



Remediation and Liability Management Company, Inc.

Confidential under FOIA
Alex Rothchild
LFR
Sep 30, 2009 09:39
Rec'd CRA
MAR 07 2008



12636

MC: 483-520-190
2000 Centerpoint Parkway
Pontiac, Michigan 48341-3147
(248)-753-5776
Fax (248)-753-5829

February 29, 2008

Mr. Richard Conforti
Michigan Department of Environmental Quality
Waste Management Division
P.O. Box 30241
Lansing, MI 48909-7760

Dear Mr. Conforti:

Re: Monitoring Well Abandonment Report
Former Peregrine (US) Inc. (Peregrine) Coldwater Road Facility – Genesee Township, Michigan

This letter transmits the monitoring well abandonment report for the environmental monitoring well PFW - 12. The abandonment was conducted on October 15, 2007 at the former Peregrine Coldwater Road Site, located at 1245E Coldwater Road in Genesee Township, near Flint, Michigan, currently owned by REALM. The abandonment was approved by you in an email on October 1, 2007. The approximate location of PFW-12 is presented on Figure 1. The measured well depth was 19.7 feet, however, the installation log indicates that the casing was installed to 20.2 feet. The diameter was 2 inches. The well installation log is presented in Attachment A.

On October 15, 2007, the asphalt covering the concrete in the vicinity of PWF-12 was removed and the flush-mounted well located. Removal of the well casing was attempted, but the casing broke at the seam approximately 5.2 feet below ground surface, and therefore the lower 15 feet of casing remains in the ground. The well was abandoned by grouting in place with bentonite slurry installed using a tremie line and the surface was sealed with 1 foot of concrete in accordance with ASTM D5299-92. Work was conducted on behalf of REALM by Young's Environmental Cleanup Inc., under the supervision of CRA. The abandonment log is presented in Attachment B. The abandonment record, as required by MDEQ Reg. 325.1675, is presented in Attachment C.

If you should have any questions concerning the well abandonment or any of the attached documentation, please call me at 248-753-5799.

Yours truly,

Cheryl Hiatt
REALM Project Manager

SE/ev/12636/3
Encl.

