

## **2016 Progress Report**

### **Environmental Remediation of a Petroleum Release**

#### *Site*

**Pap's General Store  
1637 80th Street  
Balsam Lake, WI 54810**

*Prepared for*

#### **Rick Scoglio**

1637 80<sup>th</sup> St.  
Balsam Lake, WI 54810

*WDNR BRRTS #03-49-223213  
PECFA # 54810-2432-37*

Project S2880-003  
June 20, 2016  
Cedar Corporation  
PECFA Participation No. 240179



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June 20, 2016

Mr. Phil Richard  
Department of Natural Resources  
875 S 4<sup>th</sup> Avenue  
Park Falls, WI 54552

SUBJECT: Pap's General Store, Balsam Lake – 2016 Progress Monitoring Report  
PECFA #54810-24329-37  
BRRTS #03-49-223213

Dear Mr. Richard,

This report summarizes the results of the sampling activities that have occurred since November 5, 2014. Three semi-annual rounds of groundwater monitoring have occurred from April 2015 through June 1, 2016.

Included with this report please find:

- Table 1. Residual Soil Contamination Analytical Summary
- Table 2. Groundwater Elevations and Hydrograph
- Table 3. Free Product Recovery Summary
- Table 4. PVOC, Naphthalene, and Detected VOC in Groundwater
  
- Figure 1. Topographic Map (1"= 660 ft.)
- Figure 2. Aerial Photograph (1"= 1,320 ft.)
- Figure 3. Polk County GIS Property Map
- Figure 4. Post Remediation Residual Soil Contamination Plan
- Figure 5. PVOC + Naphthalene Concentration vs Time Graphs
- Figure 6. Groundwater Flow Map April 13, 2016
- Figure 7. Groundwater Flow Map November 2, 2015
- Figure 8. Groundwater Flow Map April 28, 2015
- Figure 9. Benzene Isoconcentration Map April 2016
- Figure 10. Ethyl-benzene Isoconcentration Map April 2016
- Figure 11. Naphthalene Isoconcentration Map April 2016
- Figure 12. Toluene Isoconcentration Map April 2016

## **Setting:**

Pap's General Store is located about 300 feet south of the Apple River and 1000 feet west of White Ash Lake (Figures 1 and 2.) The site is located in a 200 degree loop in the river and is some 15 to 25 feet above the river elevation. The river generally flows from east to west in this area. The Delores Olson residence is immediately north of Pap's and the Pearson's own the surrounding acreage west and south of Pap's General Store. To the east is 80<sup>th</sup> Street with the Walter Strey residence to the northeast and the Buffalo Ridge Trails LLC property to the east (Figure 3).

On December 2, 2008 1,393 tons of contaminated soil removal was removed over a 2000 square foot area to a depth of 15-16 feet in the Pap's General Store parking lot (northeast corner of the property). The asphalt surface was removed for recycling and the contaminated soil source material was removed as best possible considering conditions. Unfortunately not all contaminated source material could be removed due to depth to the water table, caving soils, and nearby structures. Insufficient space allowed the excavation to be entered with the backhoe limiting the depth extent of the corrective action. The removed asphalt has not been replaced on the excavated area. Mr. Scoglio intends to replace it once this case is closed and the monitoring wells (MW-1R, MW-2 and MW-3) removed. Figure 4 presents the excavation boundary and the residual benzene soil contamination at the base of the excavation. Table 1 summarizes residual BTEX analyses at remedial action sample points. These data indicate the presence of PVOC and naphthalene contamination in close proximity to the water table in certain areas notably near the northeast wall of the building in the vicinity of existing wells MW-1R and MW-2.

## **Water Table:**

Groundwater measurements (Table 2) are consistent with previous measurements with variations in water table elevations occurring in all wells with precipitation and snow melt events over the monitored period. Ground water was identified as northeasterly to northerly towards the Apple River in the last report (February 2015) and continues to be northeasterly to northerly depending on the time of the year the site is sampled (Figures 6, 7, & 8).

MW-6 continues to be the up gradient well. Located west of the source area it is also more centrally located on the highland area between the oxbow bend in the Apple River (see Figure 1). Ground water flow is generally dictated by topography and regional discharges (such as the Apple River). Consistent flow patterns can be assured when consistent elevations in ground water are observed. However, variations in flow patterns are present at this location due to small changes (usually variations of less than 0.2 feet) in groundwater elevations in various wells with resultant flow patterns varying from north to northeast. The flow direction appears to be more northeast in the fall with a northerly component observed in the spring events.

Historic free product measurements are summarized in Table 3. No free product was observed over the current monitoring period (the last measureable free product was observed in 2010). Well MW-1R replaced MW-1. Free product was regularly present in MW-1 prior to the site excavation (December, 2008). However, no free product has been observed to date in MW-1R. Free product was previously observed in MW-2 but was not observed during this monitoring period. A total of 18 gallons of product was recovered from January 2007 to September 2010 from wells MW-1 and MW-2.

## **Groundwater Quality:**

Groundwater samples were collected and preserved according to EPA Methods for PVOC + Naphthalene. During this monitoring period three separate sampling events were conducted. The April 2015 sampling event all eleven monitoring wells and three residential wells were sampled. Samples were collected from 7 monitoring wells (MW-1R, MW-2, MW-3, MW-5, MW-7, P-8, and MW-9 and two residential wells (Olson, and Strey residences) during the last two sampling events. Groundwater elevations were measured at all monitoring well locations during all three of the sampling events. All samples were shipped to TestAmerica Inc. in Watertown, WI laboratory (DNR certification # 128053530) or Chicago, IL (DNR Certification # 999580010) for analysis of PVOC plus naphthalene. The analytical data is summarized in Table 4 and analytical reports for this monitoring period are attached to this report.

