

2 JAN 20 1978

**WATER WELL RECORD**  
ACT 294 PA 1965

MICHIGAN DEPARTMENT  
OF  
PUBLIC HEALTH

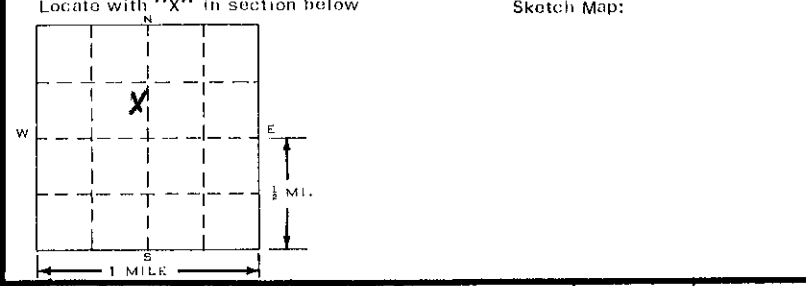
**1 LOCATION OF WELL**

|                          |                                 |   |                            |                             |                                |
|--------------------------|---------------------------------|---|----------------------------|-----------------------------|--------------------------------|
| County<br><b>Allegan</b> | Township Name<br><b>Ovenise</b> | Fraction<br><b>NE 1/4 SE 1/4 NW 1/4</b> | Section Number<br><b>9</b> | Town Number<br><b>4 N/2</b> | Range Number<br><b>14 2 W.</b> |
|--------------------------|---------------------------------|---|----------------------------|-----------------------------|--------------------------------|

Distance And Direction from Road Intersections  
**About 0.5 Miles South of 146th Ave and  
About 100' West of 43rd St**

Street address & City of Well Location

**3 OWNER OF WELL:**  
**(K&K Farms)**  
Address **Paul Koopman  
17-4554 43rd St  
Holland MI**



**4 WELL DEPTH:** [completed] Date of Completion  
**172 ft. July 1 1977**

**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 **1** ft.  
**4** in. to **163** ft. Depth Weight **11** lbs./ft.  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. Depth Drive Shoe? Yes  No

| 2 FORMATION          | THICKNESS OF STRATUM | DEPTH TO BOTTOM OF STRATUM |
|----------------------|----------------------|----------------------------|
| <del>Sand</del> Sand | 23                   | 23                         |
| Clay w/ Gravel       | 60                   | 83                         |
| Red clay             | 25                   | 108                        |
| Blue clay + Gravel   | 12                   | 120                        |
| Red clay             | 40                   | 160                        |
| Sand                 | 12                   | 172                        |

**8 SCREEN:**  
Type: **Stainless** Dia.: **4"**  
Slot/Gauge **10** Length **9'**  
Set between **163** ft. and **172** ft.  
Fittings: **3x4 K-Backer 3x6 Galu Nut  
3" PVC Plug**

**9 STATIC WATER LEVEL**  
**7** ft. <sup>above</sup> <sub>below</sub> land surface

**10 PUMPING LEVEL** below land surface  
**7** ft. after **1** hrs. pumping **25** 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 \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**14 Nearest Source of possible contamination**  
**>150 feet N** Direction **ST** Type  
Well disinfected upon completion  Yes  No

**15 PUMP:**  Not installed  
Manufacturer's Name **Myers**  
Model Number **SE1521517** HP **1/2** Volts **220**  
Length of Drop Pipe **45** ft. capacity **30** G.P.M.  
Type:  Submersible  Jet  Reciprocating

**16 Remarks, elevation, source of data, etc.**

ADDED INFO BY DRILLER, ITEM NO.  
\*CORRECTED BY  
\*\*ADDITION BY **dlc**  
ELEVATION  
DEPTH TO ROCK

**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.  
**Brookhuis Bros** **0458**  
REGISTERED BUSINESS NAME REGISTRATION NO.  
Address **17-4715 142nd Ave Holland MI**  
Signed **Phl Brookhuis** Date **8/9/77**  
AUTHORIZED REPRESENTATIVE



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

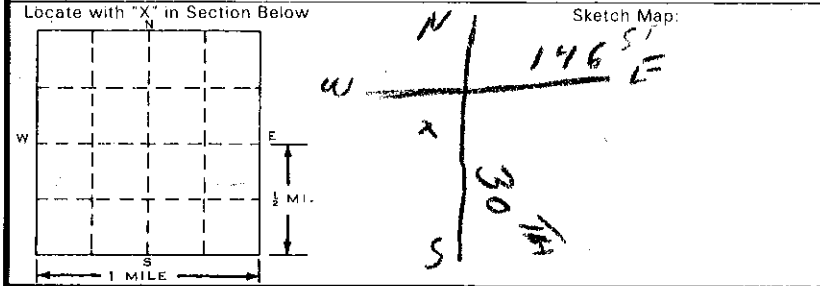
**PERMIT NUMBER**

|                           |                              |                                  |                            |                              |
|---------------------------|------------------------------|----------------------------------|----------------------------|------------------------------|
| <b>1 LOCATION OF WELL</b> |                              |                                  |                            |                              |
| County<br><b>Allegan</b>  | Township Name<br><b>DORR</b> | Fraction<br><b>NW 1/4 NE 1/4</b> | Section Number<br><b>9</b> | Town Number<br><b>4 N</b>    |
|                           |                              |                                  |                            | Range Number<br><b>14 SW</b> |

Distance And Direction From Road Intersection  
**41592 30th**

Street Address & City of Well Location  
Locate with "X" in Section Below

**3 OWNER OF WELL:** **RICK HANSEN**  
Address **41592 30th R#1 DORR MI 49323**  
Address Same As Well Location?  Yes  No



**4 WELL DEPTH:** **49 FT.** Date Completed **7-25-92**  
 New Well  
 Replacement Well

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

**2 FORMATION DESCRIPTION**

| FORMATION DESCRIPTION       | THICKNESS OF STRATUM | DEPTH TO BOTTOM OF STRATUM |
|-----------------------------|----------------------|----------------------------|
| <b>0-9' SAND &amp; CLAY</b> | <b>9'</b>            | <b>9'</b>                  |
| <b>9-49 BROWN FINE SAND</b> | <b>40'</b>           | <b>49'</b>                 |

**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  
 Height: Above/Below Surface **1** ft.  
 Weight **11** lbs./ft.  
 Drive Shoe  Yes  No

**Well End 49'**

**8 SCREEN:**  Not Installed  
 Type **JOHNSON** Diameter **3"**  
 Slot/Gauze **10** Length **5'**  
 Set between **44** ft. and **49** ft.  
 FITTINGS:  K-Packer  Lead Packer  Bromer Check  
 Blank above screen **1** ft. Other \_\_\_\_\_

**9 STATIC WATER LEVEL:** **14** ft. below land surface  Flow

**10 PUMPING LEVEL:** below land surface  
**18** ft. after **1/2** hrs. pumping at **20** 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 \_\_\_\_\_ 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 **Myers**  
 Model number **2085** HP **1/2** Volts **215**  
 Length of Drop Pipe **40** ft. capacity **12** G.P.M.  
 TYPE:  Submersible  Jet

**15. Remarks, elevation, source of water.**

PRESSURE TANK:  
 Manufacturer's name **CLAYTON MARK**  
 Model number **202** Capacity **7** 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.

