

(C)

NO LOG PUBLISHED
5-20N-4E
Clayton Twp. (Arenac Co.)

Field
TD 2614 in Dundee
Oil

Ward Oil Company

Metzger No. 3

Permit No. 13761
D.P. No. 631

Drilling Contractor: Union Rotary Corporation (Rotary)

Location: NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ section 5, T. 20N., R. 4E.,
910' from North and 330' from East line of quarter section

Elevation: 829.2 feet above sea level

Record by: Muriel E. Tara from incomplete driller's log and scout reports

	Thickness (feet)	Depth (feet)
PLEISTOCENE:		
Drift:		
Drift	184	184
MISSISSIPPIAN:		
Michigan-Marshall-Coldwater:		
Lime, shale	981	1165
Berea:		
Sand, "Berea" (water 1165-1180')	15	1180
Bedford:		
Shale, gray	15	1195
MISSISSIPPIAN-DEVONIAN:		
Antrim:		
Lime, ???	65	1260
Shale, shells	70	1330
Lime ??, shale	350 (485)	1680
DEVONIAN:		
Traverse:		
Lime, "Traverse" (water 1680-2450')	770	2450
Shale, "Bell"	39 (809)	2489
Dundee:		
Lime, "Dundee" (pay 2489-2614')	125 (125+)	2614
	TOTAL DEPTH	2614

Casing Record:

10 3/4" 181' (150 cement)
5 1/2" 2552' (150 cement)

Commenced: 12/19/47

Completed: 1/4/48

Initial Production: After acid: 10 barrels

Treated: 3-19-48 with 500 gallons

Deepened to 2628'. Deepened and abandoned: 8-26-48

12-18-58

(C)

NO LOG PUBLISHED

5-20N-4E
Clayton Twp. (Arenac Co.)Field
TD 2647 in Dundee
Oil

Ward Oil Company

Metzger No. 2

Permit No. 13720

Drilling Contractor: Union Rotary Corporation (Rotary 0-2515; Cable 2515-2647)

Location: SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ section 5, T. 20N., R. 4E.
400' from North and 330' from East line of quarter section

Elevation: 811.0 feet above sea level

Record by: Muriel E. Tara from incomplete driller's log and scout reports.

	Thickness (feet)	Depth (feet)
PLEISTOCENE:		
Drift:		
Drift	152	152
MISSISSIPPIAN:		
Coldwater:		
Lime, shale	193	345
Shale, gray	695 (888)	1040
Berea:		
Sand, "Berea" (water 1040-1220')	180	1220
MISSISSIPPIAN-DEVONIAN:		
Bedford-Antrim:		
Shale	445	1665
DEVONIAN:		
Traverse:		
Lime, "Traverse" (water 1665-2380')	715	2380
Shale, "Bell"	61 (776)	2441
Dundee:		
Lime, "Dundee" (Pay 2570-2585')	206	2647
(Pre. Report- 2 bailers water in 15 hrs. 2600-15')	(206+)	
	TOTAL DEPTH	2647
	PLUGGED BACK TOTAL DEPTH	2591

Casing Record:

10 3/4" 152' (150 cement)
7" 2515' (40 cement)

Commenced: 12-2-47

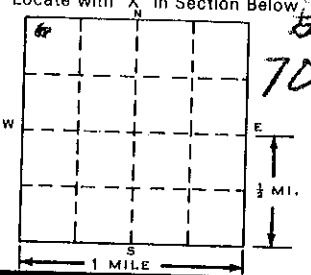
Completed: 12-17-47

Initial Production: After acid: 10 barrels

Treated: 2/4/58 with 500 gallons

WATER WELL AND PUMP RECORD

PERMIT NUMBER

1 LOCATION OF WELL		
County <u>areac</u>	Township Name <u>clayton</u>	Fraction <u>15¹/₂</u> <u>50¹/₄</u> <u>50¹/₄</u>
Distance And Direction From Road Intersection <u>1 1/2 mile west of 70</u> <u>on La Grant Rd</u>		
Section Number <u>5</u>		
Town Number <u>70 N</u>		
Range Number <u>4 E</u>		
Street Address & City of Well Location <u>La Grant Rd</u>		
Locate with "X" in Section Below. <u>70</u> Sketch Map:		
		
