GEOLOGICAL SURVEY NO.

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

WATER WELL AND PUMP RECORD

PERMIT NUMBER 0269

1 LOCATION OF WELL

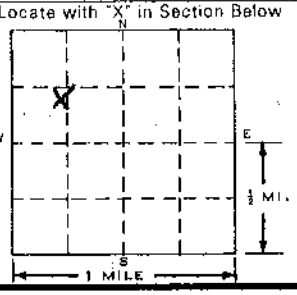
County	Township Name	Fraction	Section Number	Town Number	Range Number
JACKSON	PARMA	NE¼ SW¼ NW¼	22	2 N(S)	3 E(W)

Distance And Direction From Road Intersection

Street Address & City of Well Location

Locate with "X" in Section Below

Sketch Map:



3 OWNER OF WELL:

Richard Piske

Address 3380 Callahan Rd.

Address Same As Well Location? ☑ Yes ☐ No

4 WELL DEPTH: (completed)

100 ft.

Date of Completion 10-10-85

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 40 ft. depth

____ in. to ____ ft. depth

Grouted Drill Hole Diameter

6 in. to 39 ft. depth

____ in. to ____ ft. depth

Height: Above/Below Surface 7+ ft.

Weight ____ lbs./ft.

Drive Shoe ☐ Yes ☐ No Shoe used

2 FORMATION DESCRIPTION

FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Top Dirt	2	2
Sandrock	10	12
Shale	7	19
Sandrock	5	24
Shale	46	70
Sandrock	30	100

8 SCREEN:

☑ Not Installed

Type ____ Diameter ____

Slot/Gauze ____ Length ____

Set between ____ ft. and ____ ft.

FITTINGS: ☐ K-Packer ☐ Lead Packer ☐ Bremer Check

☐ Blank above screen ____ ft. Other ____

9 STATIC WATER LEVEL:

3 ft. below land surface ☐ Flow

10 PUMPING LEVEL: below land surface

15 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

12 WELL GROUTED?

☐ No ☑ Yes From 0 to 40 ft.

☐ Neat cement ☑ Bentonite ☐ Other ____

No. of bags of cement ____ Additives ____

13 Nearest source of possible contamination

Type Septic Distance 50' ft. Direction ____

Well disinfected upon completion? ☑ Yes ☐ No

14 PUMP:

☐ Not Installed ☐ Pump Installation Only

Manufacturer's name Gould Pump

Model number 10EJ05442 HP ½ Volts 230

Length of Drop Pipe 25 ft. capacity 10 G.P.M.

TYPE: ☑ Submersible ☐ Jet ____

PRESSURE TANK:

Manufacturer's name WELL X TROL

Model number WX202 Capacity 21 Volume Gallons

RECEIVED
Mich. Dept. of Public Health
AUG 15 1986
Bureau of Environmental and Occupational Health - GWQS

USE A 2ND SHEET IF NEEDED

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.

Sebastian & Sons 1559
REGISTERED BUSINESS NAME REGISTRATION NO.

Address 28731 U. Drive North Springport MI

Signed William Sebastian Date 10-10-85
AUTHORIZED REPRESENTATIVE

D67d 2/84

GEOLOGICAL SURVEY COPY

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

GEOLOGICAL SURVEY NO.

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

WATER WELL AND PUMP RECORD

PERMIT NUMBER 3748 3

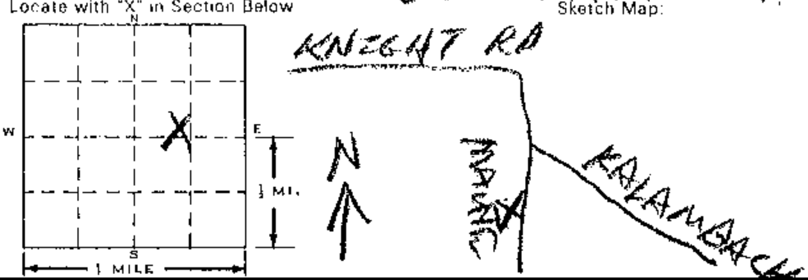
1 LOCATION OF WELL

County	Township Name	Fraction	Section Number	Town Number	Range Number
JACKSON	GRASSLAKE	SE ¼ SW ¼ NE ¼	22	T2 (S)	1O (E)