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

**Dennis Taylor well Drill 031985**  
 REGISTERED BUSINESS NAME REGISTRATION NO.  
 Address **221 Baker St Napkins MI**  
 Signed **Dennis Taylor** Date **7-28-92**  
 AUTHORIZED REPRESENTATIVE

**17. Rig Operator's Name:**  
**Dennis Taylor**

**RECEIVED**  
 Mich. Dept. of Public Health  
**AUG 31 1992**

BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH-GWQS  
 USE A 2ND SHEET IF NEEDED

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

9-4N-14W  
Overisel Twp. (Allegan Co. )

Field  
TD 2662 in Salina  
Gas

Consumers Power Co.

Ferdinand & Gustaves Peters-Harry  
Krooze-Henry J. Krooze No. 1

D. P. No. 1155  
Permit No. 20291

Drilling Contractor: The Taggart Co. (Rotary)

Location: Approx. C-SW $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
1320' from South and 1320' from East line of quarter section.

Elevation: 638.6 feet above sea level (rot. bush.)

Record by: W. E. Mantek from driller's log, core descriptions and sample  
tops submitted by the company

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>  |                     |                 |
| Drift:   |                     |                 |
| Sand, streak of clay   | 260                 | 260             |
| Clay, blue   | 50                  | 310             |
|  | (310)               |                 |
| <b>MISSISSIPPIAN:</b>  |                     |                 |
| Coldwater:   |                     |                 |
| Shale  | 109                 | 419             |
| Lime and shale (Coldwater Limestone at 430')(Coldwater<br>Redrock-shale at 733')(Coldwater Redrock-limestone at<br>746') | 336<br>(445)        | 755 SA.         |
| Ellsworth:   |                     |                 |
| Shale (light Antrim at 1205')  | 528                 | 1283 SA.        |
| <b>MISSISSIPPIAN-DEVONIAN:</b>   |                     |                 |
| Antrim:  |                     |                 |
| Shale  | 137                 | 1420 SA.        |
| <b>DEVONIAN:</b>   |                     |                 |
| Traverse Formation:  |                     |                 |
| Shale  | 12                  | 1432            |
| Lime   | 44<br>(56)          | 1476 SA.        |
| Traverse Limestone-Dundee:   |                     |                 |
| Lime   | 174                 | 1650            |
| Lime, hard   | 32                  | 1682            |
| Lime, soft   | 27                  | 1709            |
| Lime   | 77<br>(310)         | 1786 SA.        |
| Detroit River:   |                     |                 |
| Lime   | 166                 | 1952            |
| Anhydrite  | 137                 | 2089            |
| Lime   | 9                   | 2098            |
| Anhydrite  | 30                  | 2128            |
| Lime   | 78<br>(420)         | 2206 SA.        |

COMPLETED

6-28-57

CASING

RECORD

8 5/8" 330'

9-24N-14W  
Overisel Twp. (Allegan Co.)

Field  
TD 2099 in Salina  
PETD=2648 Gas

Consumers Power Co.

Harry Duer et ux, Henry D. Lankheet-  
John B. Klassen et ux - Donald Koopman et ux #1

Permit No. 20497

Drilling Contractor: The Taggart Co. (Rotary)

Location: Approximate C-N1/4 section 9, T. 4n, R. 14W.  
1220 feet from South and 1320 feet from East & West line of quarter section.

Elevation: 637.6 feet above sea level (rot. bush.)

Record by: B. L. Champion from driller's log, sample tops & core descriptions  
submitted by the company.

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| PLEISTOCENE:                                      |                     |                 |
| Drift:  |                     |                 |
| Drift   | 260                 | 260             |
| MISSISSIPPIAN:                                    |                     |                 |
| Coldwater:  |                     |                 |
| Shale   | 181                 | 441 SA          |
| Limestone, "Coldwater" and shale                  | 284                 | 725 SA          |
| Shale, red  | 10                  | 735 SA          |
| Limestone, red                                    | 25                  | 760 SA          |
|   | (500)               |                 |
| Ellsworth:  |                     |                 |
| Shale, green                                      | 460                 | 1220 SA         |
| Shale, light brown, (Light Antrim)                | 80                  | 1300 SA         |
|   | (540)               |                 |
| MISSISSIPPIAN-DEVONIAN:                           |                     |                 |
| Antrim:   |                     |                 |
| Shale, dark brown                                 | 133                 | 1433 SA         |
| DEVONIAN:   |                     |                 |
| Traverse formation:                               |                     |                 |
| Shale   | 48                  | 1481 SA         |
| Traverse limestone-Dundee:                        |                     |                 |
| COMPLETED Line and shale                          | 29                  | 1510            |
| 6-10-57 Line, "Traverse"                          | 54                  | 1564            |
| CASING Line                                       | 179                 | 1743            |
| Dolomite and lime                                 | 53                  | 1796 SA         |
| RECORD  | (315)               |                 |
| Detroit River: (Top Detroit River anhydrite 1796) |                     |                 |
| 8 5/8" 375' Lime                                  | 413                 | 2209 SA         |
| 5 1/2" 2615' Bois Blanc: ---                      |                     |                 |
| 2 3/8" 2645' Lime and chert                       | 32                  | 2241 SA         |
| SILURIAN (?):                                     |                     |                 |
| Foss Island (?):                                  |                     |                 |
| Lime  | 16                  | 2257 SA         |
| Salina:   |                     |                 |
| Lime  | 350                 | 2607            |

9-4N-14W  
Overisel Twp. (Allegan Co.)

Facility  
TD 2662 in Salina  
Gas

Consumers Power Company

Consumers Power Co. No. 7

Permit No. 21547

Drilling Contractor: The Taggart Co. (Rotary 0 to 2637)  
(Cable 2637-to 2662)

Location: NE $\frac{1}{4}$  SE $\frac{1}{4}$  SE $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
1270' from South and 50' from East line of quarter section

Elevation: 658.8 feet above sea level (rot. bush.)

Record by: R. J. Thompson from driller's log, scout report and partial sample  
log submitted by the company

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>  |                     |                 |
| Drift:   |                     |                 |
| Drift, clay  | 50                  | 50              |
| Drift  | 120<br>(170)        | 170             |
| <b>MISSISSIPPIAN:</b>  |                     |                 |
| Coldwater-Ellsworth:   |                     |                 |
| Shale, gummy   | 65                  | 235             |
| Shale and shells   | 93                  | 328             |
| Shale  | 125                 | 453             |
| Lime and shale, "Coldwater"                                  | 62                  | 515             |
| Lime   | 25                  | 540             |
| Shale and shells (Coldwater Redrock at 765)                  | 310                 | 850             |
| Shale and shells   | 465<br>(1145)       | 1315            |
| <b>MISSISSIPPIAN-DEVONIAN:</b>                               |                     |                 |
| Antrim:  |                     |                 |
| Shale, "Antrim"  | 155                 | 1470            |
| <b>DEVONIAN:</b>   |                     |                 |
| Traverse Formation:  |                     |                 |
| "Traverse Formation"   | 34                  | 1504            |
| Traverse Limestone:  |                     |                 |
| Lime, "Traverse"   | 78                  | 1582            |
| Lime   | 237<br>(315)        | 1819            |
| Detroit River: (Pre. Report-Detroit River anhydrite at 1819) |                     |                 |
| Lime (Pre. Report-porosity 1831-1871)                        | 115                 | 1934            |
| Lime and anhydrite   | 221                 | 2155            |
| Lime   | 37<br>(373)         | 2192 SA.        |
| <b>COMPLETED</b>   |                     |                 |
| 9-1-59<br>CASING   |                     |                 |
| Bois Blanc: (Pre. Report-top Bois Blanc at 2192 SA.)         |                     |                 |
| Lime   | 38                  | 2230 SA.        |
| <b>RECORD</b>  |                     |                 |
| <b>SILURIAN:</b>   |                     |                 |
| Bass Island: (Pre. Report-Top Bass Island at 2230 SA.)       |                     |                 |
| 85" 328' Lime  | 11                  | 2241            |
| 5 1/2" 2634'   |                     |                 |

9-11-14W  
Overisel Twp. (ALLEGAN Co.)

