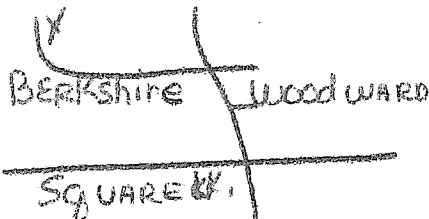
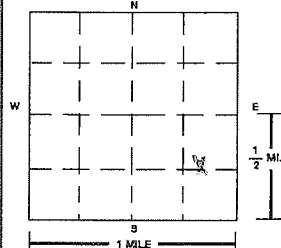
100 - N - BERKSHIRE, BLOOMFIELD

Street Address & City of Well Location

48302

Locate with 'x' in Section Below

Sketch Map



2. FORMATION DESCRIPTION

THICKNESS OF STRATUM

DEPTH TO BOTTOM OF STRATUM

BROWN SANDY CLAY	4	4
BROWN SAND	12	16
GRAY CLAY	44	60
BROWN SAND & GRAVEL	50	110
GRAY SAND & GRAVEL	53	163

3. OWNER OF WELL

Address

**HAUSAIR
100 N. BERKSHIRE
BLOOMFIELD 48302**

Address Same as Well Location ☒ Yes ☐ No

4. WELL DEPTH:

Date Completed

163 ft. 4/13/00

☐ New Well

☒ Replacement Well

☐ 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: **5** in. to **153** ft. depth

Weight: **1** lbs./ft.

in. to ft. depth

BORE HOLE:

Diameter: **8 3/4** in. to **163** ft. depth

☐ Drive Shoe

☐ Shale Packer

in. to ft. depth

8. SCREEN:

☐ Not Installed

☐ Gravel-Packed

Type **SLOTTED**

Diameter **5"**

Slot/Gauze **12**

Length: **163'**

Set Between **153** ft. and **163** ft.

FITTINGS: ☐ K-Packer

☐ Bremer Check

☐ Blank Above Screen

ft. Other

9. STATIC WATER LEVEL:

60 ft. Below Land Surface

☐ Flowing

10. PUMPING LEVEL: Below Land Surface

163 ft. After **1** hrs. Pumping at **25** 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 **150** to **0** ft.

☐ Neat Cement

☒ Bentonite

☐ Other

No. of Bags **14**

Additives **EZ-MUD**

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type **SEWER**

Distance **300** ft. Direction **W**

Type

Distance ft. Direction

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☒ Yes ☐ No

Casing Diameter **3** in.

Depth ft.

PLUGGING MATERIAL:

☐ Neat Cement

☐ Bentonite Slurry

☐ Cement/Bentonite Slurry

☐ Concrete Grout

☒ Bentonite Chips

No. of Bags **5**

Casing Removed?

☐ Yes ☒ No

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

17. DRILLING MACHINE OPERATOR:

☐ Employee ☒ Subcontractor

Name **PAUL WENDLING**

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.

FLS Well Drilling LLC, 63-2269
 REGISTERED BUSINESS NAME REGISTRATION NO.

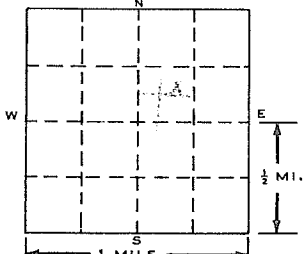
Address **2371 N-DUNDEE HIGHLAND**

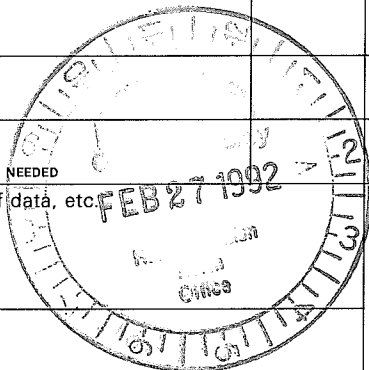
Signed **[Signature]** Date **4-27-2000**

AUTHORIZED REPRESENTATIVE

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		Fraction		Section Number	Town Number	Range Number
County <u>Oakland</u>	Township Name <u>Bloomfield</u>	NE 1/4	NE 1/4	4	2	N/S 10 E/W
Distance And Direction From Road Intersection <u>800' West of Woodward</u> <u>600' N of Hartwell</u>						
Street Address & City of Well Location <u>40 HADSELL DR</u>						
Locate with "X" in Section Below						
 Sketch Map: 						
2 FORMATION DESCRIPTION		THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM			
<u>Sand-Clay</u>		<u>8</u>	<u>8</u>			
<u>Clay</u>		<u>15</u>	<u>23</u>			
<u>Sand-Clay</u>		<u>70</u>	<u>93</u>			
<u>Sand</u>		<u>29</u>	<u>122</u>			
3 OWNER OF WELL: Address <u>MOTIUS</u> <u>40 HADSELL DR</u> Address Same As Well Location? ☒ Yes ☐ No						
4 WELL DEPTH: <u>122</u> FT. Date Completed <u>MO. 1 DAY 1 YEAR 1</u> ☐ New Well ☒ Replacement Well						
5 ☐ 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 ☒ Welded ☐ Plastic Diameter <u>5</u> in. to <u>108</u> ft. depth <u>5</u> in. to <u>108</u> ft. depth Grouted Drill Hole Diameter <u>5</u> in. to <u>108</u> ft. depth <u>5</u> in. to <u>108</u> ft. depth Height: Above/Below Surface <u>1</u> ft. Weight <u>21</u> lbs./ft. Drive Shoe ☐ Yes ☒ No						
8 SCREEN: ☐ Not Installed Type <u>Adverse</u> Diameter <u>4</u> Slot/Gauge <u>15</u> Length <u>5</u> Set between <u>113</u> ft. and <u>108</u> ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☐ Blank above screen <u>9</u> ft. Other <u> </u>						
9 STATIC WATER LEVEL: <u>100</u> ft. below land surface ☐ Flow						
10 PUMPING LEVEL: below land surface <u>122</u> ft. after <u>1</u> hrs. pumping at <u>10</u> G.P.M. <u> </u> ft. after <u> </u> hrs. pumping at <u> </u> G.P.M.						
11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit						
12 WELL GROUTED? ☐ No ☒ Yes From <u>top</u> to <u>622</u> ft. ☐ Neat cement ☒ Bentonite ☐ Other <u>CLAY</u> No. of bags of cement <u> </u> Additives <u> </u>						
13 Nearest source of possible contamination Type <u>SEPTIC</u> Distance <u>55</u> ft. Direction <u>E</u> Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☒ Yes ☐ No						
14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name <u>Harpers</u> Model number <u> </u> HP <u> </u> Volts <u>230</u> Length of Drop Pipe <u>100</u> ft. capacity <u>10</u> G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name <u> </u> Model number <u>205</u> Capacity <u>10</u> Gallons						
15. Remarks, elevation, source of data, etc. <u>FEB 27 1992</u>						
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. <u>Thomas LUD 63-1929</u> REGISTERED BUSINESS NAME <u> </u> REGISTRATION NO. <u> </u> Address <u>445 1415 ORTONVILLE, MI</u> Signed <u> </u> AUTHORIZED REPRESENTATIVE Date <u>Jan 20 92</u>						
17. Rig Operator's Name: <u> </u>						



WATER WELL AND PUMP RECORD

PERMIT NUMBER

19-04-327-008

1 LOCATION OF WELL		County		Township Name		Fraction		Section Number		Town Number		Range Number	
Oakland		Bloomfield		SE 1/4 SE 1/4 NW 1/4		4		2 N/S		10 E/W			
Distance And Direction From Road Intersection													
Street Address & City of Well Location													
Michael W. Ross 355 N1 Berkshire													
Locate with "X" in Section Below													
Sketch Map:													
2 FORMATION DESCRIPTION		THICKNESS OF STRATUM		DEPTH TO BOTTOM OF STRATUM									
brown clay		35		35									
blue clay-sand		92		127									
fine gray sand-water		10		137									
3 OWNER OF WELL:													
Ross Homes Inc.													
Address 4568 Elizabeth Lake Rd. Pontiac Mi.													
Address Same As Well Location? ☐ Yes ☒ No													
4 WELL DEPTH: Date Completed													
137 FT. 7/12/90													
☒ New Well ☐ Replacement Well													
5 ☒ 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 ☐ Welded													
4 in. to 133 ft. depth													
☐ Plastic ☒ Welded													
Height: Above/Below Surface 1 ft.													
Weight 10.40 lbs./ft.													
Grouted Drill Hole Diameter													
Drive Shoe ☒ Yes ☐ No													
8 SCREEN: ☐ Not Installed													
Type Johnson Diameter 3in.													
Slot/Gauze 7 Length 48in.													
Set between 133 ft. and 137 ft.													
FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check													
☒ Blank above screen 1 ft. Other													
9 STATIC WATER LEVEL:													
78 ft. below land surface ☐ Flow													
10 PUMPING LEVEL: below land surface													
105 ft. after 2 hrs. pumping at 60 G.P.M.													
ft. after hrs. pumping at G.P.M.													
11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade													
☐ Basement offset ☐ Approved pit													
12 WELL GROUTED? ☐ No ☒ Yes From 0 to 60 ft.													
☐ Neat cement ☒ Bentonite ☐ Other													
No. of bags of cement 2 Additives													
13 Nearest source of possible contamination													
Type septic Distance 80 ft. Direction west													
Well disinfected upon completion? ☒ Yes ☐ No													
Was old well plugged? ☐ Yes ☐ No													
14 PUMP: ☐ Not Installed ☐ Pump Installation Only													
Manufacturer's name Myers													
Model number 3/4 HP 220 Volts													
Length of Drop Pipe 105 ft. capacity 10 G.P.M.													
TYPE: ☒ Submersible ☐ Jet													
PRESSURE TANK: Well-K-Erol													
Manufacturer's name													
Model number WX203 Capacity Gallons													
15. Remarks, elevation, source of data, etc.													
Nit. -0-													
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.													
Fettig Well Drilling 0413													
REGISTERED BUSINESS NAME 5575 Jackson Blvd. White Lake 48383													
Address													
Signed Jerry Fettig Date 7-17-90													
AUTHORIZED REPRESENTATIVE													