c.c.: Genesee County Health Department (2 copies)
Michael Tomka

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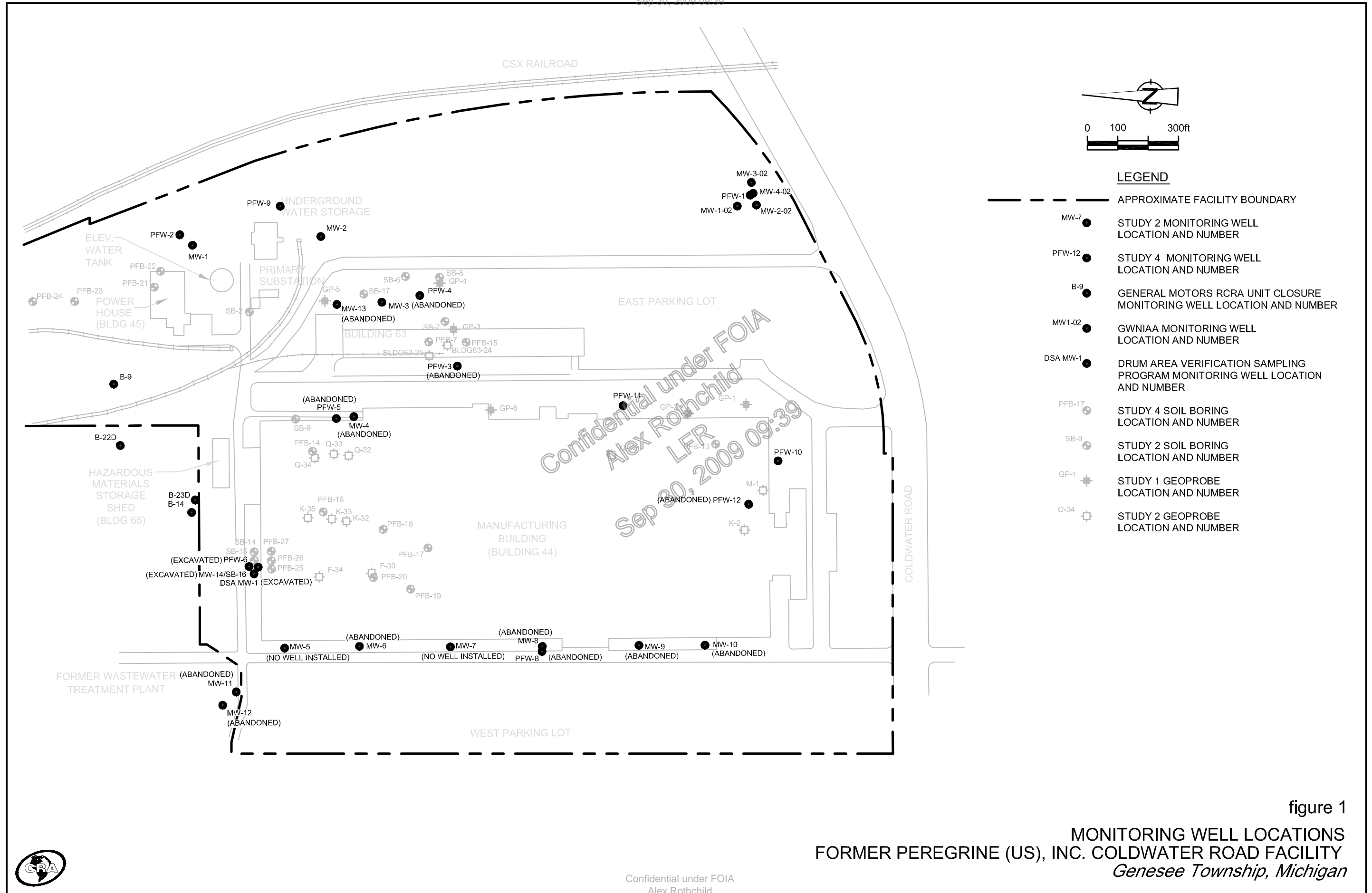


figure 1
MONITORING WELL LOCATIONS
FORMER PEREGRINE (US), INC. COLDWATER ROAD FACILITY
Genesee Township, Michigan



ATTACHMENT A
WELL INSTALLATION LOG

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ENVIRONMENTAL AUDIT REPORT
 PRIVILEGED DOCUMENT

LOG OF TEST BORING

F-203 (R 01-87)

PROJECT NAME PEREGRINE FLINT
 LOCATION FLINT, MICHIGAN
 CONTRACTOR STEARNS DRILLING CO
 DRILLING METHOD 4.25" HSA

BORING NO. PFW-12
 SHEET NO. 1 OF 2
 PROJECT NO. 4036.05
 INSTALLATION 3-21-97
 SURFACE ELEV. 101.7
 BOREHOLE DIA. 8 IN.

SAMPLING NOTES

INTERVAL NO.	TYPE	RECOVERY		PID	DEPTH
		N	IN		
1	SS	21	15	12	
2	SS	26	24	8.1	
3	SS	28	24	23.3	
4	SS	23	24	28.3	
5	SS	23	24	5.6	
6	SS	20	24	0	10

VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCT.
Concrete.	
Fill: wood blocks.	
SANDY LEAN CLAY (CL), some fine to coarse sand, few fine to coarse gravel, slightly plastic, dark grayish brown to brown 10YR 4/3 with gray mottling, moist, very stiff to hard, fractures, strong hydrocarbon odor.	
As above (CL), hard, less hydrocarbon odor.	
As above (CL), heavy fracturing with dark red precipitate along with gray fractures.	
As above (CL).	
As above (CL), fewer fractures, dark grayish brown.	

