GEOLOGICAL SURVEY NO.

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL

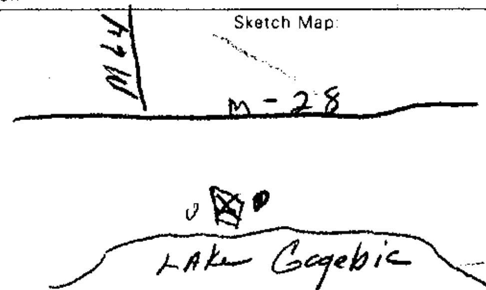
County	Township Name	Fraction	Section Number	Town Number	Range Number
Ontonagon	Bergland	SW 1/4 SE 1/4 NW 1/4	4	48 N/S	42 E/W

Distance And Direction From Road Intersection: .25 miles S. of the Int of M-64 + M-28

Street Address & City of Well Location

Locate with "X" in Section Below — N, S, E, W; 1/2 MI.; 1 MILE — X

Sketch Map:



2 FORMATION DESCRIPTION

FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Caving Sand & Clay	29'	29'
Red Clay & Gravel	7'	36'
Red Clay	28'	64'
Caving Sand Gravel	28'	96'
Red Conglomerate Rock	26'	122'

USE A 2ND SHEET IF NEEDED

3 OWNER OF WELL: Neil Kalember

Address 102 North Shore Drive Bergland Mi. 49910

Address Same As Well Location? ☐ Yes ☒ No

4 WELL DEPTH: 122 FT.

Date Completed: MO 8 DAY 17 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

6 in. to 96 ft. depth

______ in. to ______ ft. depth

Grouted Drill Hole Diameter

______ in. to ______ ft. depth

______ in. to ______ ft. depth

Height: Above/Below Surface 1 ft.

Weight 18.97 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:

5 ft. below land surface ☐ Flow

10 PUMPING LEVEL: below land surface

56 ft. after 10 hrs. pumping at 8 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 ______ to ______ ft.

☐ Neat cement ☐ Bentonite ☐ Other ______

No. of bags of cement ______ Additives ______

13 Nearest source of possible contamination

Type 1st Const 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 ______

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.

DIST. 9 OFFICE DNR-GEOLOGY ... FEB 8 1993

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.

RHINELANDER WELL DRILLING, INC. 2114

REGISTERED BUSINESS NAME REGISTRATION NO.

Address 3790 COUNTRY DRIVE RHINELANDER, WISCONSIN 54501

Signed [signature] AUTHORIZED REPRESENTATIVE Date 8/20/92

17. Rig Operator's Name

Patrick Hazen

D67d 2/89

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

GEOLOGICAL SURVEY COPY

GEOLOGICAL SURVEY SAMPLE No. [ ]

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

1 LOCATION OF WELL

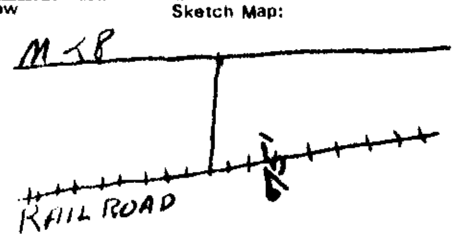
County	Township Name	Fraction	Section Number	Town Number	Range Number
Ontonagon	Bergland	SE¼ NE¼ NW¼	4	T48N N/S.	42W E/W.

Distance And Direction from Road Intersections: 1200 ft. south of M 28 & 300 ft. east of Depot St.