USE A 2ND SHEET IF NEEDED

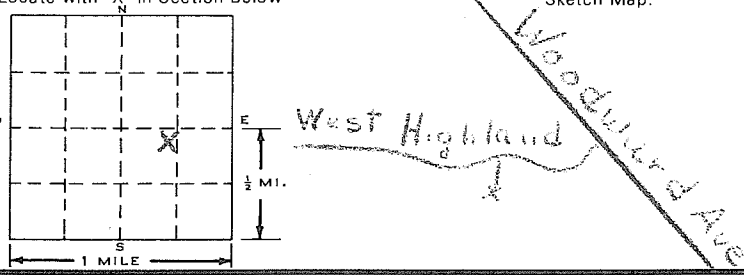
WATER WELL AND PUMP RECORD

PERMIT NUMBER

1. LOCATION OF WELL		3. OWNER OF WELL:																																					
County <u>Oakland</u>	Township Name <u>Bloomfield</u>	Fraction <u>NE 1/4 NW 1/4 SE 1/4</u>	Section Number <u>4</u>																																				
Distance And Direction From Road Intersection		Town Number <u>20</u>																																					
Street Address & City of Well Location <u>194 N. Berkshire Rd.</u>		Range Number <u>100</u>																																					
Locate with "X" in Section Below 		Date Completed MO. <u>9</u> DAY <u>8</u> YEAR <u>93</u> ☐ New Well ☒ Replacement Well																																					
2. FORMATION DESCRIPTION <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>FORMATION DESCRIPTION</th> <th>THICKNESS OF STRATUM</th> <th>DEPTH TO BOTTOM OF STRATUM</th> </tr> </thead> <tbody> <tr><td><u>SANDY BROWN CLAY</u></td><td><u>7</u></td><td><u>7</u></td></tr> <tr><td><u>BROWN CLAY</u></td><td><u>5</u></td><td><u>12</u></td></tr> <tr><td><u>GRAY CLAY</u></td><td><u>22</u></td><td><u>34</u></td></tr> <tr><td><u>SANDY CLAY</u></td><td><u>6</u></td><td><u>40</u></td></tr> <tr><td><u>SAND</u></td><td><u>13</u></td><td><u>53</u></td></tr> <tr><td><u>GRAY CLAY</u></td><td><u>2</u></td><td><u>55</u></td></tr> <tr><td><u>GRAVELY GRAY CLAY</u></td><td><u>10</u></td><td><u>65</u></td></tr> <tr><td><u>GRAY CLAY</u></td><td><u>2</u></td><td><u>67</u></td></tr> <tr><td><u>SAND GRAY</u></td><td><u>20</u></td><td><u>87</u></td></tr> <tr><td><u>BROWN SAND GRAVEL</u></td><td><u>13</u></td><td><u>100</u></td></tr> <tr><td><u>SAND</u></td><td><u>37</u></td><td><u>137</u></td></tr> </tbody> </table>		FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	<u>SANDY BROWN CLAY</u>	<u>7</u>	<u>7</u>	<u>BROWN CLAY</u>	<u>5</u>	<u>12</u>	<u>GRAY CLAY</u>	<u>22</u>	<u>34</u>	<u>SANDY CLAY</u>	<u>6</u>	<u>40</u>	<u>SAND</u>	<u>13</u>	<u>53</u>	<u>GRAY CLAY</u>	<u>2</u>	<u>55</u>	<u>GRAVELY GRAY CLAY</u>	<u>10</u>	<u>65</u>	<u>GRAY CLAY</u>	<u>2</u>	<u>67</u>	<u>SAND GRAY</u>	<u>20</u>	<u>87</u>	<u>BROWN SAND GRAVEL</u>	<u>13</u>	<u>100</u>	<u>SAND</u>	<u>37</u>	<u>137</u>	4. WELL DEPTH: <u>137</u> FT. ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Auger ☐ Jetted ☐	
		FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM																																			
<u>SANDY BROWN CLAY</u>	<u>7</u>	<u>7</u>																																					
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<u>SAND</u>	<u>37</u>	<u>137</u>																																					
5. USE: ☒ Domestic ☐ Type I Public ☐ Type III Public ☐ Irrigation ☐ Type IIa Public ☐ Heat pump ☐ Test Well ☐ Type IIb Public ☐		6. CASING: Diameter ☐ Steel ☐ Threaded ☐ Welded ☒ Plastic ☐ Grouted Drill Hole Diameter <u>5</u> in. to <u>133</u> ft. depth <u>8 1/4</u> in. to <u>137</u> ft. depth Drive Shoe ☐ Yes ☒ No																																					
15. Remarks, elevation, source of data, etc. <u>Abandoned 3 Old Wells</u> <u>4" 3" Wells 31 bags Hole Plug</u>		7. SCREEN: ☐ Not Installed Type <u>JOHNSON</u> Diameter <u>3"</u> Slot/Gauge <u>15</u> Length <u>4'</u> Set between <u>133</u> ft. and <u>137</u> ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☒ Blank above screen <u>2</u> ft. Other _____																																					
		8. STATIC WATER LEVEL: <u>93</u> ft. below land surface ☐ Flow																																					
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. <u>Adams Well Drilling, Inc. 47-1580</u> REGISTERED BUSINESS NAME <u>Adams Well Drilling, Inc.</u> REGISTRATION NO. <u>47-1580</u> Address <u>444 S. Hacker Rd. Brighton</u> Signed <u>Dan Adams</u> Date <u>9-10-93</u> AUTHORIZED REPRESENTATIVE		9. PUMPING LEVEL: below land surface _____ ft. after _____ hrs. pumping at <u>30</u> G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.																																					
		10. WELL HEAD COMPLETION: ☒ Pitless adapter ☒ 12" above grade ☐ Basement offset ☐ Approved pit																																					
17. Rig Operator's Name: <u>Tom Browne - Jim Erwin</u>		11. WELL GROUTED? ☐ No ☒ Yes From <u>0</u> to <u>110</u> ft. ☐ Neat cement ☐ Bentonite ☒ Other <u>Bence</u> No. of bags of cement <u>250</u> Additives <u>Super Mud</u>																																					
		12. NEAREST SOURCE OF POSSIBLE CONTAMINATION: Type <u>Septic</u> Distance <u>80</u> ft. Direction <u>S</u> Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☒ Yes ☐ No																																					
14. PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name <u>Myers</u> Model number <u>PM272-1000 3/4</u> Volts <u>230</u> Length of Drop Pipe <u>120</u> ft. capacity <u>12</u> G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: <u>His own</u> Manufacturer's name _____ Model number _____ Capacity _____ Gallons		13. WATER WELL CONTRACTOR'S CERTIFICATION (continued): This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. <u>Adams Well Drilling, Inc. 47-1580</u> REGISTERED BUSINESS NAME <u>Adams Well Drilling, Inc.</u> REGISTRATION NO. <u>47-1580</u> Address <u>444 S. Hacker Rd. Brighton</u> Signed <u>Dan Adams</u> Date <u>9-10-93</u> AUTHORIZED REPRESENTATIVE																																					
		14. PUMP (continued): Manufacturer's name _____ Model number _____ Capacity _____ Gallons																																					

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		SID WELL NO: 19-04-401-014	
County OAKLAND	Township Name BLOOMFIELD	Fraction NE 1/4 NW 1/4 SE 1/4	Section Number 4
Town Number 2 N/S		Range Number 10 E/W	
Distance And Direction From Road Intersection 200 FEET SOUTH OF WEST HIGHLAND 1/8 MILE WEST OF WOODWARD AVENUE		3 OWNER OF WELL: JOSEPH CONSTANT Address 129 ROANOKE ROCHESTER, MI 48306 Address Same As Well Location? ☐ Yes ☒ No	
Street Address & City of Well Location 49 WEST HIGHLAND		4 WELL DEPTH: Date Completed 106 FT. 04/29/93 ☒ New Well ☐ Replacement Well	
Locate with "X" in Section Below		5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Auger ☐ Jetted ☐	
Sketch Map: 		6 USE: ☒ Domestic ☐ Type I Public ☐ Type III Public ☐ Irrigation ☐ Type IIa Public ☐ Heat pump ☐ Test Well ☐ Type IIb Public ☐	
2 FORMATION DESCRIPTION		7 CASING: Diameter ☐ Steel ☐ Threaded ☒ Plastic ☐ Welded Height: Above/Surface 1 1/2 ft. Weight 2.926 lbs./ft. Drive Shoe ☐ Yes ☒ No	
	THICKNESS OF STRATUM	8 SCREEN: ☐ Not Installed Type STAINLESS Diameter 3" Slot/Gauge 15 Length 4" Set between 102 ft. and 106 ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☐ Blank above screen _____ ft. Other _____	
CLAY	50	9 STATIC WATER LEVEL: 84 ft. below land surface ☐ Flow	
SAND & GRAVEL	10	10 PUMPING LEVEL: below land surface 100 ft. after 2 hrs. pumping at 15 G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.	
CLAY	15	11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit	
SAND & GRAVEL	10	12 WELL GROUTED? ☐ No ☒ Yes From 0 to 102 ft. ☐ Neat cement ☒ Bentonite ☐ Other _____ No. of bags of cement _____ Additives _____	
CLAY	5	13 NEAREST SOURCE OF POSSIBLE CONTAMINATION Type SEPTIC Distance 100 ft. Direction E Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☐ Yes ☐ No	
WATER BEARING GRAVEL	16	14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name MEYERS Model number S2N72-N710 HP 3/4 Volts 230 Length of Drop Pipe 95 ft. capacity 10 G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name CHALLENGER Model number PC 122 Capacity 28 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. MIDSTATE WELL DRILLING 44-1902 REGISTERED BUSINESS NAME 1313 INLAY CITY ROAD, LAPEER, MI 48446 REGISTRATION NO. Address Signed David L. Jory Date 5-11-93 AUTHORIZED REPRESENTATIVE	
17. Rig Operator's Name: DAVID L. JORY		Authority: Completion: Penalty:	

USE A 2ND SHEET IF NEEDED

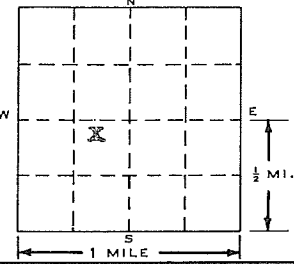
WATER WELL AND PUMP RECORD

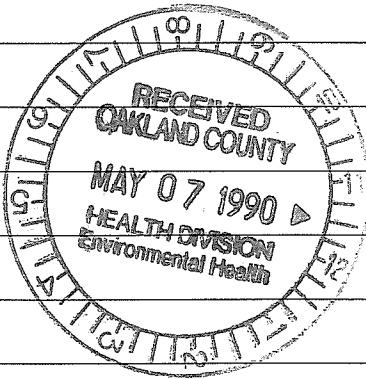
PERMIT NUMBER

1 LOCATION OF WELL		County		Township Name		Fraction		Section Number		Town Number		Range Number	
Oakland		Bloomfield		SW 1/4 NW 1/4 SE 1/4		4		2N		N/S		10E E/W	
Distance And Direction From Road Intersection						3 OWNER OF WELL:							
Woodward North of Square LKRD to West Highland						STANLEY GAUFF							
133 W HIGHLAND RD						Address 133 W HIGHLAND RD							
BLOOMFIELD						Address Same As Well Location? ☒ Yes ☐ No							
Street Address & City of Well Location						4 WELL DEPTH: Date Completed							
Locate with "X" in Section Below						178 FT. 3/4/92							
Sketch Map:						☒ New Well							
						☐ Replacement Well							
2 FORMATION DESCRIPTION						5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug							
THICKNESS OF STRATUM						☐ Hollow rod ☐ Auger ☐ Jetted ☐							
DEPTH TO BOTTOM OF STRATUM						6 USE: ☒ Domestic ☐ Type I Public ☐ Type III Public							
Brown: Blue clay						☐ Irrigation ☐ Type IIa Public ☐ Heat pump							
Gravel: Blue clay						☐ Test Well ☐ Type IIb Public ☐							
Gravel: SAND						7 CASING: ☐ Steel ☐ Threaded ☒ Plastic ☒ Welded							
Gravel: clay						Height: Above/Below							
Gravel & SAND						Surface 1 ft.							
33 33						Weight 500 lbs./ft.							
60 93						Drive Shoe ☐ Yes ☒ No							
40 133						8 SCREEN: ☐ Not Installed							
34 167						Type Stainless Diameter 3"							
11 178						Slot/Gauge 10 Length 4'							
OLD 4" WELL 180' DEEP WAS						Set between 174 ft. and 178 ft.							
PLUGGED 15 BAGS HOLE						FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check							
PLUG - IN WELL						☒ Blank above screen 1 ft. Other							
VARD						9 STATIC WATER LEVEL:							
WE INSTALLED OUR						92 ft. below land surface ☐ Flow							
FROM WELL TO OUTSIDE						10 PUMPING LEVEL: below land surface							
CUSTOMER INSTALLED						100 ft. after 1 hrs. pumping at 25 G.P.M.							
FROM TUBESHEET IF NEEDED TO THE OUTSIDE						105 ft. after 15 hrs. pumping at 35 G.P.M.							
15. Remarks, elevation, source of data, etc.						11 WELL HEAD COMPLETION: ☒ Pitless adapter ☒ 12" above grade							
ALL - WE ADVISED CUSTOMER THAT						☐ Basement offset ☐ Approved pit							
THIS PIPE WOULD FREEZE - BUT HE						12 WELL GROUTED? ☐ No ☒ Yes From Top to 25 ft.							
DID HE WOULD TAKE CARE OF IT						☐ Neat cement ☒ Bentonite ☐ Other							
17. Rig Operator's Name: Stanley Gauff						13 Nearest source of possible contamination							
Ray L. Gauff						Type Septic Distance 50 ft. Direction South							
						Well disinfected upon completion? ☒ Yes ☐ No							
						Was old well plugged? ☒ Yes ☐ No							
						14 PUMP: ☐ Not Installed ☐ Pump Installation Only							
						Manufacturer's name RED TAIL							
						Model number HP 3/4 Volts 220							
						Length of Drop Pipe 140 ft. capacity 10 G.P.M.							
						TYPE: ☒ Submersible ☐ Jet							
						PRESSURE TANK:							
						Manufacturer's name NONE (NO INSTALL)							
						Model number Capacity Gallons							
						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.							
						Ray L. Gauff Well Drilling 63-0140							
						REGISTERED BUSINESS NAME REGISTRATION NO.							
						Address 8155 Oakhill Clarkston MI 48348							
						Signed Ray L. Gauff Date 3/4/92							
						AUTHORIZED REPRESENTATIVE							