Wells previously free of detections of PVOC continued to be free of PVOC during the last three monitoring rounds. Groundwater concentrations of Benzene, Ethyl-benzene, Toluene, Total Trimethylbenzenes, Total Xylenes, and Naphthalene continue to exceed the Enforcement Standard in wells MW-1R and MW-2 with minor detections in MW-7 during the April 2015 round. Concentration vs Time graphs for the period post excavation (Dec. 2, 2008) are presented in Figure 5 for Benzene, Ethyl-benzene, Naphthalene, Toluene, and Total Xylenes. Decreasing trends are noted for Benzene in wells MW-1R and MW-2 and Ethyl-Benzene in MW-1R. A slight increasing trend for Toluene and Xylenes has been observed in MW-1R. However they are much lower than historical data for the well. Current (April 13, 2016) contaminant plume conditions are presented in Figures 9, 10, 11, and 12 presenting isoconcentrations for Benzene, Ethyl-Benzene, Naphthalene, and Toluene respectively.

No contaminants have been detected above method detection levels in any of the residential well samples over the history of the project.

## **Discussion:**

MW-1R replaced MW-1 in the contaminated soil excavation and MW-2 is on the very northwest edge of the excavation. Groundwater quality conditions in these wells show improvement in that decreasing concentrations are present for most compounds, particularly those that are more volatile. Contamination was not observed in wells other than MW-1/1R, MW-2, and MW-7.

These observations suggest that geologic conditions of the aquifer are not uniform and the movement of the plume is primarily northerly but due to stresses on the water table as a result of high runoff/infiltration events, the flow direction is more northeasterly. The plume maps also suggest there is variable ground water flow movement of the contamination towards the Apple River.

The contaminant plume can be characterized as stagnant to slowly moving northward (in the direction of down gradient well MW-9). Free product has not been observed since 2010 and is believed to have been removed during the 2008 excavation and the residual dissolved into the aquifer as is evidenced by the higher concentrations of PVOC + Naphthalene observed in wells MW-1R and MW-2.

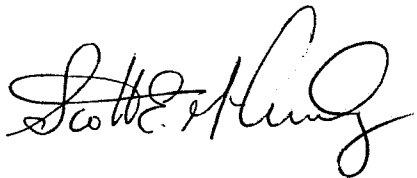
The current interpretation is that the contamination will continue to move northward and eventually enter the Apple River. No water supply wells are considered at risk as the Olson well is up gradient of the plume and there is no evidence that the plume has moved in the direction of the Strey well. Neither the Olson nor Strey properties have sufficient land between their existing well locations and the Apple River

to the north for development of additional properties, limiting the potential risk for the plume to impact human health. Discharge to the river will not occur for over 20 years given the length of time the plume existed prior to the current monitoring effort. The concentration at the point of discharge some 200 feet down gradient of the contamination noted in well MW-7 is unknown.

Continued work to evaluate the extent, magnitude, and threat to human health or the environment of the contamination at the site does not appear to be warranted. Decreasing or stable contamination levels can be attributed to the soil removal and natural attenuation. Increasing concentrations of naphthalene and xylenes on site in wells MW-1R and MW-2 are attributed to the movement of residual contamination from under the building. Given the additional monitoring and determination of plume movement and lack of risk to the public, it is recommended that this site be submitted to the closure committee for case closure with the Scoglio and Olson properties registered on the DNR BRRTS GIS database website for residual contamination.

If you have any questions please feel free to call me at 715-235-9081.

Sincerely;  
CEDAR CORPORATION

A handwritten signature in black ink, appearing to read "Scott McCurdy". The signature is fluid and cursive, with the first name "Scott" and last name "McCurdy" clearly legible.

Scott McCurdy, P.G.  
Principal

Att.

cc. Mr. R. Scoglio, 1637 80<sup>th</sup> St., Balsam Lake, WI 54810

**TABLE # 1**  
**POST EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS**  
**PAP'S GENERAL STORE**  
**BALSAM LAKE, WI**

				Results reported in ug/Kg							
				Benzene	E - Benzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Xylenes
Wis Adm. Code NR720, Table 1 & 2, Residual Contaminant Levels				5.5	2,900	NS	NS	1,500	NS	NS	4,100
Wis Adm. Code NR746.06 Table 1, Residual Petroleum Product				8,500	4,600	NS	2,700	38,000	83,000	11,000	42,000
Wis Adm. Code NR746.06 Table 2, Direct Contact				1,100	NS	NS	NS	NS	NS	NS	NS
Boring Name	Sample Depth	Sample Date	Laboratory ID								
EX-1	4	12/2/2008	WRL0139-01	<26	<26	<26	370	97	690	200	480
EX-2	12	12/2/2008	WRL0139-02	14,000	96,000	<1400	38,000	320,000	310,000	97,000	710,000
EX-3	13	12/2/2008	WRL0139-03	34,000	170,000	<3500	120,000	550,000	980,000	320,000	1,500,000
EX-4	4	12/2/2008	WRL0139-04	54	46	<26	<51	320	130	48	330
EX-5	12	12/2/2008	WRL0139-05	<26	<26	<26	<52	95	31	<26	<88
EX-6	4	12/2/2008	WRL0139-06	<26	<26	<26	<52	55	<26	<26	<88
EX-7	12	12/2/2008	WRL0139-07	180	4,300	<36	3,400	5,000	32,000	8,100	27,000
EX-8	4	12/2/2008	WRL0139-08	<27	<27	<27	<54	81	<27	<27	<92
EX-9	12	12/2/2008	WRL0139-09	6,500	29,000	<350	9,200	99,000	79,000	26,000	170,000
EX-10	14	12/2/2008	WRL0139-10	46	<26	<26	<52	160	28	<26	<89
EX-11	10	12/2/2008	WRL0139-11	650	1,400	<37	310	4,000	4,700	1,700	7,000
EX-12	4	12/2/2008	WRL0139-12	190	2,600	<37	2,800	4,900	21,000	5,400	22,000
EX-13	4	12/2/2008	WRL0139-13	<26	<26	<26	<52	110	<26	<26	<88
EX-14	12	12/2/2008	WRL0139-14	1,300	8,500	<150	3,800	24,000	31,000	9,500	53,000
EX-15	4	12/2/2008	WRL0139-15	<34	<34	<34	<67	<34	<34	<34	<110
EX-16	16	12/2/2008	WRL0139-16	2,600	41,000	<640	15,000	95,000	120,000	40,000	260,000
EX-17	4	12/2/2008	WRL0139-17	<25	<25	<25	<51	96	<25	<25	<87
EX-18	14	12/2/2008	WRL0139-18	7,300	140,000	<1900	48,000	240,000	450,000	150,000	910,000