Facility  
TD 2665 in Salina (A-2 dolomite)  
Gas

Consumers Power Company

Consumers Power Co. No. 5

Permit No. 21546

Drilling Contractor: Union Rotary Corp. (Rotary)

Location: NW $\frac{1}{4}$  SW $\frac{1}{4}$  SW $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
1270' from South and 50' from West line of quarter section

Elevation: 655.5 feet above sea level (rot. bush.)

Record by: R. J. Thompson from driller's log and core descriptions submitted  
by the company

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| PLEISTOCENE:                                |                     |                 |
| Drift:                                      |                     |                 |
| Drift                                       | 260                 | 260             |
| MISSISSIPPIAN:                              |                     |                 |
| Coldwater:                                  |                     |                 |
| Lime, shale                                 | 50                  | 310             |
| Shale, gray                                 | 440                 | 750             |
| Redrock                                     | 10                  | 760             |
|   | (500)               |                 |
| Ellsworth:                                  |                     |                 |
| Shale, gray                                 | 580                 | 1340            |
| MISSISSIPPIAN-DEVONIAN:                     |                     |                 |
| Antrim:                                     |                     |                 |
| Shale, brown                                | 120                 | 1460            |
| DEVONIAN:                                   |                     |                 |
| Traverse Formation:                         |                     |                 |
| "Traverse Formation"                        | 40                  | 1500            |
| Traverse Limestone-Dundee:                  |                     |                 |
| "Traverse lime"                             | 304                 | 1804            |
| Detroit River:                              |                     |                 |
| "Detroit River" (Porosity 1807-1885)        | 82                  | 1886            |
| Lime, anhydrite                             | 94                  | 1980            |
| Lime  | 99                  | 2079            |
| Lime, anhydrite                             | 132                 | 2211            |
|   | (407)               |                 |
| COMPLETED Bois Blanc:                       |                     |                 |
| Lime  | 32                  | 2243            |
| 6-13-59                                     |                     |                 |
| SILURIAN:                                   |                     |                 |
| Bass Island:                                |                     |                 |
| Lime  | 39                  | 2282            |
| 85' " 346'                                  |                     |                 |
| 5 1/2' 2626'                                |                     |                 |
| Salina:                                     |                     |                 |
| Lime, anhydrite (A-2 lime "E" zone at 2444) | 345                 | 2627            |

9-4N-14W  
Overisel Twp. (Alligan Co.)

Facility  
TD 2659 in Salina  
Gas

Consumers Power Company

Consumers Power Co. No. 11

Permit No. 21489

Drilling Contractor: The Taggart Co. (Rotary 0 to 2634)  
(Cable 2634 to 2659)

Location: SE $\frac{1}{4}$  SE $\frac{1}{4}$  SE $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
75' from South and 50' from East line of quarter section

Elevation: 661.0 feet above sea level (rot. bush.)

Record by: R. J. Thompson from driller's log and partial sample log submitted by  
the company

| PLEISTOCENE:  | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| Drift:  |                     |                 |
| Clay  | 140                 | 140             |
| Sand and gravel   | 75                  | 215             |
| Drift   | 10                  | 225             |
|   | (225)               |                 |
| MISSISSIPPIAN:  |                     |                 |
| Coldwater-Ellsworth:  |                     |                 |
| Shale and shells  | 102                 | 327             |
| Shale   | 128                 | 455             |
| Shale and lime  | 90                  | 545             |
| Shale (Coldwater redrock at 750)  | 335                 | 880             |
| Shale and shells  | 430                 | 1310            |
|   | (1085)              |                 |
| MISSISSIPPIAN-DEVONIAN:   |                     |                 |
| Antrim:   |                     |                 |
| Shale, dark   | 158                 | 1468            |
| DEVONIAN:   |                     |                 |
| Traverse Formation:   |                     |                 |
| "Traverse Formation"  | 29                  | 1497            |
| Shale and shells  | 7                   | 1504            |
|   | (36)                |                 |
| Traverse Limestone-Dundee: (Pre. Report-Top Traverse Limestone at 1503) |                     |                 |
| Lime  | 121                 | 1625            |
| Lime and shale  | 80                  | 1705            |
| Lime  | 108                 | 1813            |
|   | (309)               |                 |
| Detroit River: (Pre. Report-top Detroit River anhydrite at 1813)        |                     |                 |
| Lime (Pre. Report-Porosity 1827-1875)                                   | 186                 | 1999            |
| Lime and anhydrite  | 186                 | 2185            |
|   | (372)               |                 |
| COMPLETED   |                     |                 |
| 8-19-59 CASING Bois Blanc: (Pre. Report-top Bois Blanc at 2187)         |                     |                 |
| Lime  | 47                  | 2232            |
| RECORD SILURIAN:  |                     |                 |
| 85' 327' Bass Island: (Pre. Report-top Bass Island at 2231)             |                     |                 |
| Lime and anhydrite  | 21                  | 2253            |
| 5 1/2' 2632' Lime and shale   | 22                  | 2275            |
|   | (43)                |                 |

Merisol (Allegheny County)

Red-Man Oil Co. & Gould & Cross

Poelakker #2

Permit No. 7962

Drilling Contractor: Red-Man Oil Co.

Location: NW $\frac{1}{4}$  SE $\frac{1}{4}$  NW $\frac{1}{4}$  section 9, T.4N., R.14W.  
990 feet from south and 990 feet from east line of quarter section

Elevation: 627.7 feet above sea level.

Record by: L. C. Wickersham from driller's log.

|  | Thickness<br>(feet) | Depth<br>(feet)    |
|--|---------------------|--------------------|
| <b>PLEISTOCENE:</b>  |                     |                    |
| Drift:   |                     |                    |
| Sand   | 79                  | 79                 |
| Mud, sand and gravel   | 76                  | 155                |
| Sand and mud   | 59                  | 214                |
| Sand, gravel and mud   | 31                  | 245                |
| <b>MISSISSIPPIAN:</b>  |                     |                    |
| Coldwater:   |                     |                    |
| Mud, blue  | 89                  | 334                |
| Shale, gray  | 89                  | 423                |
| Lime   | 96                  | 519                |
| Shale, gray  | 6                   | 525                |
| Lime, gray   | 20                  | 545                |
| Shale, gray  | 185                 | 730                |
| Redrock  | 15                  | 745                |
| Ellsworth:   |                     |                    |
| Shale, green   | 455                 | 1200               |
| <b>MISSISSIPPIAN-DEVONIAN:</b>   |                     |                    |
| Antrim:  |                     |                    |
| Shale, light brown   | 60                  | 1260               |
| Shale, dark brown  | 144                 | 1404               |
| <b>DEVONIAN:</b>   |                     |                    |
| Traverse (Preliminary report - top at 1390):                                 |                     |                    |
| Shale, gray, broken  | 38                  | 1442               |
| Lime, gray   | 3                   | 1445               |
| Shale, gray  | 7                   | 1452               |
| Lime, gray   | 3                   | 1455               |
| Shale, gray  | 19 $\frac{1}{2}$    | 1474 $\frac{1}{2}$ |
| Traverse (Preliminary report-top of Traverse<br>line at 1474 $\frac{1}{2}$ ) | 1 $\frac{1}{2}$     | 1476               |
| <b>TOTAL DEPTH</b>   |                     | <b>1476</b>        |

Casing record:

8 $\frac{1}{2}$ " 245'

5-3/16" 1474'

Commenced: 9/5/40

Completed: 9/17/40

Initial Production: Before acid - Show (Preliminary report - 600' water & 4 bbls. oil)  
After acid - 5 bbls. (Preliminary report - to be used as a brine disposal well)  
Treated: 9/19/40 from 1474 $\frac{1}{2}$  to 1476 with 1000 gals.