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL			3 OWNER OF WELL:		
County Oakland	Township Name Bloomfield	Fraction NW 1/4 NE 1/4 SW 1/4	Section Number 4	Town Number 2N N/S	Range Number 10E E/W
Distance And Direction From Road Intersection 120ft. N. of center of road at - - - - -			Address Robert C. Wilson 236 N. Berkshire St. Pontiac, Mi.		
Street Address & City of Well Location			Address Same As Well Location? ☒ Yes ☐ No		
Locate with "X" in Section Below			4 WELL DEPTH: Date Completed		
Sketch Map: 			MO. DAY YEAR 133 FT. 3 2 90		
			5 ☒ 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: Diameter ☒ Steel ☒ Threaded ☐ Plastic ☐ Welded 4 in. to 133 ft. depth Height: Above 133 ft. Surface 1 ft. Weight 11 lbs./ft. Grouted Drill Hole Diameter 133 in. to 133 ft. depth Drive Shoe ☒ Yes ☐ No		
2 FORMATION DESCRIPTION			8 SCREEN: ☐ Not Installed		
	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	Type Stainless Stl. Diameter 3" ID		
Yellow Clay	21	21	Slot/Grate 10 Length 5ft		
Gray Clay	30	101	Set between 133 ft. and 133 ft.		
Gray Fine Sand - Water Brg.	22	123	FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check		
Gray Medium Sand - Water Brg.	15	133	☐ Blank above screen 133 ft. Other 133		
			9 STATIC WATER LEVEL: 95 ft. below land surface ☐ Flow		
			10 PUMPING LEVEL: below land surface		
			1 ft. after 1 hrs. pumping at 10 G.P.M.		
			1 ft. after 1 hrs. pumping at 10 G.P.M.		
			11 WELL HEAD COMPLETION: ☒ Pitless adapter ☒ 12" above grade ☐ Basement offset ☐ Approved pit		
			12 WELL GROUTED? ☐ No ☒ Yes From 133 to 133 ft. ☐ Neat cement ☒ Bentonite ☐ Other 133 No. of bags of cement 133 Additives 133		
			13 Nearest source of possible contamination Type Septic & Pd. Distance 55 ft. Direction N. Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☐ Yes ☐ No		
			14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name Red Jackedt Model number 75UW1-12BC HP 120 Volts 230 Length of Drop Pipe 120 ft. capacity 120 G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name Well - Mate Model number WM-6 Capacity 40 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. Scheer Well Drilling 0463 REGISTERED BUSINESS NAME REGISTRATION NO. Address 33071 Garfield Rd. Fraser, Mi. 48. Signed [Signature] Date 1990 AUTHORIZED REPRESENTATIVE		
17. Rig Operator's Name: Fred. S.			Authority: Act 368 PA 1978 Completion: Required Penalty: Conviction of a violation of any provision is a misdemeanor		



USE A 2ND SHEET IF NEEDED

WATER WELL RECORD
ACT 294 PA 1965MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Township Name Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number 4	Town Number 2 N/S.	Range Number 10 E/W.
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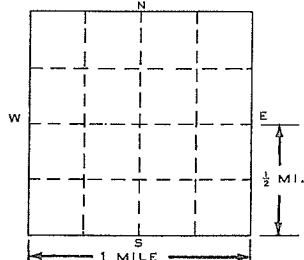
Distance And Direction from Road Intersections

234 Hadsell

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL:

Address **Mr. Don Gocella**
234 Hadsell
Bloomfield Hills, Michigan 48013

4 WELL DEPTH: (completed) Date of Completion

147'4" ft. **6-20-79**

5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored

6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well

7 CASING: Threaded ☒ Welded ☐ Height: Above/Below
Diam. **3"** Surface **3** ft.

4 in. to **145'5"** ft. Depth Weight **11** lbs./ft.
in. to ft. Depth Drive Shoe? Yes ☒ No ☐

8 SCREEN: **Johnson Stainless**

Type: **Steel** Dia.: **4"**
Slot/Groove **18** Length **5'**
Set between **142'4"** ft. and **147'4"** ft.
Fittings: **3" x 18" nipple**

9 STATIC WATER LEVEL

94 ft. below land surface

10 PUMPING LEVEL below land surface

130 ft. after **1** hrs. pumping **30+** g.p.m.
ft. after hrs. pumping g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) **1.0** Chlorides (Cl) **51**
Hardness **238** Other

12 WELL HEAD COMPLETION: ☐ In Approved Pit
☒ Pitless Adapter ☐ 12" Above Grade

13 Well Grouted? ☐ Yes ☒ No
☐ Neat Cement ☐ Bentonite
Depth: From ft. to ft.

14 Nearest Source of possible contamination **Unknown**
feet Direction Type
Well disinfected upon completion ☒ Yes ☐ No

15 PUMP:

☐ Not installed
Manufacturer's Name **Red Jacket**
Model Number **R75N1-12BC** H **3/4** Volts **230**
Length of Drop Pipe **130** ft. capacity **10** G.P.M.
Type: ☒ Submersible ☐ Jet ☐ Reciprocating

2 FORMATION

	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Brown Clay	20'	20'
Brown Sand (dry)	27'	47'
Gray Clay Sand Gravel	7'	54'
Brown Sand (dry)	6'	60'
Black Sand (dry)	4'	64'
Hardpan (gravelly)	21'	85'
Hardpan	2'	87'
Rock	1'	88'
Hardpan	4'	92'
Clay and Gravel	14'	106'
Med Gravel some Clay (dry)	7'	113'
Dirty Med. Gravel and Sand	5'	118'
Brown water sand	9'	117'
Hardpan	1'	128'
Med. Sand	7'	135'
Coarse Gravel and Sand	12'	147'
Very Fine Sand and Clay	4"	147'4"

16 Remarks, elevation, source of data, etc.

17 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.

O. O. Corsaut, Inc. **0025**
REGISTERED BUSINESS NAME REGISTRATION NO.

Address **15101 W. 11 Mile Road, Oak Park 48237**

Signed *[Signature]* Date **July 10, 1979**
AUTHORIZED REPRESENTATIVE

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Twp. Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section No. 4	Town 2 N/S.	Range 10 E/W.
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Distance And Direction from Road Intersections

**135 Bloomfield
(Colonial Hills Sub)**

Street address & City of Well Location

OWNER No. _____

3 OWNER OF WELL:

Address **Mr. Alvin Taylor
135 Bloomfield Blvd.
Bloomfield Hills, Michigan 48013**

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM**Yellow Sandy Clay****18'****18'****Blue Sandy Clay****32'****50'****Hard Blue Collaring Clay w/Gravel 14'****14'****64'****Dry Rocky Yellow Sand****9'****73'****Hard Dry Yellow Sand & Gravel****8'****81'****Dry Sand & Gravel****9'****90'****Hard Dry Sand****9'****99'****Dry Sand****12'****111'****Blue Clay****1'****112'****Med. Coarse Sand****13'****125'**

4 WELL DEPTH: (completed) Date of Completion

125 ft. 7-8-685 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐ _____6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐ _____7 CASING: Threaded ☒ Welded ☐
Diam. **4** in. to **120** ft. Depth Height: Above/Below
surface **4** ft. A.
Weight **11** lbs/ft.
_____ in. to _____ ft. Depth Drive Shoe? Yes ☒ No ☐8 SCREEN: **Johnson Stainless**Type: **steel** Dia.: **4"**Slot/Gauze **20** Length **5'**Set between **120** ft. and **125** ft.Fittings: **3" x 17" Nipple**

9 STATIC WATER LEVEL

100 ft. below land surface

10 PUMPING LEVEL below land surface

121 ft. after **2 1/2** hrs. pumping **12** g.p.m.

_____ ft. after _____ hrs. pumping _____ g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) **1.6** Chlorides (Cl) **68**Hardness **425**12 WELL HEAD COMPLETION: ☐ In Approved Pit
☒ Pitless Adapter ☐ 12" Above Grade

13 GROUTING:

Well Grouted? ☐ Yes ☒ NoMaterial: ☐ Neat Cement ☐ _____

Depth: From _____ ft. to _____ ft.

14 SANITARY:

UNKNOWN

Nearest Source of possible contamination

_____ feet _____ Direction _____ Type

Well disinfected upon completion ☒ Yes ☐ No

15 PUMP:

Manufacturer's Name **Myers**Model Number **307-21** HP **3/4**Length of Drop Pipe **110** ft. capacity **11 1/2** G.P.M.Type: ☒ Submersible ☐ _____
☐ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.

O. C. Corsant Inc.
REGISTERED BUSINESS NAME**0025**
REGISTRATION NO.Address **15101 W. 11 Mile Rd. Oak Park 48237**Signed **O. C. Corsant** Date **Jan. 28, 1969**
AUTHORIZED REPRESENTATIVE

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ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

A 2ND SHEET IS NEEDED.
 tion, source of data, etc.

WATER WELL RECORD

ACT 294 PA 1965

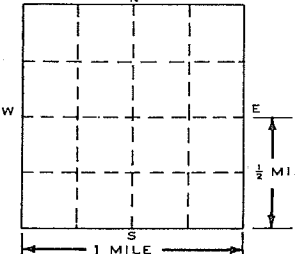
MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL			3 OWNER OF WELL:																																			
County OAKLAND	Township Name Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number 4	Town Number N/S.	Range Number E/W.																																	
Distance And Direction from Road Intersections			Address 163 BARKSHIRE ST																																			
Street address & City of Well Location			4 WELL DEPTH: (completed) Date of Completion 208 ft. JULY 74																																			
Locate with "X" in section below 			5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☒ Jetted ☐ Bored ☐ _____																																			
Sketch Map: 			6 USE: ☒ Domestic ☐ Public Supply ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☐ _____																																			
			7 CASING: Threaded ☐ Welded ☒ Height: Above/Below Surface _____ ft. 4 in. to _____ ft. Depth Weight _____ lbs./ft. _____ in. to _____ ft. Depth Drive Shoe? Yes ☒ No ☐																																			
2 FORMATION <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;">FORMATION</th> <th style="width:10%;">THICKNESS OF STRATUM</th> <th style="width:10%;">DEPTH TO BOTTOM OF STRATUM</th> </tr> </thead> <tbody> <tr><td>RED CLAY GRAVEL</td><td></td><td>25</td></tr> <tr><td>BLUE " "</td><td></td><td>55</td></tr> <tr><td>COURSE HARD GRAVEL</td><td></td><td>170</td></tr> <tr><td>BLUE CLAY GRAVEL</td><td></td><td>190</td></tr> <tr><td>WATER SAND WITH FINE SPATS</td><td></td><td>200</td></tr> <tr><td>COURSE WATER SAND</td><td></td><td>208</td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> </tbody> </table>			FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	RED CLAY GRAVEL		25	BLUE " "		55	COURSE HARD GRAVEL		170	BLUE CLAY GRAVEL		190	WATER SAND WITH FINE SPATS		200	COURSE WATER SAND		208													8 SCREEN: Type: _____ Dia.: 4 Slot/Screen 15 Length 7 Set between _____ ft. and _____ ft. Fittings: _____		
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9 STATIC WATER LEVEL 100 ft. below land surface																																						
10 PUMPING LEVEL below land surface 140 ft. after _____ hrs. pumping 20 g.p.m. _____ ft. after _____ hrs. pumping _____ g.p.m.																																						
11 WATER QUALITY in Parts Per Million: Iron (Fe) _____ Chlorides (Cl) _____ Hardness _____ Other _____																																						
12 WELL HEAD COMPLETION: ☐ In Approved Pit ☐ Pitless Adapter ☐ 12" Above Grade																																						
13 Well Grouted? ☒ Yes ☐ No ☐ Neat Cement ☒ Bentonite ☐ _____ Depth: From 0 ft. to 170 ft.																																						
14 Nearest Source of possible contamination _____ feet Direction _____ Type _____ Well disinfected upon completion ☒ Yes ☐ No																																						
15 PUMP: ☒ Not installed Manufacturer's Name _____ Model Number _____ HP _____ Volts _____ Length of Drop Pipe _____ ft. capacity _____ G.P.M. Type: ☐ Submersible ☐ Jet ☐ Reciprocating																																						
16 Remarks, elevation, source of data, etc.																																						
17 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. REGISTERED BUSINESS NAME _____ REGISTRATION NO. 613 Address 10730 CLARK Signed [Signature] Date _____ AUTHORIZED REPRESENTATIVE																																						