MTBE = Methyl tert butyl ether  
TMB = Trimethylbenzene  
E-Benzene = Ethylbenzene  
1,2-DCA = 1,2 Dichloroethane

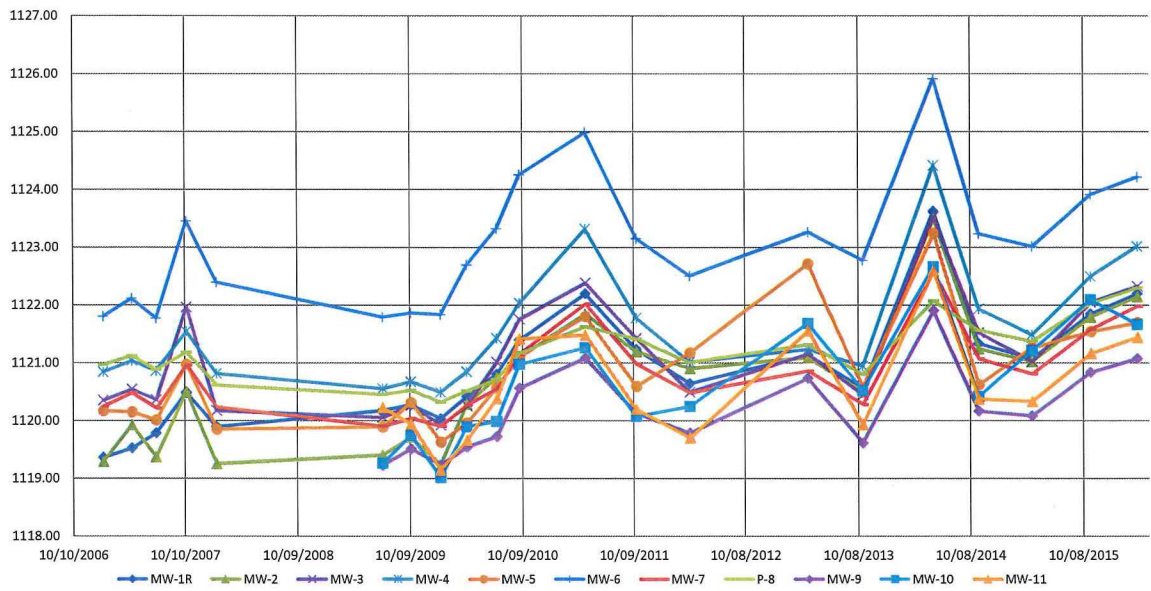
Values in **Bold Typeface** or *Italics* exceed listed table value.

ug/Kg= micrograms per kilogram = ppb = parts per billion  
mg/Kg= milligrams per kilogram = ppm = parts per million  
IU = Instrument Units  
NA = Not Analyzed  
NS = No Standard Established