GENERAL NOTES

DATE STARTED 21 MAR 97
 DATE COMPLETED 21 MAR 97
 RIG CME LC 60
 CREW CHIEF M. HEFFERAN
 LOGGED DPR CHECKED LPL

WATER LEVEL OBSERVATIONS

WHILE DRILLING ∇ 17.8 ft. bgl
 AT COMPLETION ∇ _____
 AFTER DRILLING _____
 CAVE IN: DATE/TIME _____ DEPTH _____
 WATER: DATE/TIME _____ DEPTH _____

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ENVIRONMENTAL AUDIT REPORT:
 PRIVILEGED DOCUMENT



LOG OF TEST BORING

F-203 (R 01-87)

PROJECT NAME PEREGRINE FLINT
 LOCATION FLINT, MICHIGAN
 CONTRACTOR STEARNS DRILLING CO
 DRILLING METHOD 4.25" HSA

BORING NO. PFW-12
 SHEET NO. 2 OF 2
 PROJECT NO. 4036.05
 INSTALLATION 3-21-97
 SURFACE ELEV. 101.7
 BOREHOLE DIA. 8 IN.

SAMPLING NOTES

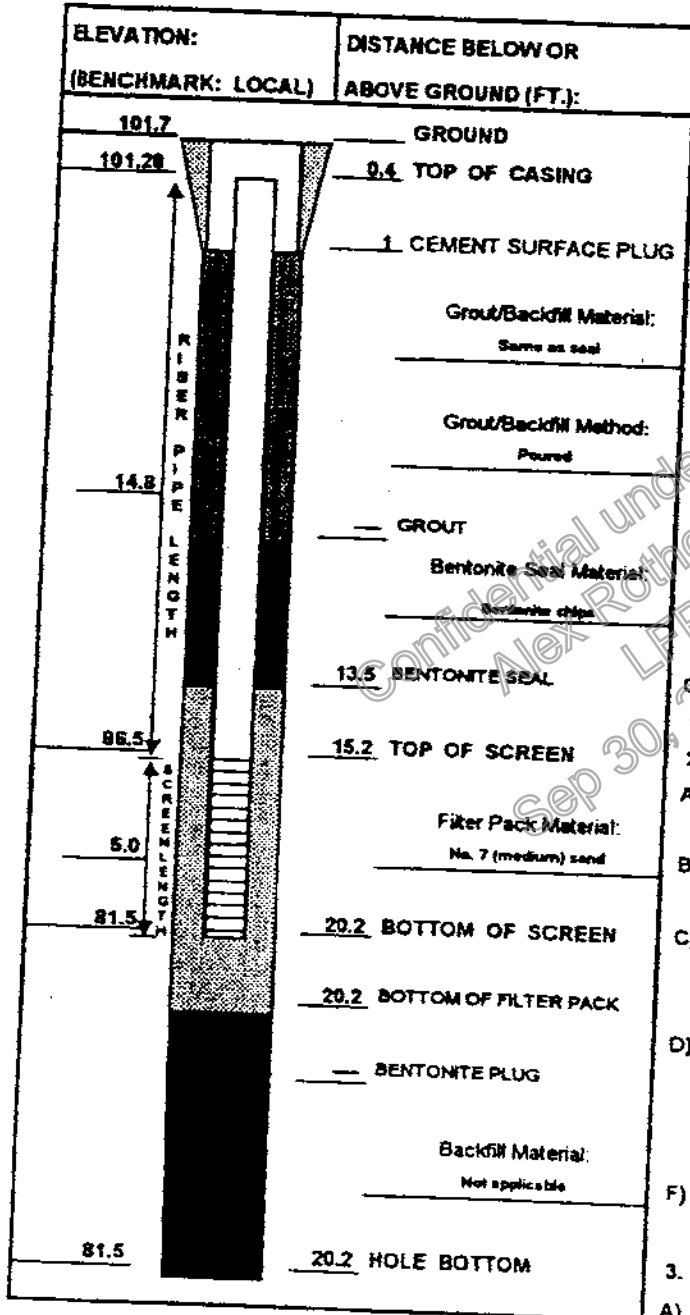
INTERVAL		RECOVERY		PID	DEPTH	VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCT.
NO.	TYPE	N	IN				
7	SS	20	24	6		As above (CL), no odor.	
8	SS	24	24	3.1		WELL-GRADED SAND (SW), fine to coarse, trace silt, trace clay, yellow to brown to dark gray and black, hydrocarbon odor, moist.	
9	SS	16	24	0	15	SANDY LEAN CLAY (CL), some fine to coarse sand, few fine to coarse gravel, slightly plastic, dark grayish brown, moist, stiff (Pp = 1.5 to 2.0), some sand partings.	
						SANDY SILT (ML), dark grayish brown, moist.	
10	SS	8	20			SILTY SAND (SM), dark grayish brown, wet, some laminated with sandy silt and clayey silt.	
					20	SANDY LEAN CLAY (CL), slightly plastic, dark gray 10YR 4/1, medium stiff (Pp = 0.8), moist. End of boring at 20 feet.	