9-14-49  
Overisel Twp., (Alleghen Co.)

Field  
TD 1503 in Traverse  
Dry

Oil Producers, Incorporated

Ferdinand Peters No. 3

Permit No. 15254

Drilling Contractor: Company Tools (Cable)

Location: NW $\frac{1}{4}$  SW $\frac{1}{4}$  NW $\frac{1}{4}$  section 9, T 4N, R 14W  
990' from south and 330' from west line of quarter section

Elevation: 626.8 feet above sea level

Record by: Ann H. Davis from driller's log

|  | Thickness<br>(Feet) | Depth<br>(Feet)              |
|--|---------------------|------------------------------|
| <b>PLEISTOCENE:</b>  |                     |                              |
| Drift:   |                     |                              |
| Mud, sand  | 205                 | 205                          |
| Gravel (Flowing water)                                       | 10                  | 215                          |
| Sand, gravel   | 10                  | 225                          |
| <b>MISSISSIPPIAN:</b>  |                     |                              |
| Coldwater:   |                     |                              |
| Shale, blue  | 200                 | 425                          |
| Lime, "Coldwater"  | 100                 | 525                          |
| Shale, gray  | 13                  | 538                          |
| Red rock   | 197                 | 735                          |
| Lime, broken   | 3                   | 738                          |
| Red rock   | 5                   | 743                          |
|  | (518)               |                              |
| Ellsworth:   |                     |                              |
| Shale, green   | 432                 | 1175                         |
| Shale, light brown   | 125                 | 1300                         |
|  | (557)               |                              |
| <b>MISSISSIPPIAN-DEVONIAN:</b>                               |                     |                              |
| Antrim:  |                     |                              |
| Shale, dark brown  | 122                 | 1422                         |
| <b>DEVONIAN:</b>   |                     |                              |
| Traverse formation:  |                     |                              |
| Shale, gray & lime shells                                    | 53                  | 1475 SLM                     |
| Traverse lime:   |                     |                              |
| Lime ( $\frac{1}{2}$ barrel of oil & 100' of water at 1478') | 28                  | 1503                         |
|  | (28*)               |                              |
|  | <b>TOTAL DEPTH</b>  | <b>1503</b>                  |
| <b>Casing Record:</b>  |                     |                              |
| 8 $\frac{1}{2}$ "  | 225'                | Commenced: 8-1-49            |
| 6 5/8"   | 746' RH             | Completed: 8-1-49            |
| 5 3/16"  | 1443'               | Initial Production: Dry hole |

9-4N-14W  
Overisel Twp. (Allegan Co.)

Facility  
TD 2650 in Salina  
Gas

Consumers Power Company

Consumers Power Co. No. 6

Permit No. 21507

Drilling Contractor: The Taggart Co. (Rotary 0 to 2622)  
(Cable 2622 to 2650)

Location: SW $\frac{1}{4}$  SW $\frac{1}{4}$  SE $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
290' from South and 75' from West line of quarter section

Elevation: 644.8 feet above sea level (rot. bush.)

Record by: R. J. Thompson from driller's and scout report

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <b>PLEISTOCENE:</b>   |                     |                 |
| Drift:  |                     |                 |
| Sand and clay, sandy  | 60                  | 60              |
| Clay  | 62                  | 122             |
| Sand and clay   | 151                 | 273             |
| Clay and gravel   | 27                  | 300             |
|   | (300)               |                 |
| <b>MISSISSIPPIAN:</b>   |                     |                 |
| Coldwater-Ellsworth:  |                     |                 |
| Shale   | 61                  | 361             |
| Shale and lime  | 158                 | 519             |
| Shale, lime streaks   | 31                  | 550             |
| Shale (Pre. Report-Coldwater redrock at 748 SA.)  | 705                 | 1255            |
| Shale, streaks of lime  | 42                  | 1297 SA.        |
|   | (997)               |                 |
| <b>MISSISSIPPIAN-DEVONIAN:</b>  |                     |                 |
| Antrim: (Pre. Report-Top Antrim at 1297 SA.) (Possibly some<br>Ellsworth in upper part ?)     |                     |                 |
| Shale, streaks of lime  | 138                 | 1435            |
| Lime  | 48                  | 1483            |
|   | (186)               |                 |
| <b>DEVONIAN:</b>  |                     |                 |
| Traverse Formation-Traverse Limestone-Dundee: (Pre. Report-top<br>Traverse Formation at 1483) |                     |                 |
| Lime  | 315                 | 1798            |
| Detroit River: (Pre. Report-top Detroit River anhydrite at 1798)                              |                     |                 |
| Lime  | 388                 | 2186            |
| Bois Blanc: (Pre. Report-top Bois Blanc at 2186)  |                     |                 |
| Lime  | 12                  | 2198            |
| <b>SILURIAN:</b>  |                     |                 |
| Bass Island: (Pre. Report-top Bass Island at 2198)  |                     |                 |
| Lime  | 12                  | 2210            |
| Anhydrite   | 20                  | 2230            |
|   | (32)                |                 |
| Salina: (Pre. Report-top Salina at 2230)  |                     |                 |
| Anhydrite   | 10                  | 2240            |

COMPLETED

4-27-59

CASING

RECORD

858" 345'

510" 2621'

238" 2648'

9-4N-14W  
Overisel Twp. (Allegan Co. )

TD 2649 in Field  
Salina Gas

Consumers Power Co.

G. F. Koopman et ux-Don Koopman  
et ux-F. Peters No. 1

Permit No. 20378  
D. P. No. 1157

Drilling Contractor: The Taggart Co. (Rotary)

Location: C-NW $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
1320' from North and 1320' from West line of quarter section.

Elevation: 628.5 feet above sea level (rot. bush.)

Record by: W. E. Mantek from driller's log, sample tops, and core descriptions submitted by the company.

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>  |                     |                 |
| Drift:   |                     |                 |
| "Drift"  | 25                  | 25              |
| Gumbo  | 75                  | 100             |
| Gravel and rocks   | 25                  | 125             |
| Sand and clay  | 95                  | 220             |
| Rocks  | 5                   | 225             |
| Sandy clay   | 35                  | 260             |
| Clay   | 40                  | 300             |
|  | (300)               |                 |
| <b>MISSISSIPPIAN:</b>  |                     |                 |
| Coldwater:   |                     |                 |
| Shale (Coldwater limestone at 434' SA.)                                      | 135                 | 435             |
| Lime   | 55                  | 490             |
| Shale (Coldwater Redrock-shale at 736')(Coldwater redrock-limestone at 745') | 269                 | 759 SA          |
|  | (459)               |                 |
| Ellsworth:   |                     |                 |
| Shale  | 166                 | 925             |
| Shale with lime  | 80                  | 1005            |
| Shale and shells   | 189                 | 1194            |
| Shale (light Antrim at 1210'? SA.)   | 90                  | 1284 SA.        |
|  | (525)               |                 |
| <b>MISSISSIPPIAN-DEVONIAN:</b>   |                     |                 |
| Antrim:  |                     |                 |
| Shale  | 111                 | 1395            |
| Shale, "Antrim"  | 10                  | 1405 SA.        |
|  | (121)               |                 |
| <b>DEVONIAN:</b>   |                     |                 |
| COMPLETED Traverse Formation:  |                     |                 |
| Shale, "Antrim" (?)  | 35                  | 1440            |
| Lime, Traverse   | 37                  | 1477 SA.        |
|  | (72)                |                 |
| RECORD Traverse Limestone-Dundee:  |                     |                 |
| Lime, "Traverse"   | 3                   | 1480            |
| Lime   | 313                 | 1793 SA.        |
|  | (316)               |                 |
| Detroit River: (Detroit River anhydrite at 1793' SA.)                        |                     |                 |
| Lime   | 227                 | 2020            |

7-6-57  
CASING

RECORD

8 5/8" 332'  
5 1/2" 260'

9-4N-14W  
Overisel Twp. (Allegan Co.)