**TABLE 2  
GROUNDWATER ELEVATIONS**

WELL	MW-1	MW-1R	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	P-8	MW-9	MW-10	MW-11
CASING ELEV.	1133.68	1133.95	1134.04	1133.07	1133.76	1131.49	1133.82	1134.5	1134.42	1131.26	1128.11	1132.24
GROUND ELEV.	1134.20	1134.45	1135.39	1133.78	1134.23	1132.14	1134.22	1134.96	1134.96	1131.78	1128.56	1132.70
SCREEN TOP ELEV.	1124.34	1125.65	1122.89	1124.83	1123.95	1121.97	1124.08	1125.53	1094.30	1123.46	1122.98	1123.99
SCREEN BOTTOM ELEV.	1114.34	1115.65	1112.89	1114.83	1113.95	1111.97	1114.08	1115.53	1089.30	1113.46	1112.98	1113.99
DATE												
10/31/2000	1120.76	1120.76	1119.82	1120.97								
01/19/2007	1119.36	1119.36	1119.29	1120.35	1120.84	1120.17	1121.80	1120.25	1120.97			
04/24/2007	1119.52	1119.52	1119.92	1120.54	1121.03	1120.15	1122.11	1120.48	1121.12			
07/10/2007	1119.78	1119.78	1119.37	1120.36	1120.86	1120.01	1121.77	1120.22	1120.88			
10/17/2007	1120.48	1120.48	1120.50	1121.96	1121.54	1120.97	1123.45	1120.96	1121.18			
01/24/2008	1119.89	1119.89	1119.25	1120.17	1120.81	1119.85	1122.39	1120.23	1120.61			
07/14/2009	1120.17	1119.40	1120.05	1120.55	1120.55	1119.89	1121.79	1119.90	1120.45	1119.23	1119.26	1120.22
10/13/2009		1120.27	1119.71	1120.26	1120.67	1120.31	1121.86	1120.04	1120.52	1119.51	1119.74	1119.94
01/19/2010		1120.03	1119.23	1119.92	1120.49	1119.63	1121.83	1119.90	1120.32	1119.23	1119.01	1119.14
04/14/2010		1120.41	1120.28	1120.25	1120.84	1119.96	1122.69	1120.27	1120.51	1119.54	1119.89	1119.66
07/20/2010		1120.80	1120.74	1121.01	1121.42	1120.57	1123.32	1120.55	1120.71	1119.72	1119.98	1120.38
09/30/2010		1121.39	1121.10	1121.75	1122.03	1121.11	1124.25	1121.16	1121.17	1120.56	1120.97	1121.41
05/03/2011		1122.19	1121.84	1122.38	1123.31	1121.80	1124.98	1122.02	1121.62	1121.08	1121.26	1121.48
10/19/2011		1121.23	1121.19	1121.42	1121.77	1120.59	1123.15	1120.98	1121.41	1120.12	1120.07	1120.19
04/12/2012		1120.64	1120.90	1120.49	1121.01	1121.17	1122.50	1120.48	1121.00	1119.78	1120.24	1119.70
04/30/2013		1121.13	1121.09	1121.15	1121.23	1122.71	1123.26	1120.86	1121.31	1120.73	1121.68	1121.55
10/23/2013		1120.56	1120.49	1120.44	1120.94	1120.57	1122.77	1120.28	1120.80	1119.61	1120.52	1119.93
06/12/2014		1123.62	1123.49	1123.52	1124.41	1123.24	1125.91	1122.58	1122.07	1121.90	1122.66	1122.59
11/05/2014		1121.33	1121.24	1121.52	1121.93	1120.62	1123.23	1121.07	1121.56	1120.16	1120.41	1120.37
04/28/2015		1121.07	1121.02	1121.02	1121.48	1121.26	1123.01	1120.81	1121.37	1120.08	1121.21	1120.33
11/02/2015		1121.84	1121.79	1122.04	1122.49	1121.54	1123.91	1121.58	1122.03	1120.83	1122.09	1121.16
04/03/2016		1122.19	1122.14	1122.32	1123.01	1121.69	1124.21	1121.98	1122.29	1121.07	1121.66	1121.44

**Pap's General Store,  
Groundwater Hydrograph 2006 -2016**



**TABLE 2  
Groundwater Elevations and Hydrograph**

**Table 3**  
**Pap's General Store**  
**Balsam Lake, WI**  
**Free Product Data**

WELL	SAMPLE DATE	FP Thickness (FT)	Volume Recovered (Gal)
MW - 1	1/19/07	1.34	0.5
	2/8/07	0.71	0.25
	3/19/07	0.56	0.25
	4/24/07	1.44	0.25
	5/15/07	1.77	0.75
	6/13/07	1.52	0.75
	7/10/07	0.84	0.25
	8/2/07	0.61	0.25
	8/29/07	0.49	0.25
	10/17/07	0.79	0.3
	11/13/07	1.76	0.7
	12/18/07	0.83	0.3
	1/24/08	0.59	0.3
	Well abandoned 12-2-2008 during site excavation		
Product recovered			5.1
MW-1R	7/14/09	0	
	10/13/09	0	
	1/19/10	0	
	4/14/10	0	
	7/20/10	0	
	9/30/10	0	
	5/3/11	0	
	10/19/11	0	
	4/12/12	0	
	4/30/13	0	
	10/23/13	0	
	6/12/14	0	
	11/5/14	0	
	4/28/15	0	
	11/2/15	0	
4/3/16	0		
Product recovered			0
MW-2	1/19/07	1.45	1
	2/8/07	1.6	1.5
	3/19/07	1.3	1.5
	4/24/07	0.95	0.75
	5/15/07	1.24	0.75
	6/13/07	1.19	0.5
	7/10/07	1.37	0.75
	8/2/07	1.52	1.3
	8/29/07	1.33	1.45
	10/17/07	0.83	0.5
	11/13/07	0.98	0.3
	12/18/07	0.7	0.2
	1/24/08	1.44	1.5
	7/14/09	0.93	0.3
	10/13/09	0.32	0.25
	1/19/10	1.06	0.25
	4/14/10	0.15	0
	7/20/10	0	0
	9/30/10	0.29	0.1
	5/3/11	0	0
	10/19/11	0	0
	4/12/12	0	0
	4/30/13	0	0
	10/23/13	0	0
	6/12/14	0	0
	11/5/14	0	0
	4/28/15	0	0
	11/2/15	0	0
	4/3/16	0	0
	Product recovered		
<b>TOTAL PRODUCT RECOVERED IN GALLONS</b>			<b>18</b>



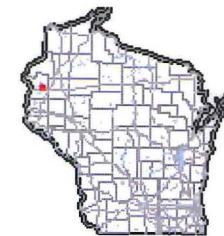
**TABLE 4**  
**Groundwater Analytical Results**  
**PVOC & Detected VOC (EPA 8020), DRO, GRO**  
**Pap's General Store**  
**Balsam Lake, WI**