2 FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
<u>sand</u>	<u>0</u>	<u>30</u>
<u>clay</u>	<u>30</u>	<u>50</u>
<u>sand</u>	<u>50</u>	<u>70</u>
3 OWNER OF WELL: <u>Bob Benzel</u>		
Address <u>5221 La Grant Rd</u> <u>Stirling</u>		
Address Same As Well Location? ☐ Yes ☒ No		
4 WELL DEPTH: <u>70</u> FT. Date Completed <u>5.5.94</u>		
☐ 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		
<u>5</u> in. to <u>20</u> ft. depth		
<u>2</u> in. to <u>50</u> ft. depth		
Grouted Drill Hole Diameter <u>2</u> in. to <u>50</u> ft. depth		
<u>2</u> in. to <u>50</u> ft. depth		
Height: Above/Below Surface <u>2</u> ft.		
Weight <u> </u> lbs./ft.		
Drive Shoe ☐ Yes ☐ No		
8 SCREEN: ☐ Not installed		
Type <u>Johnson</u> Diameter <u>4"</u>		
Slot/Gauze <u>10 70</u> Length <u>10 ft</u>		
Set between <u>60</u> ft. and <u>70</u> ft.		
FITTINGS: ☒ K-Packer ☐ Lead Packer ☐ Bremer Check		
☐ Blank above screen <u> </u> ft. Other <u> </u>		
9 STATIC WATER LEVEL: <u>20</u> ft. below land surface ☐ Flow		
10 PUMPING LEVEL: below land surface		
<u>45</u> ft. after <u>2</u> hrs. pumping at <u>12</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>0</u> to <u>50</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>septic</u> Distance <u>80</u> ft. Direction <u>N.</u>		
Well disinfected upon completion? ☒ Yes ☐ No		
Was old well plugged? <u>none</u> ☐ Yes ☐ No		
14 PUMP: ☐ Not installed ☒ Pump Installation Only		
Manufacturer's name <u>Meyers</u>		
Model number <u> </u> HP <u>1/2</u> Volts <u>115</u>		
Length of Drop Pipe <u>60</u> ft. capacity <u>12</u> G.P.M.		
TYPE: ☒ Submersible ☐ Jet		
PRESSURE TANK:		
Manufacturer's name <u>Challenger</u>		
Model number <u>WR60</u> Capacity <u>40</u> Gallons		

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

17. Rig Operator's Name:

Walt Dropting Jr

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.

Dropting & Sons 21 30

REGISTERED BUSINESS NAME

REGISTRATION NO.

Address 5109 21st Ave S MinneapolisSigned Walt Dropting Date 5/6/94

AUTHORIZED REPRESENTATIVE

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

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

TAX NO:
004-0-008-100-005-0

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:

99071

1. LOCATION OF WELL

County

ARENAC

Township Name

CLAYTON

Fraction

NE 1/4 NW 1/4 NE 1/4

Section No.

5

Town No.

20

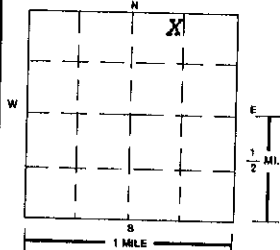
Range No.

4 E

Distance and Direction from Road Intersection

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

CLAY

25'

25'

WATER SAND

17'

43'

3. OWNER OF WELL

Address

**Gary Egan
2495 N. Melina Rd.
Sterling, MI 48659**

Address Same as Well Location ☒ Yes ☐ No

4. WELL DEPTH:

43

ft.

Date Completed

5 / 15 / 99

☒ New Well

☐ Replacement Well

5. ☐ Cable Tool

☐ Hollow Rod

☒ Rotary

☐ Auger/Bored

☐ Driven

☐ Dug

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 **38** ft. depth

Weight: **2.93** lbs./ft.

BORE HOLE:

Diameter: **8 7/8** in. to **43** ft. depth

☐ Drive Shoe

☐ Shale Packer

8. SCREEN: ☐ Not Installed

☒ Gravel-Packed

Type **PVC**

Diameter **5"**

Slot **12**

Length: **5'**

Set Between **38** ft. and **43** ft.

FITTINGS: ☐ K-Packer

☐ Bremer Check

☐ Blank Above Screen

ft. Other

9. STATIC WATER LEVEL:

22 ft. Below Land Surface

☐ Flowing

10. PUMPING LEVEL: Below Land Surface

35 ft. After **1** hrs. Pumping at **15** 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 **0** to **38** ft.

☐ Neat Cement

☒ Bentonite

☐ Other

No. of Bags **3**

Additives

13. NEAREST SOURCE OF POSSIBLE CONTAMINATION:

Type **Septic** Distance **80** ft. Direction **S.E.**

Type **Oil Tank** Distance **310** ft. Direction **S.E.**

14. PUMP: ☐ Not Installed

☐ Pump Installation Only

Manufacturer's Name **Myers**

Model Number **N5-12**

HP **1/2**

Volts **230**

Length of Drop Pipe **35** ft.

Capacity **12** G.P.M.

TYPE: ☒ Submersible

☐ Jet

☐ Other

PRESSURE TANK:

Manufacturer's Name **Well-x-Trol**

Model Number **WX 202**

Capacity **11.5** 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.

R. Webb & Son Well Drilling

REGISTERED BUSINESS NAME

35-2106

REGISTRATION NO.

Address **3120 M-65 Hale MI 48739**

Signed

AUTHORIZED REPRESENTATIVE

Date **22 June 1999**

GEOLOGICAL SURVEY COPY

EQP 2017 (12/96)

(C)

NO LOG PUBLISHED

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TD 2647 in Dundee
CAL

Ward Oil Company

Metzger No. 2

Permit No. 13720

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	(888)	
Berea:		
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Bedford-Antrim:		
Shale	445	1665
DEVONIAN:		
Traverse:		
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Shale, "Bell"	61	2441
	(776)	
Dundee:		
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