Field  
TD 2661 in Salina  
Gas

Consumers Power Co.

Lankheet et ux-Koopman et ux-  
Klassen et ux No. 1

Permit No. 20398  
D. P. No. 1159

Drilling Contractor: The Taggart Co. (Rotary 0 to 2635)  
(Cable 2635 to 2642)  
(Rotary 2642 to 2661)

Location: Approximate C-SE $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
1320' from North and 1320' from West line of quarter section.

Elevation: 641.5 feet above sea level (rot. bush.)

Record by: W. E. Mantek from driller's log, sample tops and core  
descriptions submitted by the company

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| PLEISTOCENE:  |                     |                 |
| Drift: (Possibly Coldwater in lower part)   |                     |                 |
| Sand  | 10                  | 10              |
| Clay  | 90                  | 100             |
| Gumbo clay  | 90                  | 190             |
| Clay, blue and shells   | 150                 | 340             |
| Gumbo   | 22                  | 362             |
| Hard formation  | 2                   | 364             |
| Clay  | 26                  | 390             |
|   | (390)               |                 |
| MISSISSIPPIAN:  |                     |                 |
| Coldwater:  |                     |                 |
| Line and shale (Coldwater limestone at 439' SA.) (Coldwater<br>redrock-shale at 739' SA.) | 352                 | 742             |
| "Redrock" (Coldwater Redrock-Limestone at 759' SA.)                                       | 18                  | 760             |
| Shale and lime  | 5                   | 765SA.          |
|   | (375)               |                 |
| Ellsworth:  |                     |                 |
| Shale and lime  | 29                  | 794             |
| Shale, lime streaks   | 121                 | 915             |
| Lime and shale  | 69                  | 984             |
| Shale   | 150                 | 1134            |
| Shale and lime  | 60                  | 1194            |
| Shale (light Antrim at 1200?? SA.)  | 86                  | 1280 SA.        |
|   | (515)               |                 |
| MISSISSIPPIAN&DEVONIAN:   |                     |                 |
| Antrim:   |                     |                 |
| Shale   | 156                 | 1436 SA.        |
| DEVONIAN:   |                     |                 |
| Traverse Formation:   |                     |                 |
| Shale   | 40                  | 1476 SA.        |
| Traverse Limestone-Dundee:  |                     |                 |
| Shale   | 14                  | 1490            |
| Lime  | 209                 | 1699            |
| Lime, sandy   | 65                  | 1764            |
| Lime  | 38                  | 1802 SA.        |
|   | (326)               |                 |

COMPLETED  
7-9-57  
CASING

RECORD

8 5/8" 364'  
5 1/2" 2610'

9-4N-14W  
Overisel Twp. (Allegan Co.)

Facility  
TD 2640 in Salina  
Gas

Consumers Power Company

Consumers Power Co. No. 3

Permit No. 21545

Drilling Contractor: Union Rotary Corp. (Rotary 0 to 2615)  
(Cable 2615 to 2640)

Location: SW $\frac{1}{4}$  NW $\frac{1}{4}$  NW $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
1270' from North and 50' from West line of quarter section

Elevation: 632.8 feet above sea level (rot. bush.)

Record by: R. K. Cranson from driller's log and partial sample description

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>  |                     |                 |
| Drift:   |                     |                 |
| Drift  | 250                 | 250             |
| <b>MISSISSIPPIAN:</b>  |                     |                 |
| Coldwater:   |                     |                 |
| Shale  | 490                 | 740             |
| Redrock  | 10<br>(500)         | 750             |
| <b>Ellsworth:</b>  |                     |                 |
| Shale, gray  | 550                 | 1300            |
| <b>MISSISSIPPIAN-DEVONIAN:</b>   |                     |                 |
| Antrim:  |                     |                 |
| Shale, brown   | 75                  | 1375            |
| Shale, lime  | 55                  | 1430            |
| Shale  | 40<br>(170)         | 1470            |
| <b>DEVONIAN:</b>   |                     |                 |
| Traverse Formation: (Pre. Report-top Traverse Formation at 1487 SA.)<br>"Traverse formation"   | 63                  | 1533 SA.        |
| <b>Traverse Limestone-Dundas:</b>  |                     |                 |
| Lime   | 204                 | 1737            |
| <b>Detroit River:</b>  |                     |                 |
| "Detroit River"  | 19                  | 1754            |
| Lime   | 44                  | 1798            |
| Anhydrite, white   | 5                   | 1803            |
| Dolomite, buff to brown, finely crystalline in part, fragmented<br>and coarsely crystalline in part, slightly fossiliferous,<br>with good porosity with show of oil  | 2                   | 1805            |
| Dolomite, buff to brown, finely to medium crystalline, with<br>anhydrite and shale interbedded   | 9                   | 1814            |
| Dolomite, buff and light gray to tan and light brown in part,<br>finely and medium to coarsely crystalline, with good porosity<br>intercrystalline and vugular, with thinly interbedded<br>anhydrite and shale stringers | 8                   | 1822            |

COMPLETED  
6-24-59  
CASING  
RECORD

858" 329'  
5 1/2" 2614'  
2 3/8" 2638'

Consumers Power Company

Consumers Power Co. No. 4

Permit No. 21506

Drilling Contractors: The Taggart Co. (Rotary 0 to 2630)  
 (Cable 2630 to 2648)

Location: NW<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> section 9, T. 4N., R. 14W.  
 1270' from South and 75' from West line of quarter section

Elevation: 637.0 feet above sea level (rot. bush.)

Record by: B. L. Champion from driller's log; scout tops and partial sample  
 log submitted by the company

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>  |                     |                 |
| Drift: (Pre. Report-Drift to 135)                                    |                     |                 |
| Drift  | 175                 | 175             |
| <b>MISSISSIPPIAN:</b>  |                     |                 |
| Coldwater-Ellsworth:   |                     |                 |
| Lime, sandy  | 15                  | 190             |
| Shale  | 250                 | 440             |
| Lime, "Coldwater"  | 40                  | 480             |
| Lime   | 60                  | 540             |
| Shale and shells (Red shale at 733)                                  | 680                 | 1220            |
| Shale  | 90                  | 1310            |
|  | (1135)              |                 |
| <b>MISSISSIPPIAN-DEVONIAN:</b>                                       |                     |                 |
| Antrim:  |                     |                 |
| Shale, black   | 133                 | 1443            |
| <b>DEVONIAN:</b>   |                     |                 |
| Traverse Formation:  |                     |                 |
| "Traverse Formation"   | 47                  | 1490            |
| Traverse Limestone-Durden:   |                     |                 |
| Lime, "Traverse"   | 28                  | 1518            |
| Lime   | 280                 | 1798            |
|  | (308)               |                 |
| Detroit River (?): (Pre. Report-top Detroit River anhydrite at 1798) |                     |                 |
| Lime (Pre. Report-Porosity 1812-1866)                                | 182                 | 1980            |
| Lime and anhydrite   | 182                 | 2162            |
| Lime   | 38                  | 2200            |
|  | (402)               |                 |
| <b>COMPLETED</b>   |                     |                 |
| 16-6-59 Bois Blanc:  |                     |                 |
| CASING Lime  | 30                  | 2230            |
| <b>RECORD SILURIAN:</b>  |                     |                 |
| Bass Island:   |                     |                 |
| 8 3/8" 328' Lime   | 40                  | 2270            |
| 5 1/2" 2627' Lime and shale (?)                                      | 26                  | 2296            |
|  | (66)                |                 |
| Salina:  |                     |                 |
| 2 3/8" 2646' Lime and shale (Pre. Report-"E" zone at 2459)           | 329                 | 2625            |
| Lime   | 3                   | 2628            |

9-4N-14W  
 Overisel Twp. (Allegan Co.)