PARAMETER	SAMPLE DATE	MW-1	MW-1R	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	P-8	MW-9	MW-10	MW-11	Olsons	Strey	Paps	
GRO (ug / L)	10/31/00	47,000		FP	750												
DRO (mg / L)	10/31/00	4.7		FP	<0.10												
BENZENE (ug / L)	10/31/00	8,600		FP	150										<0.10	<0.10	
Enforcement Standard - 5.0 Preventive Action Limit - 0.5	1/19/07	FP		FP	2.5	<0.20	20	<0.20	1,300	<0.20					<0.20	<0.20	
	4/24/07	FP		FP	1.0	<0.25	120	<0.25	520	<0.25					<0.20	<0.20	
	7/10/07	FP		FP	130	<0.25	27	<0.25	1,800	<0.25							
	10/17/07	FP		FP	9.7	<0.25	<0.25	<0.25	370								
	1/24/08	FP		FP	NS	NS	NS	NS	NS	NS					<0.20	<0.20	
	7/14/09		4,000	FP	25	<0.25	0.4	<0.25	1,200	<0.25	<0.20	<0.20	<0.20	<0.20	<0.25	<0.20	<0.25
	10/13/09		3,700	FP	5.2	NS	<0.25	NS	1,600	NS	NS	NS	NS	NS	NS	NS	NS
	1/19/10		3,900	FP	60	<0.25	0.54	<0.25	2,200	<0.25	<0.25	<0.20	<0.25	<0.25	NS	NS	<0.25
	4/14/10		2,600	FP	19	NS	<0.25	NS	290	NS	NS	NS	NS	NS	NS	NS	NS
	7/20/10		3,100	2,200	<0.25	<0.25	<0.25	<0.25	580	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
	9/30/10		3,500	FP	<0.25	NS	<0.25	NS	<0.25	NS	NS	NS	NS	NS	NS	NS	NS
	5/3/11		4,300	1,700	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	10/19/11		4,300	550	6.2	<0.20	30	<0.20	530	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	4/12/12		3,600	586	12.5	<0.25	164	<0.25	40.1	<0.25	<0.25	<0.25	<0.25	<0.25	NS	NS	<0.25
	4/30/13		1,300	1,700	<0.36	<0.36	<0.36	<0.36	6.7	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
	10/23/13		1,400	380	20	<0.36	<0.36	<0.36	1,200	<0.36	<0.36	<0.36	<0.36	<0.36	NS	NS	NS
	6/12/14		1,200	450	7	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	NS	NS	NS
	11/5/14		1,400	360	<0.36	<0.36	98	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	NS	<0.36
	4/28/15		1,300	86	<0.36	<0.36	<0.36	<0.36	0.56	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
	11/2/15		1,100	220	<0.36	NS	<0.36	NS	<0.36	<0.36	NS	NS	NS	<0.36	<0.36	NS	NS
4/13/16		880	140	<0.36	<0.36	<0.36	NS	<0.36	<0.36	NS	NS	NS	<0.36	<0.36	<0.36	NS	
1,2 EDB (ug / L)	10/31/00	NS		NS	NS	NS	NS	NS	NS	NS					<0.25	<0.25	
Enforcement Standard - 0.05 Preventive Action Limit - 0.005	1/19/07	FP		FP	<0.20	<0.20	<0.20	0.23	<0.20						<0.20	<0.20	
	1/24/08	FP		FP	NS	NS	NS	NS	NS	NS					<0.20	<0.20	
	7/14/09		NS		NS	NS	NS	NS	NS	NS	<0.20	<0.20	<0.20	NS	<0.20	NS	
ETHYLBENZENE (ug / L)	10/31/00	1,900		FP	13										<0.25	<0.25	
Enforcement Standard - 700 Preventive Action Limit - 140	1/19/07	FP		FP	<0.22	<0.50	8.6	<0.50	640	<0.50					<0.50	<0.50	
	4/24/07	FP		FP	<0.22	<0.22	9.5	<0.22	320	<0.22							
	7/10/07	FP		FP	0.45	<0.22	0.47	<0.22	1300	<0.22							
	10/17/07	FP		FP	0.64	<0.22	<0.22	<0.22	230	<0.22							
	1/24/08	FP		FP	NS	NS	NS	NS	NS	NS					<0.50	<0.50	
	7/14/09		2,000	FP	2	<0.22	<0.22	<0.22	1900	<0.22	<0.50	<0.50	<0.50	<0.25	<0.50	<0.25	
	10/13/09		2,000	FP	<0.22	NS	<0.22	NS	1500	NS	NS	NS	NS	NS	NS	NS	
	1/19/10		2,200	FP	1	<0.22	0.34	<0.22	1900	<0.22	<0.22	<0.22	<0.22	<0.22	NS	<0.22	
	4/14/10		1,700	FP	2	NS	<0.22	NS	230	NS	NS	NS	NS	NS	NS	NS	
	7/20/10		2,100	3,600	<0.22	<0.22	<0.22	<0.22	640	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	
	9/30/10		2,100	FP	<0.22	NS	<0.22	NS	<0.22	NS	NS	NS	NS	NS	NS	NS	
	5/3/11		2,800	3,600	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	10/19/11		2,900	3,200	4.1	<0.50	110	<0.50	470	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	4/12/12		3,020	2,640	<0.25	<0.25	1060	<0.25	505	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25	
	4/30/13		2,000	3,500	<0.37	<0.37	<0.37	<0.37	10	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	
	10/23/13		2,200	1,900	2.5	<0.37	<0.37	<0.37	980	<0.37	0.44	<0.37	<0.37	NS	NS	NS	
	6/12/14		2,000	2,700	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	NS	NS	NS	
	11/5/14		2,200	2,600	<0.37	<0.37	73	<0.37	3	<0.37	<0.37	<0.37	<0.37	<0.37	NS	<0.37	
	4/28/15		2,400	1,700	<0.37	<0.37	<0.37	<0.37	10	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	
	11/2/15		2,400	2,100	<0.37	NS	<0.37	NS	<0.37	<0.37	NS	NS	NS	<0.37	<0.37	NS	
4/13/16		2,100	1,800	<0.37	NS	<0.37	NS	<0.37	<0.37	NS	NS	NS	<0.37	<0.37	NS		
METHYL TERT-BUTYL ETHER (ug / L)	7/20/10	<23	<23	<0.23	0.23	<0.23	0.29	<9.2	<0.23	<0.23	<0.23	<0.23	0.3	<0.23	<0.23		
Enforcement Standard - 60  Preventive Action Limit - 12	5/3/11	<2.0	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
	10/19/11	<5.0	<10.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
	4/12/12	<25	1,090	0.41	<0.25	116	<0.25	191	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25		
	4/30/13	150	470	<0.24	<0.24	<0.24	<0.24	5.9	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24		
	10/23/13	98	67	16.0	<0.24	<0.24	<0.24	<0.24	0.7	<0.24	<0.24	<0.24	<0.24	NS	NS		
	6/12/14	48	120	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	NS	<0.24		
	11/5/14	150	49	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	NS	<0.24		
	4/28/15	<2.4	63	<0.24	<0.24	<0.24	<0.24	1.3	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24		
	11/2/15	65	270	<0.24	NS	<0.24	NS	<0.24	<0.24	NS	NS	NS	NS	<0.24	<0.24		
	4/13/16	170	290	<0.24	NS	<0.24	NS	<0.24	<0.24	NS	NS	NS	NS	<0.24	0.30 J		
	NAPHTHALENE (ug / L)	10/31/00	300		FP	1.5										<0.25	<0.25
	Enforcement Standard - 100 Preventive Action Limit - 10	1/19/07	FP		FP	<0.43	<0.25	1.0	<0.25	120	<0.25					<0.25	<0.25
1/24/08		FP		FP	NS	NS	NS	NS	NS	NS					<0.25	<0.25	
7/14/09			270	FP	2.1	<0.25	<0.25	<0.25	420	<0.50	<0.25	<0.25	<0.25	<0.50	<0.25	<0.50	
10/13/09			290	FP	<0.50	NS	<0.50	NS	300	NS	NS	NS	NS	NS	NS	NS	
1/19/10			320	FP	0.65	<0.25	<0.50	<0.25	410	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	
4/14/10			210	FP	2.8	NS	<0.25	NS	38	NS	NS	NS	NS	NS	NS	NS	
7/20/10			310	880	<0.50	<0.50	<0.50	<0.50	190	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/30/10			370	FP	<0.50	NS	<0.50	NS	<0.50	NS	NS	NS	NS	NS	NS	NS	
5/3/11			360	630	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	
10/19/11			390	960	<0.25	<0.25	15	0.42	81	<0.25	0.3	<0.25	<0.25	<0.25	<0.25	<0.25	
4/12/12			545	1,030	<2.5	<2.5	263	<2.5	136	<2.5	<2.5	<2.5	<2.5	<2.5	NS	<	