ENVIRONMENTAL AUDIT REPORT
 PRIVILEGED DOCUMENT

WELL CONSTRUCTION DIAGRAM

PROJECT: <u>Peregrine - Flint</u>				WELL NO.: <u>PFW-12</u>
PROJ. NO: <u>4036.05</u>	DATE INSTALLED: <u>3-21-97</u>	OBSV. BY: <u>DPR</u>	CHECKED BY: <u>DPR</u>	



1. CASING AND SCREEN DETAILS:

- A) Type Of Pipe: 2" PVC Pipe Schedule: 40
- B) Pipe Joints: Flush with O-ring
- C) Solvent Used? No
- D) Screen Type: 2" with machined slots, flush joint Screen Slot Size: 0.01"
- E) Borehole Diameter: 8 In. From 0 To 19.5 Ft.
3 In. From 19.5 To 20 Ft.
- F) Surf. Casing Diameter: In. From To Ft.
 2nd Surface Casing: In. From To Ft.
- G) Installed Protective Cover W/ Lock? Yes

2. WELL DEVELOPMENT:

- A) Method: Gently bail
- B) Time Spent Developing: 1 Hours
- C) Water Removed: 5.9 Gallons
 Added: 0 Gallons
- D) Water Clarity Before/After Development:
 Before: Opaque dark grayish brown
 After: Slightly turbid (approximately 100 NTU)
- F) Odor (Descr. if present) None

3. WATER LEVEL SUMMARY:

- A) After Developing: Ft. Below Top Of Casing
- B) Other Date/Time: 3-24-97/1040 15.19 Ft.
 Other Date/Time: 3-31-97/1418 15.21 Ft.

Notes:

ATTACHMENT B
ABANDONMENT LOG

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STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: WELL ABANDONMENT

HOLE DESIGNATION: PFW-12

PROJECT NUMBER: 12636

DATE COMPLETED: October 15, 2007

CLIENT: REALM

DRILLING METHOD: Grout in Place

LOCATION: 6125 East Coldwater Rd, Genesee Township, MI

FIELD PERSONNEL: S. Hoevemeyer

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	'N' VALUE
2	Original stratigraphy: see RMT borehole log PFW-12 (3/21/97). END OF BOREHOLE @ 20.2ft BGS NOTES: - Well installed 3/21/97 with measured screen and hole depth 20.2ft bgs. - Well abandoned 10/15/07 with measured hole depth 19.7ft bgs. - Top five feet of riser removed (remaining riser and screen: 5.2 to 20.2ft bgs).	1.00					
4		5.20					
6							
8							
10							
12							
14							
16							
18							
20			20.20				
22							
24							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

OVERBURDEN LOG - 12636 ABANDON PFW12.GPJ CRA_CORP.GDT 2/26/08

ATTACHMENT C
ABANDONMENT RECORD

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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

ABANDONED WELL PLUGGING RECORD

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

Permit No.

WSSN & Source ID/Well No.

PFW-12

Tax No.