Facility  
 TD 2665 in Salina  
 Gas

Consumers Power Company

Consumers Power Co. No. 9

Permit No. 21501

Drilling Contractor: Union Rotary Corp. (Rotary)

Location: SW $\frac{1}{4}$  SE $\frac{1}{4}$  SW $\frac{1}{4}$  section 9, T. 4N., R. 14W.  
 75' from South and 1140' from East line of quarter section

Elevation: 658.3 feet above sea level (rot. bush.)

Record by: R. K. Cranson from driller's log, partial sample log and core descriptions submitted by the company

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <b>PLEISTOCENE:</b>   |                     |                 |
| Drift:  |                     |                 |
| Drift   | 225                 | 225             |
| Clay  | 50                  | 275             |
|   | (275)               |                 |
| <b>MISSISSIPPIAN:</b>   |                     |                 |
| Coldwater:  |                     |                 |
| Shale, gray   | 195                 | 470             |
| Shale, shells   | 60                  | 530             |
| Shale, gray   | 235                 | 765 SA.         |
| Red rock  | 20                  | 785             |
|   | (510)               |                 |
| Ellsworth:  |                     |                 |
| Shale, shells   | 180                 | 965             |
| Shale, gray   | 325                 | 1290            |
|   | (505)               |                 |
| <b>MISSISSIPPIAN-DEVONIAN:</b>  |                     |                 |
| Antrim:   |                     |                 |
| Shale, brown  | 134                 | 1424            |
| <b>DEVONIAN:</b>  |                     |                 |
| Traverse Formation:   |                     |                 |
| "Traverse formation"  | 31                  | 1455            |
| Traverse Limestone-Dundee: (Top Traverse Limestone at 1501 Schj.)   |                     |                 |
| Lime, "Traverse"  | 260                 | 1715            |
| Limestone, buff to tan and brown, coarsely crystalline, fossiliferous in part, with trace to small vugular porosity in part, with good show oil, with abundant anhydrite    | 4                   | 1719            |
| Shale, gray and green, carbonaceous in part, finely pyritic, in part, slightly fossiliferous in part  | 3                   | 1722            |
| Limestone, white to buff and light brown, coarsely crystalline, fossiliferous in part, with abundant vugs and vugular porosity, with a good show of oil, abundant anhydrite | 6                   | 1728            |
| Lime  | 80                  | 1808            |
|   | (353)               |                 |
| Detroit River: (Pres. Report-top Detroit River at 1810 Schj.)   |                     |                 |
| Lime  | 50                  | 1858            |
| "Detroit River"   | 23                  | 1881            |
| Lime  | 342                 | 2222            |
|   | (415)               |                 |

COMPLETED  
 4-28-59  
 CASING  
 RECORD

8 5/8" 337'  
 5 1/2" 2625'  
 2 3/8" 2622'

9-4N-14W  
Overisel Twp., (Alleghen Co.)

Field  
TD 1483 in Traverse  
Dry

H. E. Walton

Koopman-Lankheet No. 1

Permit No. 17223

Drilling Contractor: Fisher-McCall Oil & Gas, Incorporated (Cable)

Location: NE $\frac{1}{4}$  SW $\frac{1}{4}$  SE $\frac{1}{4}$  section 9, T 4N, R 14W  
990' from south and 990' from west line of quarter section

Elevation: 638.0 feet above sea level

Record by: B. Brown from driller's log

|   | Thickness<br>(Feet)          | Depth<br>(Feet) |
|---|------------------------------|-----------------|
| <b>PLEISTOCENE:</b>   |                              |                 |
| Drift:  |                              |                 |
| Drift   | 191                          | 191             |
| <b>MISSISSIPPIAN:</b>   |                              |                 |
| Coldwater:  |                              |                 |
| Shale, gray   | 234                          | 425             |
| Lime, "Coldwater"   | 100                          | 525             |
| Shale, gray   | 205                          | 730             |
| Red rock  | 12                           | 742             |
|   | (551)                        |                 |
| Ellsworth:  |                              |                 |
| Lime, white, "Berea"  | 10                           | 752             |
| Shale, green  | 388                          | 1140            |
| "Light Antrim"  | 150                          | 1290            |
|   | (546)                        |                 |
| <b>MISSISSIPPIAN-DEVONIAN:</b>  |                              |                 |
| Antrim:   |                              |                 |
| "Antrim", dark  | 130                          | 1420 SLM        |
| <b>DEVONIAN:</b>  |                              |                 |
| Traverse formations:  |                              |                 |
| Shale, gray   | 20                           | 1440            |
| Lime shell  | 10                           | 1450            |
| Shale & shells  | 26                           | 1476 SLM        |
|   | (56)                         |                 |
| Traverse limestones:  |                              |                 |
| Lime, brown, "Traverse" (Pre. Report-very small show of<br>oil 1476-78) | 4                            | 1480            |
| Lime, gray, "Traverse" (1 bailer of water per hour at<br>1481-83)       | 3                            | 1483            |
|   | (7+)                         |                 |
|   | <b>TOTAL DEPTH</b>           | <b>1483</b>     |
| <b>Casing Record:</b>   |                              |                 |
| 8 $\frac{1}{2}$ " 191'  | Commenced: 12-17-51          |                 |
| 6 5/8" 200' RH  | Completed: 12-31-51          |                 |
| 5 3/16" 1443' RH  | Initial Production: Dry hole |                 |

5-25-52

Overisel (Allegan County)  
**OIL PRODUCERS, INC.**  
 PETROLEUM DEVELOPMENT

H.J. & Harry Krooze #4

Permit No. 8161

Drilling Contractor: Company Tools

Location: SE $\frac{1}{4}$  SW SW $\frac{1}{4}$  section 9, T.4N., R.14W.  
 330 feet from south and 890 feet from west line of quarter section

Elevation: 657.4 feet above sea level.