USE A 2ND SHEET IF NEEDED

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL					
County Oakland	Township Name Bloomfield	Fraction 1/4 1/4 1/4	Section Number 4	Town Number 2 N/S	Range Number 10 E/W
Distance And Direction From Road Intersection 154 N. Berkshire			3 OWNER OF WELL: Harry Cendrowski 154 N. Berkshire Address Bloomfield Hills Mi 48013		
Street Address & City of Well Location			Address Same As Well Location? ☒ Yes ☐ No		
Locate with "X" in Section Below			4 WELL DEPTH: 151 FT. Date Completed 7/5/90 ☐ New Well ☒ Replacement Well		
Sketch Map: 			5 ☒ 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 ☐		
2 FORMATION DESCRIPTION			7 CASING: Diameter ☒ Steel ☐ Threaded ☐ Plastic ☐ Welded		
			Height: Above/Below --- Surface 1 ft. Weight 11 lbs./ft.		
Sandy yellow clay			4 in. to 146 ft. depth Grouted Drill Hole Diameter in. to --- ft. depth in. to --- ft. depth		
Soft yellow clay			Drive Shoe ☒ Yes ☐ No		
Soft grey clay			8 SCREEN: ☐ Not Installed Type stainless steel Diameter 4" Slot/Gauze 25 Length 5' Set between 146 ft. and 151 ft.		
Gravelly grey clay			FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☐ Blank above screen 1 1/2 ft. Other ---		
Yellow gravelly hardpan			9 STATIC WATER LEVEL: 84' ft. below land surface ☐ Flow		
Yellow sand (packing)			10 PUMPING LEVEL: below land surface 100 ft. after --- hrs. pumping at 25 G.P.M. ft. after --- hrs. pumping at --- G.P.M.		
Dirty grey fine sand			11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit		
Med. coarse water sand & gravel 8'			12 WELL GROUTED? ☐ No ☒ Yes From --- to --- ft. ☐ Neat cement ☐ Bentonite ☐ Other casing seal No. of bags of cement --- Additives ---		
			13 Nearest source of possible contamination unknown Type --- Distance --- ft. Direction --- Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☒ Yes ☐ No		
			14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name Tait Model number 10DL218 HP 1 , Volts 230 Length of Drop Pipe 126' ft. capacity 18 G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name Wel-x-trol Model number 2-WX251 Capacity 62 gallons		
15. Remarks, elevation, source of data, etc. Sub-cont: Fulmer Well Drilling			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. O.O. Corsaut, Inc. 0025 REGISTERED BUSINESS NAME REGISTRATION NO. Address 15101 W. 11 Mile Oak Park, MI 48237 Signed O.O. Corsaut Date 7/19/90 AUTHORIZED REPRESENTATIVE		
17. Rig Operator's Name: Charles Fulmer			Authority: Act 368 PA 1978 Completion: Required Penalty: Conviction of a violation of any provision is a misdemeanor		

WATER WELL RECORD ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Township Name Bloomfield	Fraction SE 1/4 NW 1/4 SE 1/4	Section Number 4	Town Number 2 N/S.	Range Number 10 E/W.
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Distance And Direction from Road Intersections

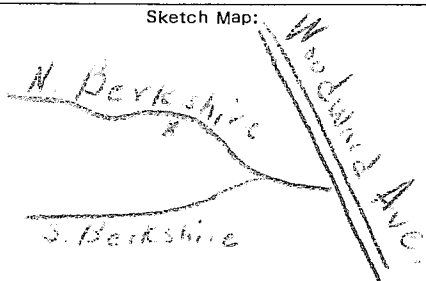
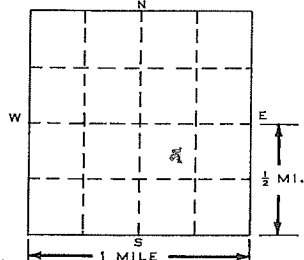
**1/4 mi. w-nw of intersection of N. Berkshire
and Woodward Avenue.**

**163 N. Berkshire, Bloomfield Hills, Mich.
48013**

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL:

Mrs. John Killoran
Address
**163 N. Berkshire
Bloomfield Hills, Mich. 48013**

4 WELL DEPTH: (completed) Date of Completion

208 ft. **July 17, 1974**

5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☒ Jetted ☐ Bored ☐

6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐

7 CASING: Threaded ☐ Welded ☒ Height: Above/Below

4 in. to **201** ft. Depth
Surface **1** ft.
Weight **11** lbs./ft.
Drive Shoe? Yes ☒ No ☐

8 SCREEN:

2 stainless steel
Type: **4"** Dia.: **4"**
Slot **.012 & .015** Length **4' & 3'**
Set between **201** ft. and **208** ft.
Fittings: **K packer and 3' 3" nipple**

9 STATIC WATER LEVEL

100 ft. below land surface

10 PUMPING LEVEL below land surface

130 ft. after **4** hrs. pumping **20** g.p.m.
ft. after hrs. pumping g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) Chlorides (Cl)
Hardness Other

12 WELL HEAD COMPLETION:

☐ In Approved Pit
☒ Pitless Adapter ☒ 12" Above Grade

13 Well Grouted? ☒ Yes ☐ No

☐ Neat Cement ☒ Bentonite
Depth: From **0** ft. to **175** ft.

14 Nearest Source of possible contamination

75 feet **S.** Direction **septic** Type
Well disinfected upon completion ☒ Yes ☐ No

15 PUMP:

☐ Not installed
Manufacturer's Name **Myers**
Model Number **SG102-10AA** HP **1** Volts **230**
Length of Drop Pipe **180** ft. capacity **12** G.P.M.
Type: ☒ Submersible
☐ Jet ☐ Reciprocating

2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Red clay, gravel

25

25

Blue clay, gravel

30

55

Coarse "hard" gravel

115

170

Blue clay, gravel

20

190

Water sand with fine spots

10

200

Coarse sand and gravel

8

208

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

17 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.

Daniel H. Chissus Well & Pump Service **0127**

REGISTERED BUSINESS NAME

REGISTRATION NO.

4885 Walnut Lake Road, West Bloomfield, Michigan
Address **48033**

Signed

AUTHORIZED REPRESENTATIVE

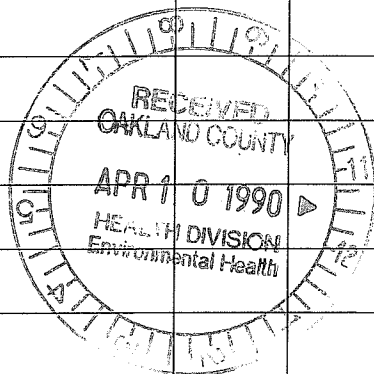
Date

7/24/74.

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		3 OWNER OF WELL:																			
County <u>Oakland</u>	Township Name <u>Bloomfield</u>	Fraction <u>NW 1/4 SE 1/4</u>	Section Number <u>4</u>																		
Distance And Direction From Road Intersection		Town Number <u>2N</u> N/S	Range Number <u>10E</u> E/W																		
Street Address & City of Well Location		Address <u>BEUSON HOMES</u> <u>8627 AIRPORT RD</u> <u>DRAYTON PLAINS</u>																			
Locate with "X" in Section Below		Address Same As Well Location? ☐ Yes ☒ No																			
		4 WELL DEPTH: <u>122</u> FT. Date Completed MO. <u>6</u> DAY <u>19</u> YEAR <u>89</u> ☒ New Well ☐ Replacement Well 5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Auger ☐ Jetted ☐																			
2 FORMATION DESCRIPTION <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>THICKNESS OF STRATUM</th> <th>DEPTH TO BOTTOM OF STRATUM</th> </tr> </thead> <tbody> <tr> <td><u>SAND & GRAVEL</u></td> <td><u>6</u></td> <td><u>6</u></td> </tr> <tr> <td><u>Brown clay & Gravel</u></td> <td><u>5</u></td> <td><u>11</u></td> </tr> <tr> <td><u>Blue clay & Gravel</u></td> <td><u>98</u></td> <td><u>109</u></td> </tr> <tr> <td><u>CLAY</u></td> <td><u>9</u></td> <td><u>118</u></td> </tr> <tr> <td><u>SAND</u></td> <td><u>4</u></td> <td><u>122</u></td> </tr> </tbody> </table>			THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	<u>SAND & GRAVEL</u>	<u>6</u>	<u>6</u>	<u>Brown clay & Gravel</u>	<u>5</u>	<u>11</u>	<u>Blue clay & Gravel</u>	<u>98</u>	<u>109</u>	<u>CLAY</u>	<u>9</u>	<u>118</u>	<u>SAND</u>	<u>4</u>	<u>122</u>	6 USE: ☒ Domestic ☐ Type I Public ☐ Type III Public ☐ Irrigation ☐ Type IIa Public ☐ Heat pump ☐ Test Well ☐ Type IIb Public ☐	
			THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM																	
<u>SAND & GRAVEL</u>	<u>6</u>	<u>6</u>																			
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<u>CLAY</u>	<u>9</u>	<u>118</u>																			
<u>SAND</u>	<u>4</u>	<u>122</u>																			
7 CASING: ☐ Steel ☐ Threaded ☒ Plastic ☒ Welded <u>5</u> in. to <u>118</u> ft. depth <u>8-3</u> in. to _____ ft. depth Grouted Drill Hole Diameter <u>8-3</u> in. to _____ ft. depth _____ in. to _____ ft. depth Height: Above/Below Surface <u>1</u> ft. Weight <u>302</u> lbs./ft. Drive Shoe ☐ Yes ☒ No																					
8 SCREEN: ☐ Not Installed Type <u>Stainless</u> Diameter <u>3"</u> Slot/Gauze <u>10</u> Length <u>4'</u> Set between <u>118</u> ft. and <u>122</u> ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☒ Blank above screen <u>1</u> ft. Other _____																					
		9 STATIC WATER LEVEL: <u>70</u> ft. below land surface ☐ Flow																			
10 PUMPING LEVEL: below land surface <u>75</u> ft. after <u>1</u> hrs. pumping at <u>20</u> G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.																					
		11 WELL HEAD COMPLETION: ☒ Pitless adapter ☒ 12" above grade ☐ Basement offset ☐ Approved pit																			
12 WELL GROUTED? ☐ No ☒ Yes From <u>Top</u> to <u>60</u> ft. ☐ Neat cement ☒ Bentonite ☒ Other <u>Bentonite</u> No. of bags of cement _____ Additives _____																					
		13 Nearest source of possible contamination Type <u>Sewer</u> Distance <u>50</u> ft. Direction <u>S</u> Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☐ Yes ☐ No																			
14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name <u>MYERS</u> Model number _____ HP <u>1/2</u> Volts <u>220</u> Length of Drop Pipe <u>90</u> ft. capacity _____ G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name <u>Y7AOL</u> Model number <u>203</u> Capacity <u>42</u> Gallons																					
		15. Remarks, elevation, source of data, etc.																			
17. Rig Operator's Name: <u>Greg Lalanc</u>		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. <u>Ray Lalanc Well Drilling 63-0140</u> REGISTERED BUSINESS NAME REGISTRATION NO. Address <u>2155 Oak Hill Clarkston, MI 48016</u> Signed <u>Ray Lalanc</u> Date <u>6/19/89</u> AUTHORIZED REPRESENTATIVE																			



USE A 2ND SHEET IF NEEDED

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Twp. Bloomfield West	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section No. 4	Town N/S.	Range E/W.
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Distance And Direction from Road Intersections