Distance And Direction From Road Intersection: 1/4 MI. SOUTH OF INTERSECTION OF MAUTE AND KALAMBACH RD

Street Address & City of Well Location: 2800 MAUTE RD

Locate with "X" in Section Below — Sketch Map:



3 OWNER OF WELL: HI-TECH HOMES

Address

Address Same As Well Location? ☐ Yes ☒ No

4 WELL DEPTH: 218 FT. Date Completed MO 4 DAY 27 YEAR 92 ☒ 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 106 ft. depth

____ in. to ____ ft. depth

Grouted Drill Hole Diameter 8 in. to 106 ft. depth

____ in. to ____ ft. depth

Height: Above/Below Surface 1 ft.

Weight ____ lbs./ft.

Drive Shoe SHALE PACKER ☐ Yes ☐ No

2 FORMATION DESCRIPTION

FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
GRAVEL	13	13
BROWN CLAY	1	14
GRAY SAND, GRAVEL	32	46
GRAVEL, GRAY CLAY	6	52
GRAY CLAY, GRAVEL	49	101
GRAY SANDSTONE	16	117
BROWN LIMESTONE	12	129
GRAY SANDSTONE	5	134
GREEN SANDSTONE	16	150
BROWN SANDSTONE	13	163
GRAY SANDSTONE	55	218

USE A 2ND SHEET IF NEEDED

8 SCREEN: ☒ Not Installed

Type ____ Diameter ____

Slot/Gauze ____ Length ____

Set between ____ ft. and ____ ft.

FITTINGS: ☐ K-Packer ☐ Lead Packer ☐ Bremer Check

☐ Blank above screen ____ ft. Other ____

9 STATIC WATER LEVEL: 29 ft. below land surface ☐ Flow

10 PUMPING LEVEL: below land surface

104 ft. after 2 hrs. pumping at 45 G.P.M. WAZR

____ 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 6 to 105 ft.

☐ Neat cement ☒ Bentonite ☐ Other ____

No. of bags of cement ____ Additives ____

13 Nearest source of possible contamination

Type SEPTIC TANK Distance 50+ 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 BURKS

Model number 2MSSKIE8B HP 1/2 Volts 230

Length of Drop Pipe 50 ft. capacity 10 G.P.M.

TYPE: ☒ Submersible ☐ Jet ____

PRESSURE TANK: Manufacturer's name ELBI

Model number ____ Capacity Ø Gallons

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

MCC 11-12-92

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.

BEAR WELL DRILLING 38-1529

REGISTERED BUSINESS NAME — REGISTRATION NO.

Address 8301 DEXON RD, RIVES JUNCTION

Signed William [signature] Date 5/8/92

AUTHORIZED REPRESENTATIVE

17. Rig Operator's Name: BILL

D67d 2/89

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

GEOLOGICAL SURVEY COPY

X

GEOLOGICAL SURVEY SAMPLE No.

DEC 03 1973

WATER WELL RECORD
ACT 294 PA 1965

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

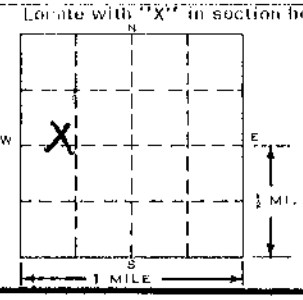
1 LOCATION OF WELL

County	Township Name	Fraction	Section Number	Town Number	Range Number
JACKSON	Parma	SE ¼ SW ¼ NW ¼	22	2 N/S.	3 E/W.

Distance And Direction from Road Intersection
1 mile South of Michigan on west side of Callahan Road

Street address & City of Well Location

Locate with "X" in section below



Sketch Map:

3 OWNER OF WELL
Ruth Lincoln
Address 13235 W Michigan Parma

4 WELL DEPTH: (completed) 80 ft. Date of Completion 11-23-73

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 32 ft. Depth — Surface 11 ft.
___ in. to ___ ft. Depth — Weight 11 lbs./ft.
Drive Shoe? Yes ☑ No ☐

2 FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Sand	12	12
soft S rock	8	20
Medium H Rock	22	42
Soft W Lime	26	70
White SAND ROCK	10	80

USE A 2ND SHEET IF NEEDED

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

9 STATIC WATER LEVEL
14 ft. below land surface

10 PUMPING LEVEL below land surface
20 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) _____ Chlorides (Cl) _____
Hardness _____ Other _____