Record by: W.N. Holhorn from driller's log

**PLEISTOCENE:**

Drift:

Drift

| Thickness<br>(feet) | Depth<br>(feet) |
|---------------------|-----------------|
|---------------------|-----------------|

|     |     |
|-----|-----|
| 267 | 267 |
|-----|-----|

**MISSISSIPPIAN:**

Coldwater:

Shale, blue

|    |     |
|----|-----|
| 38 | 305 |
|----|-----|

Slate, blue

|   |     |
|---|-----|
| 3 | 308 |
|---|-----|

Mud, blue

|     |     |
|-----|-----|
| 147 | 455 |
|-----|-----|

Coldwater lime

|     |     |
|-----|-----|
| 130 | 585 |
|-----|-----|

Slate

|    |     |
|----|-----|
| 95 | 680 |
|----|-----|

Slate, gray

|    |     |
|----|-----|
| 81 | 761 |
|----|-----|

Redrock

|    |     |
|----|-----|
| 12 | 773 |
|----|-----|

Ellsworth:

Berea grit

|    |     |
|----|-----|
| 12 | 785 |
|----|-----|

Shale, green

|     |      |
|-----|------|
| 515 | 1300 |
|-----|------|

Shale, light brown

|    |      |
|----|------|
| 30 | 1330 |
|----|------|

**MISSISSIPPIAN-DEVONIAN:**

Antrim: (Preliminary report - top at 1300)

Shale, dark brown

|    |      |
|----|------|
| 65 | 1395 |
|----|------|

Shale, brown

|    |      |
|----|------|
| 45 | 1440 |
|----|------|

**DEVONIAN:**

Traverse:

Slate, gray

|    |      |
|----|------|
| 10 | 1450 |
|----|------|

Shale, white

|    |      |
|----|------|
| 58 | 1508 |
|----|------|

Traverse (pay 1508-1510)

|                 |                    |
|-----------------|--------------------|
| 2 $\frac{1}{2}$ | 1510 $\frac{1}{2}$ |
|-----------------|--------------------|

**TOTAL DEPTH**

1510 $\frac{1}{2}$

Casing record:

10" 326'

8 $\frac{1}{2}$ " 340' RH

6-5/8" 800' RH

5-3/16" 1508'

Commenced: 11/13/40

Completed: 11/26/40

Initial Production:

Before acid - 800' oil

After acid - 75 bbls.

Treated: 11/24/40 from 1509 to  
 1510 $\frac{1}{2}$  with 500 gals.



## Overisol (Allegheny County)

OIL PRODUCERS, INC.

H.H. Kroeze (Comm.) #2

Permit No. 805g

Drilling Contractor: Company Tools

Location: SE $\frac{1}{4}$  SE $\frac{1}{4}$  SW $\frac{1}{4}$  section 9, T.4N., R.14W.  
330 feet from south and 375 feet from east line of quarter section

Elevation: 643.4 feet above sea level.

Record by: L. C. Wickersham from driller's log

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| PLEISTOCENE:                           |                     |                 |
| Drift:                                 |                     |                 |
| Drift                                  | 220                 | 220             |
| MISSISSIPPIAN:                         |                     |                 |
| Coldwater:                             |                     |                 |
| No record                              | 30                  | 250             |
| Slate                                  | 115                 | 365             |
| Mud                                    | 60                  | 425             |
| Slate                                  | 15                  | 440             |
| Lime                                   | 110                 | 550             |
| Shale                                  | 15                  | 565             |
| Slate                                  | 70                  | 635             |
| Shale                                  | 110                 | 745             |
| Redrock, hard                          | 14                  | 759             |
| Ellsworth:                             |                     |                 |
| Berea, hard - Berea horizon (?)        | 7                   | 766             |
| Shale and shells                       | 44                  | 810             |
| Shale                                  | 150                 | 960             |
| Shale, green                           | 50                  | 1010            |
| Shale                                  | 70                  | 1080            |
| Shale, blue                            | 65                  | 1145            |
| Shale, green                           | 135                 | 1280            |
| MISSISSIPPIAN-DEVONIAN:                |                     |                 |
| Antrim:                                |                     |                 |
| Shale, light brown                     | 40                  | 1320            |
| Shale, brown                           | 105                 | 1425            |
| Shale, light brown                     | 10                  | 1435            |
| DEVONIAN:                              |                     |                 |
| Traverse:                              |                     |                 |
| Slate, white                           | 7                   | 1442            |
| Lime, shell                            | 21                  | 1463            |
| Shale and shells                       | 22                  | 1485 SIM        |
| Traverse line (oil & gas; pay 1486-88) | 4                   | 1489            |
|  | TOTAL DEPTH         | 1489            |

/Casing record: Commenced: 10/8/40  
 8 $\frac{1}{2}$ " 240' Completed: 10/19/40  
 6-5/8" 1485' Initial Production: Before acid: 100 bbls. (Flow)  
 After acid: 200 bbls. (Pumped)  
 Treated: 10/19/40 from 1485 to 1489 with 500 gals.

## Overisel (Alleghen County)

**PETER GORTSEMA**  
H. C. WICKERSHAM

J. Peters #4

Permit No. 8057

Drilling Contractor: Company Tools

Location: NE $\frac{1}{4}$  NW $\frac{1}{4}$  SW $\frac{1}{4}$  section 9, T.4N., R.14W.  
330 feet from north and 990 feet from west line of quarter section

Elevation: 627.8 feet above sea level.

Record by: L. C. Wickersham from driller's log.

|               | Thickness<br>(feet) | Depth<br>(feet) |
|---------------|---------------------|-----------------|
| PLEISTOCENE:  |                     |                 |
| Drift:        |                     |                 |
| Drift         | 226                 | 226             |
| Drift and mud | 24                  | 250             |

|                                      |     |      |
|--------------------------------------|-----|------|
| MISSISSIPPIAN:                       |     |      |
| Coldwater:                           |     |      |
| Slate, soft                          | 45  | 295  |
| Slate, gray, soft                    | 130 | 425  |
| Lime, gray, hard                     | 100 | 525  |
| Slate, gray, soft                    | 206 | 731  |
| Redrock, hard                        | 11  | 742  |
| Ellsworth                            |     |      |
| Berea gray, hard - Berea horizon (?) | 8   | 750  |
| Shale and shell, green, medium       | 25  | 775  |
| Shale, green, soft                   | 500 | 1275 |

|                          |    |      |
|--------------------------|----|------|
| MISSISSIPPIAN:           |    |      |
| Antrim:                  |    |      |
| Shale, light brown, soft | 35 | 1310 |
| Shale, brown, firm       | 87 | 1397 |
| Shale, hard              | 3  | 1400 |
| Shale, brown, firm       | 5  | 1400 |
| Shale, brown, firm       | 5  | 1405 |
| Shale, light brown, soft | 15 | 1520 |

|                                |    |      |
|--------------------------------|----|------|
| DEVONIAN:                      |    |      |
| Traverse:                      |    |      |
| Slate, white, soft             | 17 | 1437 |
| Lime, light gray, hard         | 14 | 1451 |
| Shale, light, soft             | 20 | 1471 |
| Lime (Pay oil and gas 1471-72) | 5  | 1476 |

TOTAL DEPTH 1476

|                        |   |
|------------------------|---|
| Casing record:         | Commenced: 9/26/40                      |
| 8 $\frac{1}{4}$ " 269' | Completed: 10/6/40                      |
| 6-5/8" 1471'           | Initial Production: 100 bbls. (swabbed) |

Overisel (Allegan County)  
*Earl G. Hartman*  
~~Kent Drilling Company~~

John Lankheet #1

Permit No. 8042

Drilling Contractor: Kent Drilling Co.

Location: SW $\frac{1}{4}$  SW $\frac{1}{4}$  SE $\frac{1}{4}$  section 9, T.4N., R.14W.  
 264 feet from south and 330 feet from northwest property line

Elevation: 645.3 feet above sea level.