Street address & City of Well Location

Locate with "X" in section below — N, S, E, W, ½ MI., 1 MILE

Sketch Map:



3 OWNER OF WELL: Bergland Township

Address: Bergland, Michigan

4 WELL DEPTH: (completed) 280 ft. Date of Completion 9-20-74

5 [ ] Cable tool [x] Rotary [ ] Driven [ ] Dug [ ] Hollow rod [ ] Jetted [ ] Bored [ ] ____

6 USE: [ ] Domestic [x] Public Supply [ ] Industry [ ] Irrigation [ ] Air Conditioning [ ] Commercial [ ] Test Well [ ]

7 CASING: Threaded [ ] Welded [x] Diam. 8 in. to 84 ft. Depth; ____ in. to ____ ft. Depth. Height: Above/ Surface 1 ft. Weight ____ lbs./ft. Drive Shoe? Yes [x] No [ ]

2 FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Sand	0	5'
Red Clay	5	30
Stoney red clay	30	61
Gravely hardpan	61	77
Broken red rock	77	82
Black granit w/streaks of redish brown to tan sandstone	82	200
Dark brown w/streaks of black granite streaks of redish brown sandstone	200	233
Redish brown with streaks of black	233	236
Dark brown w/streaks of black granite & sandstone	236	250
Black granite with streaks of brown & sandstone	250	280

USE A 2ND SHEET IF NEEDED

8 SCREEN: Type: None Dia.: ____ Slot/Gauze ____ Length ____ Set between ____ ft. and ____ ft. Fittings:

9 STATIC WATER LEVEL 9 ft. below land surface

10 PUMPING LEVEL below land surface
77 ft. after 2 hrs. pumping 48 g.p.m.
180 ft. after 3 hrs. pumping 60 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 [x] 12" Above Grade

13 Well Grouted? [x] Yes [ ] No — [x] 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: [x] 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.
Ext. Location Fraction
by C. Courchaine
GS 2-13-75

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. — REGISTERED BUSINESS NAME — 0163 REGISTRATION NO.

Address 307 Broadway, Swanton, Ohio 43558

Signed ____ AUTHORIZED REPRESENTATIVE Date 11-22-74

Dale R. Dunbar, Presid...

D67d 100M (Rev. 12-68)

FEB 13 1975

GEOLOGICAL SURVEY COPY

GEOLOGICAL SURVEY SAMPLE No.

WATER WELL RECORD

ACT 294 PA 1965

SW SE 1/4

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

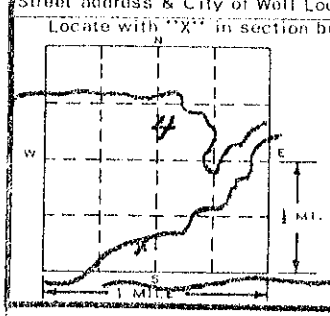
1 LOCATION OF WELL

County	Township Name	Fraction	Section Number	Town Number	Range Number
ONTONAGON	BERGLAND	LOT # 2 1/4 1/4	4	48 N/S	42 E/W

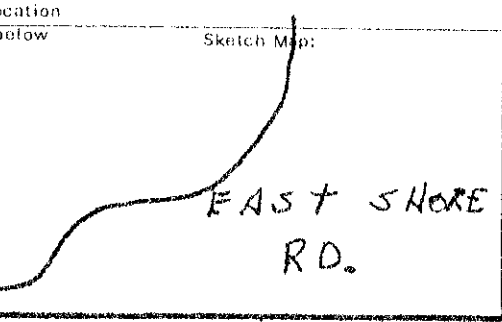
Distance And Direction from Road Intersections: APPR. 3MI. S. + W. OF M28 ON EAST SHORE RD. LAKE GOGEBIC

Street address & City of Wolf Location

Locate with "X" in section below



Sketch Map:



3 OWNER OF WELL:

OTTO PAVEK

Address STAR, RTE. PoH AR, WIS. 54968

4 WELL DEPTH: (completed) 160 ft. Date of Completion 11-11-81

5 [X] Cable tool [ ] Rotary [ ] Driven [ ] Dug [ ] Hollow rod [ ] Jetted [ ] Bored [ ]

6 USE: [X] Domestic [ ] Public Supply [ ] Industry [ ] Irrigation [ ] Air Conditioning [ ] Commercial [ ] Test Well [ ]

7 CASING: Threaded [X] Welded [ ] Height: Above/Below Surface 1 ft.

Diam. 6 in. to 21 ft. Depth; Weight ____ lbs./ft.