**155I Furse St. First house off Franklin Blvd
1/2 mile north of Square Lake Rd.**

Street address & City of Well Location

OWNER No. **3 OWNER OF WELL: Mr. Tom Shunko
Address: 155I Furse St.
Bloomfield Hills, Mich.**

2 FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Red clay & sand	25	25
Hard pan & gravel	77	102
Water gravel	2	104
Blue clay	7	111
Water gravel	38	149

**4 WELL DEPTH: (completed) Date of Completion
149 ft. March 1, 1968****5** ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐ _____**6 USE:** ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐ _____**7 CASING:** Threaded ☐ Welded ☒
Diam. **4** in. to **145** ft. Depth Height: Above/Below surface **1** ft.
Weight _____ lbs/ft.
_____ in. to _____ ft. Depth Drive Shoe? Yes ☒ No ☐**8 SCREEN: Stainless steel
35 slot 4"**
Type: _____ Dia.: _____
Slot/Gauze **35 slot** Length **4 feet**
Set between **145** ft. and **149** ft.
3" pipe & rubber packer
Fittings: _____**9 STATIC WATER LEVEL
85 ft. below land surface****10 PUMPING LEVEL below land surface
85 ft. after 3 hrs. pumping 60 g.p.m.**
_____ ft. after _____ hrs. pumping _____ g.p.m.**11 WATER QUALITY in Parts Per Million:**
Iron (Fe) _____ Chlorides (Cl) _____
Hardness _____**12 WELL HEAD COMPLETION:** ☐ In Approved Pit
☒ Pitless Adapter ☒ 12" Above Grade**13 GROUTING:**
Well Grouted? ☐ Yes ☐ No **none**
Material: ☐ Neat Cement ☐ _____
Depth: From _____ ft. to _____ ft.**14 SANITARY:**
Nearest Source of possible contamination **none**
_____ feet _____ Direction _____ Type
Well disinfected upon completion ☒ Yes ☐ No**15 PUMP: Red Jacket**
Manufacturer's Name _____
Model Number **9- B.B.** HP **3/4**
Length of Drop Pipe **106** ft. capacity _____ G.P.M. **13**
Type: ☒ Submersible ☐ _____
☐ Jet ☐ Reciprocating

16 Remarks, elevation, source of data, etc.

17 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.**Roy LaLone****0817**

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address **615 Lakeside, Pontiac Mich 48054**Signed **Roy LaLone** Date **March 1, 68**
AUTHORIZED REPRESENTATIVE

TAX NO. 19 04 428 003

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

WATER WELL AND PUMP REPORT **D**

PERMIT NO. 25977

1. LOCATION OF WELL

COUNTY Oakland	TOWNSHIP: BLOOMFIELD	FRACTION SW 1/4 NE 1/4 SE 1/4	SECTION NO. 4	TOWN NO 2N	RANGE NO. 10E
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DISTANCE AND DIRECTION FROM INTERSECTION:

WELL ADDRESS:
43575 WOODWARD

BLOOMFIELD, MI

3. OWNER OF WELL: MARY SAWIN

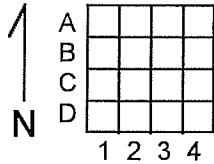
ADDRESS: 43575 WOODWARD

BLOOMFIELD, MI

ADDRESS SAME AS WELL LOCATION: YES

LOCATE WITH "X" BELOW OR
FOUND IN MAP SECTION: **C4**

SKETCH MAP:



4. WELL DEPTH:

140 ft.

DATE COMPLETED

9/13/02

REPLACEMENT WELL

5. EQUIPMENT: ROTARY

6. USE: DOMESTIC

OTHER: _____

7. CASING: PLASTIC

Diameter: 5 in. to 132 ft. depth

in. to ft. depth

HEIGHT: above/below

Surface: 1.00 ft.

Weight: SDR-21 lbs./ft.

BORE HOLE:

Diameter: 8.5 in. to 140 ft. depth

in. to ft. depth

NONE

8. SCREEN: PVC

Type: SLOTTED

Diameter: 4 in.

Slot/Gauze: 32 in.

Length: 8 ft.

Set Between: 132 ft. and 140 ft.

FITTINGS: K-PACKER

Blank Above Screen: 2 ft. other _____

9. STATIC WATER LEVEL:

70 ft. Below Land Surface Flowing: NO

10. PUMPING LEVEL: Below Land Surface

140 ft. After 1 hrs. Pumping at 25 G.P.M.
AIR

11. WELL HEAD COMPLETION: PITLESS ADAPTER

12. WELL GROUTED? YES From 1 to 130 ft.

BENTONITE

No. of Bags 9

Additives

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type: Septic

Distance 75 ft. Direction NW

Type:

Distance ft. Direction

15. ABANDONED WELL PLUGGED? YES

Casing Diameter: 4 in. Depth: 113 ft.

PLUGGING MATERIAL: BENTONITE CHIPS

No. of Bags: 16 Casing Removed? NO

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

14. PUMP: PUMP INSTALLATION ONLY

Manufacturer's Name: GOULDS

Model Number:

HP: 3/4 Volts: 230

Length of Drop Pipe: 100 ft. Capacity: 10 G.P.M.

TYPE: SUBMERSIBLE

PRESSURE TANK:

Manufacturer's Name: STATE

Model Number:

Capacity: 10 Gallons:

17. DRILLING MACHINE OPERATOR:

Robert Fleming EMPLOYEE

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.

ROBERT FLEMING WELL DRILLING

Registration No. 63-0357

445 M-15, Ortonville, Michigan 48462

Signed

Authorized Representative

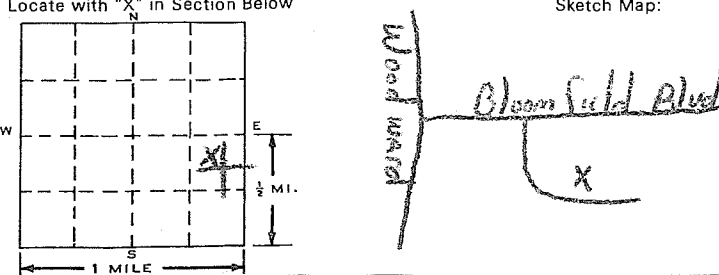
Date

LOCAL HEALTH DEPT. COPY

EOP 2017 (12/96)

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		3 OWNER OF WELL:			
County <u>Oakland</u>	Township Name <u>Bloomfield</u>	Fraction <u>NW 1/4 NE 1/4 SE 1/4</u>	Section Number <u>4</u>	Town Number <u>2N</u> N/S	Range Number <u>10E</u> E/W
Distance And Direction From Road Intersection		Address <u>3607 Airport Rd</u> <u>Oakton Plains</u>			
Street Address & City of Well Location		Address Same As Well Location? ☐ Yes ☒ No			
Locate with "X" in Section Below		4 WELL DEPTH: <u>106</u> FT. Date Completed <u>6/17/89</u> ☒ New Well ☐ Replacement Well			
		5 ☐ Cable tool ☒ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Auger ☐ Jetted ☐			
2 FORMATION DESCRIPTION		6 USE: ☒ Domestic ☐ Type I Public ☐ Type III Public ☐ Irrigation ☐ Type IIa Public ☐ Heat pump ☐ Test Well ☐ Type IIb Public ☐			
	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	7 CASING: ☐ Steel ☐ Threaded ☒ Plastic ☒ Welded <u>5</u> in. to <u>102</u> ft. depth Height: Above/Below Surface <u>1</u> ft. <u>8.5</u> in. to <u> </u> ft. depth Weight <u>30.7</u> lbs./ft. <u> </u> in. to <u> </u> ft. depth Grouted Drill Hole Diameter <u> </u> in. <u> </u> in. to <u> </u> ft. depth Drive Shoe ☐ Yes ☒ No		
Brown clay + sand	11	11	8 SCREEN: ☐ Not Installed Type <u>Stankes</u> Diameter <u>3"</u> Slot/Gauze <u>25</u> Length <u>4'</u> Set between <u>102</u> ft. and <u>106</u> ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☒ Blank above screen <u>1</u> ft. Other <u> </u>		
Blue clay + gravel	80	91	9 STATIC WATER LEVEL: <u>75</u> ft. below land surface ☐ Flow		
GRAVEL	15	106	10 PUMPING LEVEL: below land surface <u>80</u> ft. after <u>1</u> hrs. pumping at <u>25</u> G.P.M. <u> </u> ft. after <u> </u> hrs. pumping at <u> </u> G.P.M.		
			11 WELL HEAD COMPLETION: ☒ Pitless adapter ☒ 12" above grade ☐ Basement offset ☐ Approved pit		
			12 WELL GROUTED? ☐ No ☒ Yes From <u>Top</u> to <u>80</u> ft. ☐ Neat cement ☒ Bentonite ☒ Other <u>Bentonite</u> No. of bags of cement <u> </u> Additives <u> </u>		
			13 Nearest source of possible contamination Type <u>sewer</u> Distance <u>50</u> ft. Direction <u>S</u> Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☐ Yes ☐ No		
			14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name <u>Mylers</u> Model number <u> </u> HP <u>1/2</u> Volts <u>220</u> Length of Drop Pipe <u>90</u> ft. capacity <u>10</u> G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name <u>XTROL</u> Model number <u>203</u> Capacity <u>42</u> 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. <u>Ray Lalanc Well Drilling</u> 63-0140 REGISTERED BUSINESS NAME <u>8125 Oak Hill Clarkston, MI</u> REGISTRATION NO. <u>43016</u> Address <u> </u> Signed <u>Ray Lalanc</u> Date <u>6/17/89</u> AUTHORIZED REPRESENTATIVE			
17. Rig Operator's Name: <u>Greg Lalanc</u>					

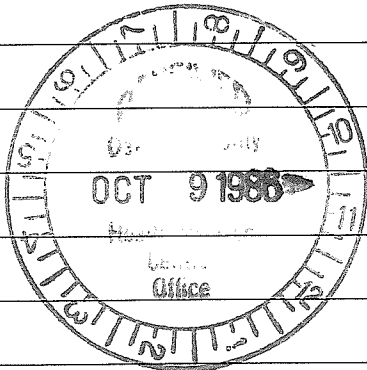


USE A 2ND SHEET IF NEEDED

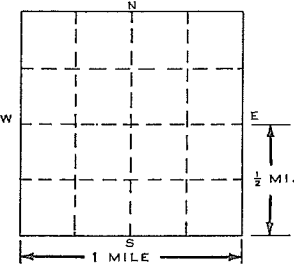
WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		3 OWNER OF WELL:	
County Oakland	Township Name Bloomfield	Fraction NE 1/4 SE 1/4	Section Number 4
		Town Number 2 N/S	Range Number 10 E/W
Distance And Direction From Road Intersection 1/4 mile North of Square Lake - West of Telegraph - 900 Woodward Avenue Pontiac, MI		Address St. Joseph Mercy Hospital 900 Woodward Avenue Pontiac, MI 48053	
Street Address & City of Well Location		Address Same As Well Location? ☒ Yes ☐ No	
Locate with "X" in Section Below		Date of Completion 8/28/86	
		4 WELL DEPTH: (completed) 145 ft.	
		5 ☐ 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: Diameter ☐ Steel ☐ Threaded ☒ Plastic ☐ Welded 5 in. to 136 ft. depth _____ in. to _____ ft. depth Grouted Drill Hole Diameter 8 in. to 136 ft. depth _____ in. to _____ ft. depth Height: Above/Below Surface _____ ft. Weight 2.92 lbs./ft. Drive Shoe ☐ Yes ☒ No	
2 FORMATION DESCRIPTION		8 SCREEN: ☐ Not Installed	
	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	Type Stainless Diameter 3"
Sand and clay	20	20	Slot/Grit 15 Length 9'
Clay	10	30	Set between 136 ft. and 145 ft.
Clay and gravel	15	45	FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check
Clay	40	85	☐ Blank above screen _____ ft. Other _____
Gravel	10	95	9 STATIC WATER LEVEL: 80 ft. below land surface ☐ Flow
Clay and gravel	30	125	10 PUMPING LEVEL: below land surface 60 ft. after 2 hrs. pumping at 40 G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.
Water bearing gravel	20	145	11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit
			12 WELL GROUTED? ☐ No ☒ Yes From 0 to 136 ft. ☐ Neat cement ☒ Bentonite ☐ Other _____ No. of bags of cement _____ Additives _____
			13 Nearest source of possible contamination Type none Distance _____ ft. Direction _____ Well disinfected upon completion? ☒ Yes ☐ No
			14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name Flint & Walling Model number 4P27R15 HP 1 1/2 Volts 230 - 3 p Length of Drop Pipe 120 ft. capacity 20 G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name Well-X-Trol Model number 302 Capacity 24 Gallons
USE A 2ND SHEET IF NEEDED			
15. Remarks, elevation, source of data, etc. Drilled by - Glenn Eagan #25-1876 Drilled 1 dry hole 100' Cemented off - same location		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. Bellinger Well Drilling - 44-1757 REGISTERED BUSINESS NAME REGISTRATION NO. Address 4020 S. Lapeer Rd. Metamora, MI 48455 Signed <i>[Signature]</i> Date 8/29/86 AUTHORIZED REPRESENTATIVE	