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

13 Well Grouted ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ _____
Depth: From _____ ft. to _____ ft.

14 Nearest Source of possible contamination
70 feet East Direction Septic 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.
LOG RECD. BY DRILLER
CORRECTED BY
ADDITION

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.
Leonard Well Drilling 0404
REGISTERED BUSINESS NAME REGISTRATION NO.
Address Springport
Signed M Leonard AUTHORIZED REPRESENTATIVE Date 11-28-73

D67d 100M (Rev. 12-68)

GEOLOGICAL SURVEY COPY

GEOLOGICAL SURVEY NO. DEC 16 1981

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

WATER WELL AND PUMP RECORD

PART 127 ACT 368, P.A. 1978

PERMIT NUMBER

1 LOCATION OF WELL

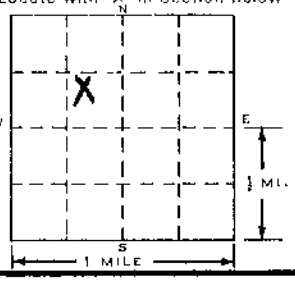
County	Township Name	Fraction	Section Number	Town Number	Range Number
Jackson	Parma	SW ¼ SE ¼ NW ¼	22	T2S N/S	R3W E/W

Distance And Direction From Road Intersection

300' east of Callahan Road
1 2/10ths mile north of Michigan Avenue

Street Address & City of Well Location

Locate with "X" in Section Below



Sketch Map:

3 OWNER OF WELL:

Total Petroleum
P. O. Box 708
Address: Traverse City, Michigan 49684

Address Same As Well Location? ☐ Yes ☒ No

4 WELL DEPTH: (completed)

161 ft.

Date of Completion: 11/5/81

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 ☒ water supply for oil rig

7 CASING:

Diameter ☒ Steel ☒ Threaded
blk. ☐ Plastic ☐ Welded
4 in. to 55' ft. depth
_____ in. to _____ ft. depth
Grouted Drill Hole Diameter
6 1/4 in. to 54 ft. depth
_____ in. to _____ ft. depth

Height: Above/Below Surface 12" ±

Weight _____ lbs /ft

Drive Shoe ☒ Yes ☐ No

8 SCREEN

☒ Not Installed

Type _____ Diameter _____
Slot/Gauze _____ Length _____
Set between _____ ft. and _____ ft.
FITTINGS: ☐ K-Packer ☐ Lead Packer ☐ Bremer Check
☐ Blank above screen _____ ft Other _____

9 STATIC WATER LEVEL

_____ ft. below land surface ☒ Flow

10 PUMPING LEVEL: below land surface

20 ft. after _____ hrs. pumping at 95 G.P.M.
_____ ft. after _____ hrs. pumping at _____ G.P.M.

11 WELL HEAD COMPLETION:

☐ Pitless adaptor ☒ 12" above grade
☐ Basement offset ☐ Approved pit

12 WELL GROUTED?

☐ No ☒ Yes From _____ to _____ ft.
☐ Neat cement ☒ Bentonite ☐ Other _____
No. of bags of cement _____ Additives _____

13 Nearest source of possible contamination

Type _____ Distance _____ ft. Direction _____

Well disinfected upon completion? ☒ 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

2 FORMATION DESCRIPTION

FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Gravel Fill	1	1
Muck	2	3
Sand, gravel, stones & coal	24	27
Grey Shale	2	29
Green Shale	2	31
Green Sandstone & Shale	5	36
Grey Shale & Sandstone	9	45
Hard Sandstone	5	50
Green Shale	3	53
Sandstone, Lime w/Shale Strips	17	70
Hard Grey Shale	12	82
Lime w/Green Shale Strips	4	86
Hard Sandstone	49	135
Sandstone	26	161

ADDED INFO. BY DRILLER, ITEM #8
CORRECTED BY
USE A 2ND SHEET IF NEEDED
ADDITION BY

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

Lease: Kompa Farms 1-22

CORRECTED BY
ADDITION BY

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.

Hart Well Drilling Company 522
REGISTERED BUSINESS NAME REGISTRATION NO.

Address 1154 S. Jefferson Mason, Michigan 48854

Signed S. W. Hart Date 11-13-81
AUTHORIZED REPRESENTATIVE

D67d (Rev 10-80)

GEOLOGICAL SURVEY COPY