4 in. to 71 ft. Depth; Drive Shoe? Yes [X] No [ ]

8 SCREEN:

Type: ____ Dia.: ____

Slot/Gauze ____ Length ____

Set between ____ ft. and ____ ft.

Fittings:

9 STATIC WATER LEVEL: 8 ft. below land surface

10 PUMPING LEVEL below land surface: 120 ft. after ___ hrs. pumping 95 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 [X] 12" Above Grade

13 Well Grouted? [ ] Yes [X] No [ ] Neat Cement [ ] Bentonite [ ] ____

Depth: From ____ ft. to ____ ft.

14 Nearest Source of possible contamination: 60 feet N Direction S. TANK Type

Well disinfected upon completion [X] Yes [ ] No

15 PUMP: [X] Not installed

Manufacturer's Name ____

Model Number ____ HP ____ Volts ____

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

Type: [ ] Submersible [ ] Jet [ ] Reciprocating

2 FORMATION

FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
CLAY PEBBLES -	4'	4'
CLAY - ROCKS -	3'	7'
CLAY -	10'	17'
SHELL STONE -	3'	20'
STONE -	51'	71'
4" PIPE RUN -		
HOLE CAVES -	95'	166'

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.

DON JOHNSON — REGISTERED BUSINESS NAME — 126 REGISTRATION NO.

Address BRUCE CROSSING, MICH. 49912

Signed Don Johnson AUTHORIZED REPRESENTATIVE Date 11-11-81

D67d 100M (Rev. 12-68) JAN 27 1982

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GEOLOGICAL SURVEY SAMPLE No.

WATER WELL RECORD
ACT 294 PA 1965

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

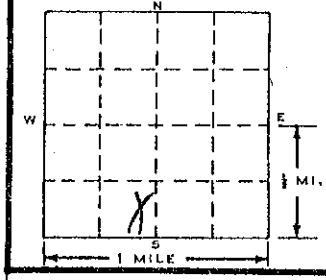
1 LOCATION OF WELL

County	Township Name	Fraction	Section Number	Town Number	Range Number
ONTONAGON	BERGLAND	SE ¼ SW ¼ ¼	4	48 N.S.	42 E.W.

Distance And Direction from Road Intersections
BERGLAND BAY, LAKE GOGEBIC

Street address & City of Well Location
EAST SHORE RD., BERGLAND, MI.

Locate with "X" in section below



Sketch Map:

3 OWNER OF WELL:
MR. LEONARD KORPI
Address 701 HEDIN AVE, IRONWOOD, MI. 49938

4 WELL DEPTH: (completed) Date of Completion
147 ft. 10-4-80

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 ☐
6 in. to 32 ft. Depth
____ in. to ____ ft. Depth
Height Above/Below Surface DUE ft.
Weight 20 lbs./ft.
Drive Shoe? Yes ☑ No ☐

8 SCREEN:
Type: NONE Dia.: ____
Slot/Gauze ____ Length ____
Set between ____ ft. and ____ ft.
Fittings:

9 STATIC WATER LEVEL
18 ft. below land surface

10 PUMPING LEVEL below land surface
130 ft. after 1 hrs. pumping 2 g.p.m.
____ ft. after ____ hrs. pumping ____ g.p.m.

11 WATER QUALITY in Parts Per Million:
Iron (Fe) N/A 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 ____ ft. to ____ ft.

14 Nearest Source of possible contamination
72 feet S 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

2 FORMATION

FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
CLAY	20	20
SILTY SAND, GRAVEL & CLAY	12	32
BEDROCK (BASALT)	115	147

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.

PRESQUE ISLE WELL DRILLERS 1558
REGISTERED BUSINESS NAME REGISTRATION NO.

Address Box 163, PRESQUE ISLE, MI.

Signed Eric M. Bach Date 11-24-80
AUTHORIZED REPRESENTATIVE

D67d 100M (Rev. 12-68)

DEC 1 1 1980

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GEOLOGICAL SURVEY SAMPLE No.