PARAMETER	SAMPLE DATE	MW-1	MW-1R	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	P-8	MW-9	MW-10	MW-11	Olsons	Strey	Paps
n-PROPYLBENZENE (ug / L)	10/31/00	220		FP	1.7									<0.25		<0.25
	1/19/07	FP		FP		<0.50	0.89	<0.50	67	<0.50				<0.50		<0.50
	1/24/08	FP		FP	NS	NS	NS	NS	NS	NS				<0.50		<0.50
	7/14/09		NS		NS	NS	NS	NS	NS	NS	<0.50	<0.50	<0.50	NS	<0.50	NS
TOLUENE (ug / L)  Enforcement Standard - 800 Preventive Action Limit - 160	10/31/00	21000		FP	130									<0.10		<0.10
	1/19/07	FP		FP	<0.11	<0.20	7.8	<0.20	7,400	<0.20				<0.20		<0.20
	4/24/07	FP		FP	<0.11	<0.11	17	<0.11	2,900	<0.11						
	7/10/07	FP		FP	1.1	<0.11	0.44	<0.11	12,000	<0.11						
	10/17/07	FP		FP	0.19	<0.11	<0.11	<0.11	1,900	<0.11						
	1/24/08	FP		FP	NS	NS	NS	NS	NS	NS				<0.20		<0.20
	7/14/09		20,000	FP	3.2	<0.25	<0.25	<0.25	16,000	<0.25	<0.50	<0.50	<0.50	<0.25	<0.50	<0.25
	10/13/09		18,000	FP	<0.25	NS	<0.25	NS	14,000	NS	NS	NS	NS	NS	NS	NS
	1/19/10		20,000	FP	3.6	<0.25	<0.25	<0.25	19,000	<0.25	<0.25	16	<0.25	<0.25	NS	<0.25
	4/14/10		13,000	FP	5.9	NS	<0.25	NS	2,100	NS	NS	NS	NS	NS	NS	NS
	7/20/10		18,000	22,000	<0.25	<0.25	<0.25	<0.25	6,400	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
	9/30/10		19,000	FP	<0.25	NS	<0.25	NS	<0.25	NS	NS	NS	NS	NS	NS	NS
	5/3/11		28,000	29,000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	10/19/11		25,000	14,000	<0.50	<0.50	300	<0.50	5,000	<0.50	0.99	0.64	<0.50	<0.50	<0.50	<0.50
	4/12/12		20,300	9,640	<0.25	<0.25	3240	<0.25	696	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25
	4/30/13		6,500	15,000	<0.33	<0.33	<0.33	<0.33	3.5	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
	10/23/13		8,600	6,000	0.91	<0.33	<0.33	<0.33	9,800	<0.33	<0.33	<0.33	<0.33	NS	NS	NS
	6/12/14		6,900	12,000	4.50	<0.33	<0.33	<0.33	<0.33	<0.33	0.36					
	11/5/14		12,000	7,300	<0.33	<0.33	42	<0.33	31	<0.33	<0.33	<0.33	<0.33	<0.33	NS	<0.33
	4/28/15		7,000	3,200	<0.33	<0.33	<0.33	<0.33	22	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
	11/2/15		8,600	5,800	<0.33	NS	<0.33	NS	<0.33	<0.33	NS	NS	NS	<0.33	<0.33	NS
	4/13/16		9,700	4,100	<0.33	NS	<0.33	NS	<0.33	<0.33	NS	NS	NS	<0.33	<0.33	NS
	1,2,4-TRIMETHYLBENZENE (ug / L)  Combined 1,2,3- TMB & 1,3,5 TMB  Enforcement Standard - 480 Preventive Action Limit - 96	10/31/00	1,800		FP	6.2									<0.10	
1/19/07		FP		FP	<0.25	<0.20	3.2	<0.20	560	<0.20				<0.20		<0.20
4/24/07		FP		FP	<0.25	<0.25	5.3	<0.25	280	<0.25						
7/10/07		FP		FP	<0.25	<0.25	0.31	<0.25	1,100	<0.25						
10/17/07		FP		FP	<0.25	<0.25	<0.25	<0.25	780	<0.25					<0.20	<0.20
1/24/08		FP		FP	NS	NS	NS	NS	NS	NS				<0.20	<0.20	
7/14/09			1,400	FP	5.6	<0.25	<0.25	<0.25	1,500	<0.25	<0.20	<0.20	<0.25	<0.20	<0.25	
10/13/09			1,400	FP	0.67	NS	<0.25	NS	1,200	NS	NS	NS	NS	NS	NS	
1/19/10			1,600	FP	11	<0.25	0.36	<0.25	1,400	<0.25	<0.25	0.64	<0.25	<0.25	NS	<0.25
4/14/10			1,200	FP	7.9	NS	<0.25	NS	160	NS	NS	NS	NS	NS	NS	
7/20/10			1,500	6,000	<0.25	<0.25	<0.25	<0.25	440	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	
9/30/10			1,500	FP	<0.25	NS	<0.25	NS	<0.25	NS	NS	NS	NS	NS	NS	