WATER WELL RECORD
ACT 294 PA 1965MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL																																																					
County Oakland	Township Name Bloomfield	Fraction 1/41/41/4	Section Number 4	Town Number 2 N2S.	Range Number 10 E2W.																																																
Distance And Direction from Road Intersections 1640 Woodward (E. side N. of Square Lake Road)			3 OWNER OF WELL: Address Ms. Mary Helen Griggs 1640 Woodward Bloomfield Hills, Michigan 48013																																																		
Street address & City of Well Location Locate with "X" in section below 			4 WELL DEPTH: (completed) Date of Completion 100 ft. 7-29-75																																																		
2 FORMATION <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 40%;">FORMATION</th><th style="width: 10%;">THICKNESS OF STRATUM</th><th style="width: 10%;">DEPTH TO BOTTOM OF STRATUM</th></tr></thead><tbody><tr><td>Yellow Sand Gravel and Clay</td><td>12'</td><td>12'</td></tr><tr><td>Hardpan</td><td>15'</td><td>27'</td></tr><tr><td>Sand Clay</td><td>10'</td><td>37'</td></tr><tr><td>Clay</td><td>16'</td><td>53'</td></tr><tr><td>Dry Gravel</td><td>4'</td><td>57'</td></tr><tr><td>Hardpan</td><td>43'</td><td>100'</td></tr><tr><td>Boulders</td><td>20'</td><td>100'</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>			FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	Yellow Sand Gravel and Clay	12'	12'	Hardpan	15'	27'	Sand Clay	10'	37'	Clay	16'	53'	Dry Gravel	4'	57'	Hardpan	43'	100'	Boulders	20'	100'																									5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Jetted ☐ Bored ☐ _____		
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			7 CASING: Threaded ☐ Welded ☐ Height: Above/Below Surface _____ ft. _____ in. to _____ ft. Depth Weight _____ lbs./ft. _____ in. to _____ ft. Depth Drive Shoe? Yes ☐ No ☐																																																		
			8 SCREEN: Type: _____ Dia.: _____ Slot/Gauze _____ Length _____ Set between _____ ft. and _____ ft. Fittings: _____																																																		
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			15 PUMP: ☐ Not installed Manufacturer's Name _____ Model Number _____ HP _____ Volts _____ Length of Drop Pipe _____ ft. capacity _____ G.P.M. Type: ☐ Submersible ☐ Jet ☐ Reciprocating																																																		
16 Remarks, elevation, source of data, etc. Dry Hole- All Pipe Pulled and hole cemented.			17 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. O. O. Corsaut, Inc. 0025 REGISTERED BUSINESS NAME REGISTRATION NO. Address 15101 W. 11 Mile Road, Oak Park 48237 Signed  Date Aug. 14, 1975 AUTHORIZED REPRESENTATIVE																																																		

TAX NO:

MICHIGAN DEPARTMENT OF PUBLIC HEALTH WATER WELL AND PUMP RECORD

PERMIT NO:

1. LOCATION OF WELL

County

Oakland

Township Name

Blodgett

Fraction

NE 1/4 SE 1/4 SE 1/4

Section No.

41

Town No.

2N

Range No.

10E

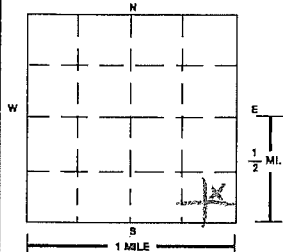
Distance and Direction from Road Intersection

Woodward North of Square L Rd 1/4 mile to
S Birch St left 1/4 mile on left.

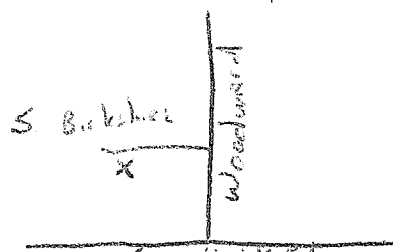
715 BIRCH ST

Street Address & City of Well Location

Locate with 'X' in Section Below



Sketch Map



2. FORMATION DESCRIPTION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Brown clay

29

29

Sand

7

36

Blue clay & gravel

44

80

CLAY

22

102

SAND & GRAVEL

39

141

OLD 4" STEEL WELL PLUGGED OLD

SUBMERSIBLE PUMP BROKE OFF & COULD

NOT BE RECOVERED. 90' OF

STEEL PIPE WAS THE WORKER FROM

WELL & 100 gal cement used to

plug hole

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☒ Yes ☐ No

Casing Diameter 4" in.

Depth 7 ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry☐ Neat Cement☒ Bentonite Slurry☐ Concrete Grout☐ Bentonite Chips

No. of Bags

Casing Removed?

☐ Yes ☒ No

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

NOTICE: OLD 4" STEEL WELL WAS IN PIT
BUT APPARENTLY TO 110' 50" DEPTH
WELL WAS NOT

17. DRILLING MACHINE OPERATOR:

☒ Employee ☐ Subcontractor

Name Guy Lalone

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.

Signed Roy Lalone WILL DALLING
REGISTERED BUSINESS NAME
HEALTH AND ENVIRONMENTAL DIVISION
ADDRESS 11000 Clarkston MI 48348

Signed

AUTHORIZED REPRESENTATIVE

Date

63-0140

REGISTRATION NO.

48348

LOCAL HEALTH DEPT. COPY

Authority: Act 368 PA 1978
Completion: Required

TAX NO. 19.04.476.010
1. LOCATION OF WELL

MICHIGAN DEPARTMENT OF PUBLIC HEALTH
WATER WELL AND PUMP REPORT

PERMIT NO. 25644

COUNTY Oakland TOWNSHIP: BLOOMFIELD FRACTION NW SE SE 1/4 1/4 1/4 SECTION NO. 4 TOWN NO 2N RANGE NO. 10E

DISTANCE AND DIRECTION FROM INTERSECTION:

WELL ADDRESS:
57 BERKSHIRE.S BLOOMFIELD, MI 48302

3. OWNER OF WELL: JOHN PAGE

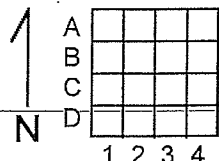
ADDRESS: 57 BERKSHIRE.S

BLOOMFIELD, MI 48302

ADDRESS SAME AS WELL LOCATION: YES

LOCATE WITH "X" BELOW OR
FOUND IN MAP SECTION: C4

SKETCH MAP:



4. WELL DEPTH: 135 ft. DATE COMPLETED: 6/16/01 REPLACEMENT WELL

5. EQUIPMENT: ROTARY

6. USE: DOMESTIC OTHER:

7. CASING: PLASTIC

Diameter: 5 in. to 125 ft. depth
in. to ft. depth

HEIGHT: above/below

Surface: 1.00 ft.

Weight: SDR-21 lbs./ft.

BORE HOLE:

Diameter: 8.5 in. to 135 ft. depth
in. to ft. depth

NONE

8. SCREEN: PVC

Type: SLOTTED Diameter: 4 in.

Slot/Gauze: 15 in. Length: 8 ft.

Set Between: 127 ft. and 135 ft.

FITTINGS: NON-TELESCOPE

Blank Above Screen: 2 ft. other

9. STATIC WATER LEVEL:

65 ft. Below Land Surface Flowing: NO

10. PUMPING LEVEL: Below Land Surface

135 ft. After 1 hrs. Pumping at 20 G.P.M.

AIR

11. WELL HEAD COMPLETION: PITLESS ADAPTER

12. WELL GROUTED? YES From 1 to 120 ft.
BENTONITE

No. of Bags 8 Additives

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type: Septic Distance 55 ft. Direction SE

Type: Distance ft. Direction

15. ABANDONED WELL PLUGGED? YES

Casing Diameter: 5 in. Depth: 200 ft.

PLUGGING MATERIAL: BENTONITE SLURRY

No. of Bags: 7 Casing Removed? NO

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

14. PUMP: PUMP INSTALLATION ONLY

Manufacturer's Name: RED JACKET

Model Number: HP: 1 1/2 Volts: 230

Length of Drop Pipe: 100 ft. Capacity: 20 G.P.M.

TYPE: SUBMERSIBLE

PRESSURE TANK:

Manufacturer's Name: WELL-X-TROL

Model Number: 250 Capacity: 14 Gallons:

17. DRILLING MACHINE OPERATOR:

Robert Fleming EMPLOYEE

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.

ROBERT FLEMING WELL DRILLING
445 M-15, Ortonville, Michigan 48462

Registration No. 63-0357

LOCAL HEALTH DEPT. COPY

Signed

Authorized Representative

Date

Don Fleming 6/15/01

WATER WELL RECORD
ACT 294 PA 1965MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL

County Oakland	Township Name Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$	Section Number 4	Town Number 2 N/4	Range Number 10 E/4
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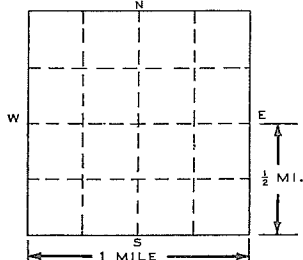
Distance And Direction from Road Intersections

**1640 Woodward
(E. Side N. of Square Lake Road)**

Street address & City of Well Location

Locate with "X" in section below

Sketch Map:



2 FORMATION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM**Yellow Sand Gravel and Clay****12'****12'****Hardpan****13'****25'****Sandy Clay****15'****40'****Hardpan****60'****100'****Clay****10'****110'****Coarse Gravel****3'****113'**

3 OWNER OF WELL:

**Ms. Mary Ann Helen Griggs
Address
1640 Woodward
Bloomfield Hills, Michigan 48013**

4 WELL DEPTH: (completed) Date of Completion

113 ft. 8-5-755 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug
☐ Hollow rod ☐ Jetted ☐ Bored ☐6 USE: ☒ Domestic ☐ Public Supply ☐ Industry
☐ Irrigation ☐ Air Conditioning ☐ Commercial
☐ Test Well ☐7 CASING: Threaded ☒ Welded ☐ Height: Above/Below
Diam. Surface **3 1/2** ft.**4** in. to **114** ft. Depth Weight **11** lbs./ft.**4** in. to **114** ft. Depth Drive Shoe? Yes ☒ No ☐8 SCREEN: **Johnson Stainless**Type: **Steel** Dia.: **4"**Slot: **50** Length **3'**Set between **110 1/2** ft. and **114** ft.Fittings:
3" x 18" Nipple

9 STATIC WATER LEVEL

90 ft. below land surface

10 PUMPING LEVEL below land surface

105 ft. after **2** hrs. pumping **15** g.p.m.**105** ft. after **2** hrs. pumping **15** g.p.m.

11 WATER QUALITY in Parts Per Million:

Iron (Fe) **2.3** Chlorides (Cl) **34**Hardness **289** Other12 WELL HEAD COMPLETION: ☐ In Approved Pit
☒ Pitless Adapter ☐ 12" Above Grade13 Well Grouted? ☐ Yes ☒ No☐ Neat Cement ☐ Bentonite ☐Depth: From **113** ft. to **113** ft.14 Nearest Source of possible contamination **Unknown****Unknown** feet **Unknown** Direction **Unknown** TypeWell disinfected upon completion ☒ Yes ☐ No15 PUMP: ☐ Not installedManufacturer's Name **Myers** **2 Wire**Model Number **S2G727A** HP **3/4** Volts **230**Length of Drop Pipe **99** ft. capacity **12 1/2** G.P.M.Type: ☒ Submersible☐ Jet ☐ Reciprocating

USE A 2ND SHEET IF NEEDED

16 Remarks, elevation, source of data, etc.

17 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.