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

1 LOCATION OF WELL

SE SW Part of Parcel

County	Twp	Fraction	Section No.	Town	Range
ONTONAGON	BERGLAND	Lot 4 ¼	4	48 N	42 E (W)

Distance And Direction from Road Intersections

LAKE GOGEBIC

200 FROM LAKE SHORE

OWNER No. 76

Street address & City of Well Location

3 OWNER OF WELL: EMIL COOK

Address BRUCE CROSSING, MICH

2 FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
CLAY - BOULDERS -	12'	(12')
SHELL STONE	14'	26'
HARD STONE	13'	39'
SE ¼ - SW ¼		
SEC. 4 -		

4 WELL DEPTH: (completed) 39 ft. Date of Completion 7/18/70

5 [X] Cable tool [ ] Rotary [ ] Driven [ ] Dug [ ] Hollow rod [ ] Jetted [ ] Bored [ ]

6 USE: [X] Domestic [ ] Public Supply [ ] Industry [ ] Irrigation [ ] Air Conditioning [ ] Commercial [ ] Test Well [ ]

7 CASING: Diam. 5 in. to 26 ft. Depth; Threaded [X] Welded [ ]; Height: Above/Below surface 2 ft.; Weight 15 lbs/ft.; Drive Shoe? Yes [X] No [ ]

in. to ft. Depth

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

9 STATIC WATER LEVEL 1 ft. below land surface

10 PUMPING LEVEL below land surface 33 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

12 WELL HEAD COMPLETION: [ ] In Approved Pit [ ] Pitless Adapter [X] 12" Above Grade

13 GROUTING: Well Grouted? [ ] Yes [X] No Material: [ ] Neat Cement [ ] Depth: From ft. to ft.

14 SANITARY: Nearest Source of possible contamination 25 feet W Direction Out House Type

Well disinfected upon completion [X] Yes [ ] No

15 PUMP: Manufacturer's Name NONE Installed Model Number HP 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.

Don Johnson Jr. 126

REGISTERED BUSINESS NAME REGISTRATION NO.

Address BRUCE CROSSING, MICH.

Signed Don Johnson Jr. Date 7/20/70

AUTHORIZED REPRESENTATIVE

D671D 100M 6-66 AUG 2 1970

GEOLOGICAL SURVEY COPY

WATER WELL RECORD

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

Town 4S (N/S) Range 9E

TOWNER No.

3 OWNER OF WELL: Edwin Hooks

Address 97 N. Tasmania St. Pontiac, Mich.

Berkland

FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Fill	35'	35'
Clay - Pebbles	8'	43'
Muddy Gravel	2'	45'

4 WELL DEPTH: (completed) 45 ft. Date of Completion 5/24/68

5 [X] Cable tool [ ] Rotary [ ] Driven [ ] Dug [ ] Hollow rod [ ] Jetted [ ] Bored [ ]

6 USE: [X] Domestic [ ] Public Supply [ ] Industry [ ] Irrigation [ ] Air Conditioning [ ] Commercial [ ] Test Well [ ]

7 CASING: Threaded [X] Welded [ ] Height: Above/Below
Diam. 5 in. to 45 ft. Depth; surface 1 ft.
Weight 15 lbs/ft.
in. to ft. Depth; Drive Shoe? Yes [ ] No [X]

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

9 STATIC WATER LEVEL
ft. below land surface FLOWS

10 PUMPING LEVEL below land surface
ft. after hrs. pumping 1 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 [X] 12" Above Grade

13 GROUTING:
Well Grouted? [ ] Yes [X] No
Material: [ ] Neat Cement [ ]
Depth: From ft. to ft.

14 SANITARY:
Nearest Source of possible contamination
50 feet S Direction Out House Type
Well disinfected upon completion [X] Yes [ ] No

15 PUMP:
Manufacturer's Name None Installed
Model Number HP
Length of Drop Pipe ft. capacity G.P.M.
Type: [ ] Submersible [ ]
[ ] Jet [ ] Reciprocating

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.

REGISTRATION NO.

Mich

Date 6-10-68