5/3/11			2,300	4,300	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
10/19/11			2,400	6,200	0.59	<0.20	79	0.22	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
4/12/12			2,270	3,020	<0.25	<0.25	909	<0.25	525	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	
4/30/13			1,900	4,900	0.4	<0.30	<0.30	<0.30	14	0.94	<0.30	<0.30	<0.30	<0.30	<0.30	
10/23/13			1,900	3,400	2.8	<0.30	2	1.9	740	<0.30	2.7	<0.30	<0.30	<0.30	NS	<0.30
6/12/14			2,100	3,700	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30					
11/5/14			2,400	5,600	<0.30	<0.30	63	<0.30	1.6	<0.30	<0.30	<0.30	<0.30	<0.30	NS	<0.30
4/28/15			2,000	4,400	<0.30	<0.30	<0.30	<0.30	8.1	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	
11/2/15			3,000	4,200	<0.30	NS	<0.30	NS	<0.30	<0.30	NS	NS	NS	<0.30	<0.30	
4/13/16			2,100	3,700	<0.30	NS	<0.30	NS	<0.30	<0.30	NS	NS	NS	<0.30	<0.30	
1,3,5-TRIMETHYLBENZENE (ug / L)		10/31/00	440		FP	1.7									<0.10	
	1/19/07	FP		FP	<0.19	<0.20	1.4	<0.20	150	<0.20				<0.20		<0.20
	4/24/07	FP		FP	<0.19	<0.19	2.7	<0.19	75	<0.19						
	7/10/07	FP		FP	<0.19	<0.19	<0.19	<0.19	320	<0.19						
	10/17/07	FP		FP	<0.19	<0.19	<0.19	<0.19	54	<0.19						
	1/24/08	FP		FP	NS	NS	NS	NS	NS	NS				<0.20	<0.20	
	7/14/09		390	FP	1.9	<0.19	<0.19	<0.19	430	<0.19	<0.20	<0.20	<0.20	<0.19	<0.20	
	10/13/09		390	FP	<0.19	NS	<0.19	NS	310	NS	NS	NS	NS	NS	NS	
	1/19/10		480	FP	2.6	<0.19	<0.19	<0.19	410	<0.19	<0.19	0.28	<0.19	<0.19	NS	<0.19
	4/14/10		330	FP	2.4	NS	<0.25	NS	42	NS	NS	NS	NS	NS	NS	
	7/20/10		410	1,900	<0.19	<0.19	<0.19	<0.19	120	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	
	9/30/10		430	FP	<0.19	NS	<0.19	NS	<0.19	NS	NS	NS	NS	NS	NS	
	5/3/11		600	1,200	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
	10/19/11		660	1,800	0.36	<0.20	30	<0.20	89	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
	4/12/12		638	940	<0.25	<0.25	319	<0.25	151	<0.25	<0.25	<0.25	<0.25	<0.25	NS	<0.25
	4/30/13		570	1,300	<0.30	<0.30	<0.30	<0.30	8.7	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	
	10/23/13		540	1,000	1.5	<0.30	2.3	1.1	190	3.2	0.76	<0.30	<0.30	NS	NS	
	6/12/14		560	1,000	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30					
	11/5/14		700	1,800	<0.30	<0.30	22	<0.30	0.48	<0.30	<0.30	<0.30	<0.30	<0.30	NS	<0.30
	4/28/15		570	1,400	<0.30	<0.30	<0.30	<0.30	2.4	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	
	11/2/15		710	1,200	<0.30	NS	<0.30	NS	<0.30	<0.30	NS	NS	NS	<0.30	<0.30	
	4/13/16		620	1,200	<0.30	NS	<0.30	NS	<0.30	<0.30	NS	NS	NS	<0.30	<0.30	
	XYLENES (ug / L)  Enforcement Standard - 2,000 Preventive Action Limit - 400	10/31/00	9200		FP	42									<0.25	
1/19/07		FP		FP	<0.39	<0.50	11	<0.50	3,900	<0.50				<0.50		<0.50
4/24/07		FP		FP	<0.39	<0.39	23	<0.39	1,700	<0.39						
7/10/07		FP		FP	0.67	<0.39	0.73	<0.39	7,500	<0.39						
10/17/07		FP		FP	<0.39	<0.39	<0.39	<0.39	1,100	<0.39						
1/24/08		FP		FP	NS	NS	NS	NS	NS	NS				<0.50	<0.50	
7/14/09			9,900	FP	19	<0.39	<0.39	<0.39	<0.39	<0.39	<0.50	<0.50	<0.50	<0.39	<0.50	
10/13/09			9,500	FP	0.74	NS										