O. O. Corcoran, Inc.

REGISTERED BUSINESS NAME

0025
REGISTRATION NO.Address **15101 W. 11 Mile Road, Oak Park** **48237**Signed **O. O. Corcoran, Inc.** Date **Aug. 14, 1975**
AUTHORIZED REPRESENTATIVE

TAX NO:

MICHIGAN DEPARTMENT OF PUBLIC HEALTH
WATER WELL AND PUMP RECORD

PERMIT NO:

1. LOCATION OF WELL

County

OAKLAND

Township Name

Bloomfield

Fraction

NE 1/4 SE 1/4 SE 1/4

Section No.

4

Town No.

2N

Range No.

10E

Distance and Direction from Road Intersection

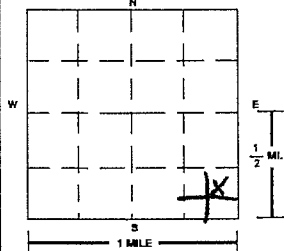
Woodward North of Square Lk Rd 1/4 mile to
S. Birkshire left 1/8 mile on left.

715 BIRKSHIRE

Street Address & City of Well Location

Locate with 'x' in Section Below

Sketch Map



S. Birkshire

Woodward

Square Lk Rd

2. FORMATION DESCRIPTION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Brown clay

29

29

SAND

7

36

Blue clay : gravel

44

80

CLAY

22

102

SAND & GRAVEL

39

141

OLD 4" STEEL WELL PLUGGED - OLD

SUBMERSIBLE PUMP BROKE OFF & COULD

NOT BE RECOVERED. 90' OF

DROP PIPE WAS REMOVED FROM

WELL & 165 gal. removed and

PLUG HOLE

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☒ Yes ☐ No

Casing Diameter 4" 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.)

ANOTHER OLD 4" STEEL WELL IS IN PIT
BUT APPEARS TO HAVE BEEN
FILLED WITH DIRT.

17. DRILLING MACHINE OPERATOR:

☒ Employee ☐ Subcontractor

Name Greg Labore

WELL CONTRACTOR'S CERTIFICATION:

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

Ray Labore Will Drilling

BUSINESS NAME

NOISIAID HILTH

11000 ONVATN

SIGNED

AUTHORIZED REPRESENTATIVE

63-0140

REGISTRATION NO.

48348

Date

7/15/96

WATER WELL RECORD
ACT 294 PA 1965MICHIGAN DEPARTMENT
OF
PUBLIC HEALTH

1 LOCATION OF WELL					
County Oakland	Twp. Bloomfield	Fraction $\frac{1}{4}$ $\frac{1}{4}$	Section No. 4	Town X N/S	Range 10 E/W.
Distance And Direction from Road Intersections 345 Berkshire			OWNER No. 		
Street address & City of Well Location			3 OWNER OF WELL: Mr. Samuel J. Emami Address 345 Berkshire Bloomfield Hills, Michigan 48013		
2	FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	4 WELL DEPTH: (completed) 144 1/2 ft. Date of Completion 9-11-73	
	Stony Yellow Clay	25'	25'	5 ☒ Coble tool ☐ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Jetted ☐ Bored ☐	
	Stony Blue Clay	15'	49'	6 USE: ☒ Domestic ☐ Public Supply ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☐	
	Hard Blue Clay	5'	45'	7 CASING: Threaded ☒ Welded ☐ Diam. 4 in. to 139 ft. Depth Height: Above/Below surface EVEN ft. Weight 11 lbs./ft. Set between 139 ft. and 144 1/2 ft. Drive Shoe? Yes ☒ No ☐	
	Sand & Gravel Hardpan	71'	116'	8 SCREEN: Johnson Stainless Type: Steel Dia.: 4 " Slot/Gauze 20 Length 5' Set between 139 ft. and 144 1/2 ft. Fittings: 3" x 18" Nipple	
	Mostly Sand and gravel	2'	118'	9 STATIC WATER LEVEL 105 ft. below land surface	
	Sand and Gravel	2'	118'	10 PUMPING LEVEL below land surface 0.3 ft. after 2 1/2 hrs. pumping 20 g.p.m. _____ ft. after _____ hrs. pumping _____ g.p.m.	
	Very Fine Brown Sand	6'	124'	11 WATER QUALITY in Parts Per Million: Iron (Fe) 0.3 Chlorides (Cl) 68 Hardness 374	
	Med. Coarse sand & Gravel Hardpan	8'	132'	12 WELL HEAD COMPLETION: ☐ In Approved Pit ☒ Pitless Adapter ☐ 12" Above Grade	
	Water bearing dirty	11'	143'	13 GROUTING: Well Grouted? ☐ Yes ☒ No Material: ☐ Neat Cement ☐ Depth: From _____ ft. to _____ ft.	
	Sand and Gravel	11'	143'	14 SANITARY: Unknown Nearest Source of possible contamination _____ feet _____ Direction _____ Type _____ Well disinfected upon completion ☒ Yes ☐ No	
	Med. Coarse Dirty Sand & Gravel	1 1/2'	144 1/2'	15 PUMP: Red Jacket Manufacturer's Name Red Jacket Model Number R150N1-1100 HP 1 1/2 Length of Drop Pipe 128 ft. capacity 18 1/2 G.P.M. Type: ☒ Submersible ☐ ☐ Jet ☐ Reciprocating	
16 Remarks, elevation, source of data, etc.				17 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. O. O. Corraut, Inc. 0025 REGISTERED BUSINESS NAME REGISTRATION NO. Address 15101 W. 21 Mile Road, Oak Park 48237 Signed O. O. Corraut Date Oct. 16, 1973 AUTHORIZED REPRESENTATIVE	

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		3 OWNER OF WELL:																
County <u>OAKLAND</u>	Township Name <u>Bloomfield</u>	Fraction <u>SW 1/4 NE 1/4 1/4</u>	Section Number <u>4</u>															
Distance And Direction From Road Intersection <u>TRIMORE TO HIGHLAND BLVD on right hand side</u>		Town Number <u>20</u> Range Number <u>10E/W</u>																
Street Address & City of Well Location <u>Lot 56 E. Highland Dr</u>		Address Same As Well Location? ☐ Yes ☐ No																
Locate with "X" in Section Below		Date Completed MO. <u>8</u> DAY <u>29</u> YEAR <u>1984</u>																
		☒ New Well ☐ Replacement Well																
		4 WELL DEPTH: <u>97</u> FT. 5 ☒ Cable tool ☐ Rotary ☐ Driven ☐ Dug ☐ Hollow rod ☐ Auger ☐ Jetted ☐																
2 FORMATION DESCRIPTION <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;">FORMATION DESCRIPTION</th> <th style="width:10%;">THICKNESS OF STRATUM</th> <th style="width:10%;">DEPTH TO BOTTOM OF STRATUM</th> </tr> </thead> <tbody> <tr> <td><u>Gravel clay</u></td> <td><u>20</u></td> <td><u>20</u></td> </tr> <tr> <td><u>BLUE CLAY with gravel</u></td> <td><u>50</u></td> <td><u>70</u></td> </tr> <tr> <td><u>BLUE CLAY</u></td> <td><u>20</u></td> <td><u>90</u></td> </tr> <tr> <td><u>Gravel sand medium</u></td> <td><u>7</u></td> <td><u>97</u></td> </tr> </tbody> </table>		FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM	<u>Gravel clay</u>	<u>20</u>	<u>20</u>	<u>BLUE CLAY with gravel</u>	<u>50</u>	<u>70</u>	<u>BLUE CLAY</u>	<u>20</u>	<u>90</u>	<u>Gravel sand medium</u>	<u>7</u>	<u>97</u>	6 USE: ☒ Domestic ☐ Type I Public ☐ Type III Public ☐ Irrigation ☐ Type IIa Public ☐ Heat pump ☐ Test Well ☐ Type IIb Public ☐	
		FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM														
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<u>Gravel sand medium</u>	<u>7</u>	<u>97</u>																
7 CASING: ☒ Steel ☐ Threaded ☒ Welded ☐ Plastic ☐ Height: Above/Below <u>4</u> in. to <u>93</u> ft. depth <u> </u> in. to <u> </u> ft. depth Grouted Drill Hole Diameter <u> </u> in. to <u> </u> ft. depth <u> </u> in. to <u> </u> ft. depth		Surface <u>1</u> ft. Weight <u>179</u> lbs./ft. Drive Shoe ☒ Yes ☐ No																
		8 SCREEN: ☐ Not Installed Type <u>Standard</u> Diameter <u>3"</u> Slot/Gauze <u>15</u> Length <u>4'</u> Set between <u>93</u> ft. and <u>97</u> ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☒ Blank above screen <u>1</u> ft. Other <u> </u>																
9 STATIC WATER LEVEL: <u>65</u> ft. below land surface ☐ Flow		10 PUMPING LEVEL: below land surface <u>75</u> ft. after <u>2</u> hrs. pumping at <u>20</u> G.P.M. <u> </u> ft. after <u> </u> hrs. pumping at <u> </u> G.P.M.																
		11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit																
12 WELL GROUTED? ☐ No ☐ Yes From <u> </u> to <u> </u> ft. ☐ Neat cement ☐ Bentonite ☐ Other <u> </u> No. of bags of cement <u> </u> Additives <u> </u>		13 Nearest source of possible contamination Type <u>CITY SEWER</u> Distance <u>30</u> ft. Direction <u>EAST</u> Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☐ Yes ☐ No																
		14 PUMP: ☐ Not Installed ☐ Pump Installation Only Manufacturer's name <u>MYERS</u> Model number <u> </u> HP <u>1/2</u> Volts <u>230</u> Length of Drop Pipe <u>73</u> ft. capacity <u> </u> G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: <u>WELL XTALL</u> Manufacturer's name <u> </u> Model number <u>201</u> Capacity <u>42</u> Gallons																
15. Remarks, elevation, source of data, etc. 																		
17. Rig Operator's Name: <u>Charles Jayman</u>		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. <u>B.W. LAMARSON</u> 0406 REGISTERED BUSINESS NAME REGISTRATION NO. Address <u>4811 Cass St Highland MI</u> Signed <u>Charles Jayman</u> Date <u>9-17-88</u> AUTHORIZED REPRESENTATIVE																

TAX NO:

MICHIGAN DEPARTMENT OF PUBLIC HEALTH WATER WELL AND PUMP RECORD

PERMIT NO:

1. LOCATION OF WELL

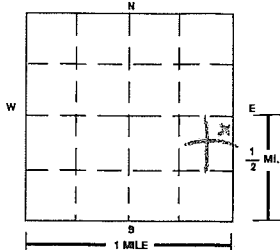
County Oakland Township Name Bloomfield Fraction N 1/4 NE 1/4 SE 1/4 Section No. 4 Town No. 2N Range No. 10E

Distance and Direction from Road Intersection

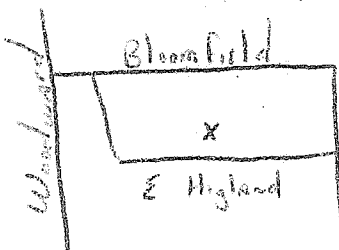
Bloomfield Rd East of Woodward to East Highland
Rd, 3rd from last on left
245 E
HIGHLAND

Street Address & City of Well Location

Locate with 'X' in Section Below



Sketch Map



2. FORMATION DESCRIPTION

THICKNESS
OF
STRATUMDEPTH TO
BOTTOM OF
STRATUM

Blue clay - Gravel	72	72
Gravel w/ Blue clay streaks	20	92
Dirty Gravel - sands	28	120
SAND	5	125

USE A 2ND SHEET IF NEEDED

15. ABANDONED WELL PLUGGED?

☐ Yes ☐ No

Casing Diameter _____ in. Depth _____ ft.