Latitude
43° 5' 30.35" N

Longitude
83° 40' 58.49" W

County
USA

Township
Genesee

Distance & Direction from Road Intersection
500'N, 650'E at intersection of East Coldwater Rd & Horton Ave

Well Street Address, City/ZIP
1245E East Coldwater Rd
Genesee Township, MI

Fraction Section Town No. Range No.
1/4 1/4 1/4 18 08N 07E

Well Owner REALM
Address 2000 Centerpoint Parkway
City/ZIP Pontiac-Centerpoint Campus-Central
Pontiac, MI, 48341-3147
Owner Address Same as Well Address? Yes No

Drilling Unknown Rotary Cable Tool
Method Other Grout in place

Date of Well Plugging
10/15 /07
Well Use Household Type I Public
 Type II Public Type III Public Industrial
 Irrigation Test Well Heat Pump
 Other _____

Measured Well Depth 19.7 ft.

Date Well Constructed
03/21 /97
Well Construction Type Drift Well
 Rock Well Dry Hole Unknown
 Other PVC & sandpack
Flowing Well Yes No

Casing Steel-black Steel-galvanized Plastic
 Clay Tile Crock Other _____
Diameter 2 in. to 0.4-20.2 ft. depth (installed)
Diameter _____ in. to _____ ft. depth

Plugging Material (Enter the layers from top to bottom.)

From	To	Quantity	Units
<input type="checkbox"/> Bentonite Chips/Pellets <input type="checkbox"/> Bentonite Slurry <input type="checkbox"/> Clean Soil Fill	0 ft.	1 ft.	<input checked="" type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Neat Cement <input type="checkbox"/> Other _____	1 ft.	19.7 ft.	3 <input checked="" type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Bentonite Chips/Pellets <input checked="" type="checkbox"/> Bentonite Slurry <input type="checkbox"/> Clean Soil Fill	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Concrete <input type="checkbox"/> Neat Cement <input type="checkbox"/> Other _____	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Bentonite Chips/Pellets <input type="checkbox"/> Bentonite Slurry <input type="checkbox"/> Clean Soil Fill	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Concrete <input type="checkbox"/> Neat Cement <input type="checkbox"/> Other _____	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Bentonite Chips/Pellets <input type="checkbox"/> Bentonite Slurry <input type="checkbox"/> Clean Soil Fill	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Concrete <input type="checkbox"/> Neat Cement <input type="checkbox"/> Other _____	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Bentonite Chips/Pellets <input type="checkbox"/> Bentonite Slurry <input type="checkbox"/> Clean Soil Fill	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Concrete <input type="checkbox"/> Neat Cement <input type="checkbox"/> Other _____	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Bentonite Chips/Pellets <input type="checkbox"/> Bentonite Slurry <input type="checkbox"/> Clean Soil Fill	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____
<input type="checkbox"/> Concrete <input type="checkbox"/> Neat Cement <input type="checkbox"/> Other _____	_____ ft.	_____ ft.	_____ <input type="checkbox"/> Bags <input type="checkbox"/> Yards <input type="checkbox"/> Other _____

Casing Status After Plugging 5.2 ft. Below Grade Above Grade
 Casing Pulled
Note: Cutting casing off 4 feet below grade is recommended.
Reason For Abandoning Well Public Water Connection Well in Disrepair
 Well No Longer Needed Dry Hole Uncompleted Well
 Other Well in way of development
Abandonment Method Pumped Through Grout Pipe Poured From Surface
 Poured Through Grout Pipe Other _____
Pumping Equipment Removed Yes No N/A
Equipment Removed Bremer Check Valve Drawdown Seal
 Drop Pipe Electrical Wiring Packer Pitless Adapter Spool
 Check Valve Pump Cylinder Pump Rods Stones/Debris
 Submersible Pump Turbine Pump Bowls Unknown Obstruction
 Obstruction Driven to Bottom Other N/A
Note: Plugging well from bottom up to ground surface is required.

General Remarks

Water Well Contractor's Certification Well Owner Plugged Well
This well was plugged under my supervision and this report is true to the best of my knowledge and belief.

Registered Business Name _____ Registration No. _____

Address _____

City/State/ZIP _____

Signature of Registered Contractor _____ Date _____

IMPORTANT: FILE WITH DEED