Record by: L. C. Wickersham from driller's log.

|                                       | Thickness<br>(feet) | Depth<br>(feet) |
|---------------------------------------|---------------------|-----------------|
| PLEISTOCENE:                          |                     |                 |
| Drift:                                | 228                 | 228             |
| Drift                                 |                     |                 |
| MISSISSIPPIAN:                        |                     |                 |
| Coldwater:                            |                     |                 |
| Shale                                 | 202                 | 430             |
| Lime                                  | 90                  | 520             |
| Mud, blue                             | 224                 | 744             |
| Redrock                               | 6                   | 750             |
| Ellsworth:                            |                     |                 |
| Shale, green                          | 520                 | 1270            |
| MISSISSIPPIAN:                        |                     |                 |
| Antrim:                               |                     |                 |
| Antrim, brown                         | 159                 | 1429            |
| DEVONIAN:                             |                     |                 |
| Traverse:                             |                     |                 |
| Lime, broken, and shale               | 54                  | 1483            |
| Traverse (Pay 1486-86 $\frac{1}{2}$ ) | 4                   | 1487            |

TOTAL DEPTH 1487

Casing record:  
 8 $\frac{1}{4}$ " 221'  
 5-3/16" 1462'

Commenced: 9/24/40  
 Completed: 10/4/40  
 Initial production:  
 Before acid - 1200' oil in hole  
 After acid - 40 bbls.  
 Treated: 10/4/40 with 500 gals.

Overisel (Alleghen County)

H. O. Nelson  
**PETER GORTSEMA**

J. Peters #3

Permit No. 7950

Drilling Contractor: Own Tools

Location: NW $\frac{1}{4}$  NE $\frac{1}{4}$  SW $\frac{1}{4}$  section 9, T.4N., R.14W.  
 330 feet from north and 990 feet from east line of quarter section

Elevation: 631 feet above sea level

Record by: L. O. Wickersham from driller's log.

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>                          |                     |                 |
| Drift:                                       |                     |                 |
| Drift  | 245                 | 245             |
| <b>MISSISSIPPIAN:</b>                        |                     |                 |
| Coldwater:                                   |                     |                 |
| Shale, gray                                  | 70                  | 315             |
| Slate, gray                                  | 112                 | 427             |
| Lime, hard                                   | 118                 | 545             |
| Shale, gray, soft                            | 185                 | 730             |
| Redrock                                      | 10                  | 740             |
| Ellsworth:                                   |                     |                 |
| Berea grit sand (Berea horizon (?))          | 10                  | 750             |
| Shale, soft, green                           | 450                 | 1200            |
| <b>MISSISSIPPIAN-DEVONIAN:</b>               |                     |                 |
| Antrim:                                      |                     |                 |
| Shale, light brown                           | 75                  | 1275            |
| Shale, dark brown                            | 130                 | 1405            |
| <b>DEVONIAN:</b>                             |                     |                 |
| Traverse (Preliminary report - top at 1415): |                     |                 |
| Slate, soft, gray                            | 5                   | 1410            |
| Shale, firm, light gray                      | 10                  | 1420            |
| Shale, soft, white                           | 23                  | 1443            |
| Shell, hard, white                           | 12                  | 1455            |
| Shale, soft, white                           | 10                  | 1465            |
| Shale, and shells, hard, gray                | 6                   | 1471            |
| Traverse lime, gray and hard (Pay 1472-75)   | 6                   | 1477            |
|  | <b>TOTAL DEPTH</b>  | <b>1477</b>     |

|                        |                                 |
|------------------------|---------------------------------|
| Casing record:         | Commenced: 9/2/40               |
| 8 $\frac{1}{2}$ " 252' | Completed: 9/13/40              |
| 6-5/8" 1469'           | Initial Production:             |
|                        | Before acid - 400' oil in hole  |
|                        | After acid - 100 bbls.          |
|                        | Treated: 9/18/40 with 500 gals. |

## Overisel (Alleghen County)

PETER GORTSEMA  
N. C. Nelson

H.J. &amp; Harry Krooze #1

Permit No. 7785

Drilling Contractor: H.C. Nelson

Location: NE $\frac{1}{4}$  SW $\frac{1}{4}$  SW $\frac{1}{4}$  section 9, T.4N., R.14W.  
709.5 feet from south and 990 feet from west line of quarter section

Elevation: 650.7 feet above sea level.

Record by: L. C. Wickorsham from driller's log.

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>                            |                     |                 |
| Drift:   |                     |                 |
| Drift  | 245                 | 245             |
| <b>MISSISSIPPIAN:</b>                          |                     |                 |
| Coldwater:                                     |                     |                 |
| Lime   | 330                 | 575             |
| Mud, blue                                      | 15                  | 590             |
| Shale, gray                                    | 55                  | 645             |
| Slate, blue                                    | 107                 | 752             |
| Redrock  | 11                  | 763 SIM         |
| Ellsworth:                                     |                     |                 |
| No record                                      | 2                   | 765             |
| Berea sand, hard                               | 10                  | 775             |
| Shale, green                                   | 535                 | 1310            |
| <b>MISSISSIPPIAN-DEVONIAN:</b>                 |                     |                 |
| Antrim:  |                     |                 |
| Shale, brown                                   | 115                 | 1425            |
| <b>DEVONIAN:</b>                               |                     |                 |
| Traverse (Preliminary report - top at 1435):   |                     |                 |
| Shale, gray                                    | 70                  | 1495            |
| Traverse lime (Pay 1495-99; hole filled 1200') | 4                   | 1499            |
|  | <b>TOTAL DEPTH</b>  | <b>1499</b>     |

|                        |   |
|------------------------|---|
| Casing record:         | Commenced: 8/16/40                      |
| 8 $\frac{1}{2}$ " 245' | Completed: 8/30/40                      |
| 6-5/8" 1495'           | Initial Production: 100 bbls. (swabbed) |

(C)

9-4N-14W  
Overisel Twp. (Alleghen Co.)

Exploratory  
TD 1497 in Traverse  
Dry

Rowmor Corporation

Poelakker #1

Permit No. 6417

Drilling Contractor: Columbia Oil & Gas Company

Location: SW $\frac{1}{4}$  SW $\frac{1}{4}$  NE $\frac{1}{4}$  section 9, T.4N., R.14W.  
330' from south and 330' from west line of quarter section.

Elevation: 642 feet above sea level.

Record by: L. C. Wickersham from driller's log.

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <b>PLEISTOCENE:</b>                        |                     |                 |
| Drift:                                     |                     |                 |
| Drift                                      | 92                  | 92              |
| Mud and gravel                             | 105<br>(197)        | 197             |
| <b>MISSISSIPPIAN:</b>                      |                     |                 |
| Coldwater:                                 |                     |                 |
| Shale, blue                                | 243                 | 440             |
| Lime                                       | 108                 | 548             |
| Shale                                      | 197                 | 745             |
| Redrock                                    | 11<br>(599)         | 756             |
| Ellsworth:                                 |                     |                 |
| Sand and lime                              | 14                  | 770             |
| Shale, gray                                | 465<br>(479)        | 1235            |
| <b>MISSISSIPPIAN-DEVONIAN:</b>             |                     |                 |
| Antrim: (Possibly Ellsworth in upper part) |                     |                 |
| Shale, brown                               | 203                 | 1438            |
| <b>DEVONIAN:</b>                           |                     |                 |
| Traverse:                                  |                     |                 |
| Lime, broken                               | 53                  | 1491            |
| Lime, "Traverse" (Water 1494-97)           | 6<br>(59+)          | 1497            |
| TOTAL DEPTH                                |                     | 1497            |

Casing Record:  
8 $\frac{1}{4}$ " 225'  
6 5/8" 778'  
5 3/16" 1485'

Commenced: 7-6-39  
Completed: 7-18-39  
Initial Production: Dry hole

12-1-59