PLUGGING MATERIAL:

☐ Cement/Bentonite Slurry☐ Neat 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 ☐ SubcontractorName Guy Labone

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.

Ray Labone Well Drilling 63-0190
 REGISTERED BUSINESS NAME REGISTRATION NO.

Address 8155 Oak Hill Circle MI 48319

Signed [Signature]
 AUTHORIZED REPRESENTATIVE

Date 8/22/94

LOCAL HEALTH DEPT. COPY

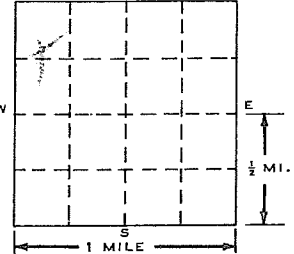
Authority: Act 368 PA 1978

Completion: Required

Penalty: Conviction of a violation of any provision is a misdemeanor.

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL					
County <u>Oakland</u>	Township Name <u>Bloomfield</u>	Fraction <u>SW 1/4 NE 1/4 NE 1/4</u>	Section Number <u>4</u>	Town Number <u>2</u>	Range Number <u>10E/W</u>
Distance And Direction From Road Intersection <u>Bloomfield Blvd</u> <u>to Tidy more to Highland Blvd on right</u> <u>hand side</u>			3 OWNER OF WELL: <u>Mr Cook</u> Address <u>Lot 57 E Highland Dr</u> Address Same As Well Location? ☒ Yes ☐ No		
Street Address & City of Well Location Locate with "X" in Section Below			4 WELL DEPTH: Date Completed <u>8/31/88</u> <u>104</u> FT. ☒ New Well ☐ Replacement Well		
 Sketch Map: <u>Grm plant</u> <u>Tidy more</u> <u>Highland Blvd</u> <u>Woodward</u>			5 ☒ 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		
2 FORMATION DESCRIPTION			7 CASING: Diameter ☒ Steel ☐ Threaded ☐ Plastic ☐ Welded <u>4</u> in. to <u>100</u> ft. depth _____ in. to _____ ft. depth Grouted Drill Hole Diameter _____ in. to _____ ft. depth _____ in. to _____ ft. depth		
			Height: Above/Below Surface _____ ft. Weight <u>1279</u> lbs./ft. Drive Shoe ☒ Yes ☐ No		
Brown clay			8 SCREEN: ☐ Not installed Type <u>Stainless</u> Diameter <u>3"</u> ☒ Gauze <u>12</u> Length <u>4</u> Set between <u>100</u> ft. and <u>104</u> ft. FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check ☒ Blank above screen <u>1</u> ft. Other _____		
Blue clay mixed with gravel			9 STATIC WATER LEVEL: <u>65</u> ft. below land surface ☐ Flow		
Blue clay			10 PUMPING LEVEL: below land surface <u>75</u> ft. after <u>2</u> hrs. pumping at <u>20</u> G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M.		
gray sand very fine			11 WELL HEAD COMPLETION: ☒ Flush adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit		
gray sand medium			12 WELL GROUTED? ☐ No ☐ Yes From _____ to _____ ft. ☐ Neat cement ☐ Bentonite ☐ Other _____ No. of bags of cement _____ Additives _____		
15. Remarks, elevation, source of data, etc.			13 Nearest source of possible contamination Type <u>CH Sewer</u> Distance <u>30</u> ft. Direction <u>EAST</u> Well disinfected upon completion? ☐ Yes ☐ No Was old well plugged? ☐ Yes ☐ No		
			14 PUMP: ☐ Not installed ☐ Pump Installation Only Manufacturer's name <u>Mylers</u> Model number _____ HP <u>1/2</u> Volts <u>230</u> Length of Drop Pipe <u>73</u> ft. capacity <u>10</u> G.P.M. TYPE: ☒ Submersible ☐ Jet PRESSURE TANK: Manufacturer's name <u>Well & Tool</u> Model number <u>2002</u> Capacity <u>40</u> Gallons		
			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. <u>B.W. Lajman & Sons</u> <u>0906</u> REGISTERED BUSINESS NAME REGISTRATION NO. Address <u>4815 Segle Rd Highland</u> Signed <u>Charles Lajman</u> Date <u>9-17-88</u> AUTHORIZED REPRESENTATIVE		
			17. Rig Operator's Name: <u>Charles Lajman</u>		
			USE A 2ND SHEET IF NEEDED		



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

WATER WELL AND PUMP RECORD

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

103191083

PERMIT NUMBER

108-09-000012

WSSN & SOURCE ID/WELL NUMBER

TAX NUMBER
19-04376-007

LATITUDE

LONGITUDE

COUNTY

TOWNSHIP

19-04376-007

19-04376-007

19-04376-007

19-04376-007

DISTANCE & DIRECTION FROM ROAD
INTERSECTION

WELL STREET ADDRESS, CITY/ZIP

FRACTION

SECTION

TOWN NO.

RANGE NO.

West of Woodward 1/2 mi
corner of Berkshire
50 ft

Woodward
Berkshire Well

1/4 1/4 1/4

1/4 1/4 1/4

WELL OWNER John Yamin

ADDRESS 211 Berkshire

CITY/ZIP Bloomfield, MI 48302

Owner Address Same As Well Address? ☐ Yes ☐ No

DRILLING METHOD ☐ Cable Tool ☒ Rotary ☐ Auger/Bored
☐ Hollow Rod ☐ Jetted ☐ Other

PUMP ☐ Not Installed ☐ Pump Installation Only
Manufacturer Berkeley

WELL DEPTH 131 ft.
WELL USE ☒ Household ☐ Type I Public
☐ Test Well ☐ Irrigation ☐ Type II Public
☐ Heat Pump ☐ Industrial ☐ Type III Public
☐ Other

Pump Type ☒ Submersible ☐ Jet ☐ Other
Model Number B10X05221 HP 12 Volts 230
Pump Capacity 10 G.P.M. Drawdown Seal Installed ☐
Length of Drop Pipe 100 ft. Diameter of Drop Pipe 1 in.

DATE COMPLETED 5/7/09
WELL TYPE ☐ New ☒ Replacement ☐ Dry Hole

PRESSURE TANK ☐ Not Installed ☐ Buried
Type ☐ Diaphragm/Bladder ☐ Other

CASING ☐ Steel-Black ☒ Plastic ☐ Steel-Galvanized
☐ Welded ☐ Threaded ☐ Other

Manufacturer Runk Air Model PAD 20
Total Tank Capacity 20 gal. Pressure Relief Valve Installed ☐

Diameter 5 in. to 123 ft. depth 21 SDR
in. to ft. depth SDR

Formation Description Thickness of Stratum Depth to Bottom of Stratum

BOREHOLE
Diameter 8 1/2 in. to 131 ft. depth
in. to ft. depth
Height Casing Fittings
Above/Below Surface ft. ☐ Drive Shoe ☐ Shale Packer

clay 30 30
sand 20 50
Blue clay & Gravel 50 100
sand 31 131

STATIC WATER LEVEL
80 ft. Below Land Surface ☐ Flowing

PUMPING LEVEL (Below Land Surface)
118 ft. After 1 hrs. Pumping at 30 G.P.M.
☐ Air ☐ Bailer ☐ Plunger ☐ Test Pump

SCREEN ☐ Not Installed ☒ Filter-Packed
Material Type Stainless Diameter 3 in.
Slot 2-12 Length 8 ft.
Set Between 123 ft. and 131 ft.

FITTINGS ☒ Neoprene Packer ☐ Bremer Check
BLANK ☐ above 2 ft. Other

WELL GROUTED ☒ Yes ☐ No From 0 ft. to 116 ft.
☐ Neat Cement ☐ Bentonite Slurry ☐ Bentonite Dry Granular
☐ Other No. of Bags 10 Additives 2-111111

WELLHEAD COMPLETION ☒ Pitless Adapter ☒ 12 in. Above Grade
☐ Basement Offset ☐ Well House

NEAREST SOURCE OF POSSIBLE CONTAMINATION
Type Septic Distance 60 ft. Direction S
Type Distance ft. Direction

ABANDONED WELL PLUGGED ☒ Yes ☐ No
Casing Diameter 4 in. Depth 128 ft.

PLUGGING MATERIAL ☐ Neat Cement ☐ Bentonite Slurry
☐ Cement/Bentonite Slurry ☐ Concrete Grout ☒ Bentonite Chips
Number of Bags 14 Casing Removed? ☐ Yes ☐ No

DRILLING MACHINE OPERATOR ☐ Employee ☐ Subcontractor
Name Al Edwards 5/1/09

PUMP INSTALLER (If different from drilling machine operator.)
Name

REMARKS Also 3' well next to it was not abandoned, plugged it with 10 bags Bentonite chips

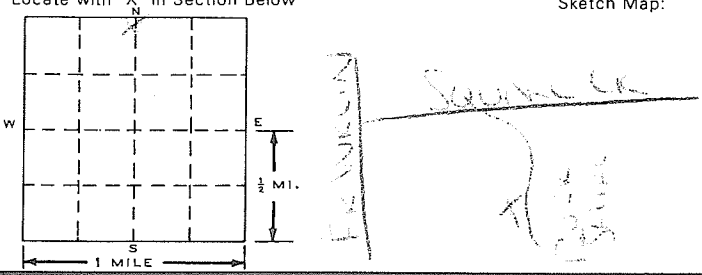
WATER WELL CONTRACTOR'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge and belief.
Kirklin Well Drilling 2047
Registered Business Name Registration No.
Address 4118 Dawson Rd
City/State/Zip Kalamazoo, MI 49001
Signature of Registered Contractor Date 6/4/09

RECEIVED
JUN 09 2009

USE 2ND SHEET IF NECESSARY

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL County Oakland Township Name Bloomfield Fraction NE 1/4 NE 1/4 NW 1/4 Section Number 4 Town Number 3 N/S N/S Range Number 11 E/W E/W	
Distance And Direction From Road Intersection South of Square Lake on the west side of Burkshire	
Street Address & City of Well Location 276 E. BURKSHIRE	
Locate with "X" in Section Below Sketch Map: 	
2 FORMATION DESCRIPTION	3 OWNER OF WELL: Randy Lalone 10075 Davisburg Rd Davisburg MI Address Same As Well Location? ☐ Yes ☐ No 4 WELL DEPTH: 260 FT. Date Completed 12 6 91 ☒ New Well ☐ Replacement Well 5 ☐ 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: Diameter ☐ Steel ☐ Threaded ☒ Plastic ☐ Welded 5 in. to 260 ft. depth Grouted Drill Hole Diameter 8 1/2 in. to 265 ft. depth Height: Above/Below Surface 1 ft. Weight _____ lbs./ft. Drive Shoe ☐ Yes ☒ No 8 SCREEN: ☐ Not Installed Type Wrapped Diameter 5" Slot/Gauze 20 Length 7' Set between 253 ft. and 260 ft. FITTINGS: ☐ K-Packer ☐ Lead Packer ☐ Bremer Check ☐ Blank above screen _____ ft. Other _____ 9 STATIC WATER LEVEL: 50-60 ft. below land surface ☐ Flow 10 PUMPING LEVEL: below land surface Air 180 ft. after 1 hrs. pumping at 50+ G.P.M. _____ ft. after _____ hrs. pumping at _____ G.P.M. 11 WELL HEAD COMPLETION: ☒ Pitless adapter ☐ 12" above grade ☐ Basement offset ☐ Approved pit 12 WELL GROUTED? ☐ No ☒ Yes From 60 to 0 ft. ☐ Neat cement ☒ Bentonite ☐ Other _____ No. of bags of cement _____ Additives _____ 13 Nearest source of possible contamination Type Sewage Distance 75 ft. Direction South Well disinfected upon completion? ☒ Yes ☐ No Was old well plugged? ☒ 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 _____ 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. Ed Birkmeier Well Drilling Ltd. 1607 REGISTERED BUSINESS NAME REGISTRATION NO. Address 10655 Easton Rd New Lothrop MI 48460 Signed Ed Birkmeier Date 12-6-91 AUTHORIZED REPRESENTATIVE
17. Rig Operator's Name: Barry Brown	

USE A 2ND SHEET IF NEEDED