# Pap's General Store



### Legend

- ◆ Open Site (ongoing cleanup)
- Open Site Boundary
- ◆ Closed Site (completed cleanup)
- Closed Site Boundary
- Airport
- Great Lakes
- Cities
- Villages

0.3 0 0.13 0.3 Miles

NAD\_1983\_HARN\_Wisconsin\_TM

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1:7,920



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Note: Not all sites are mapped.

### Notes









LEGEND

PROPERTY MAP  
TOWN OF APPLE RIVER  
POLK COUNTY, WI



604 Wilson Avenue  
Menomonie, WI 54751

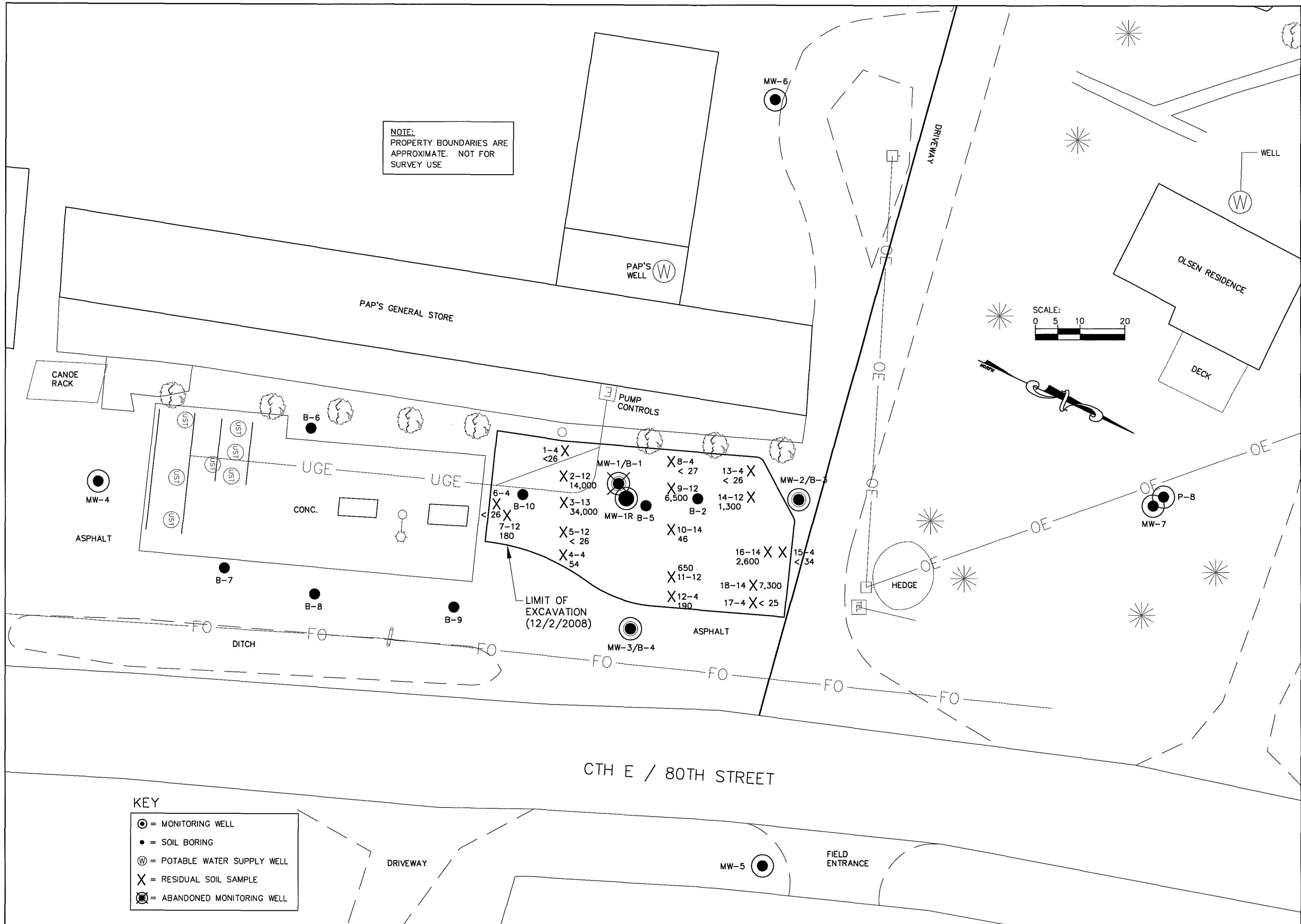
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DRAWN BY Polk Co	SITE PROPERTY MAP  RICK SCOGLIO PAP'S GENERAL STORE BLASAM LAKE, WI	CHECKED BY sem
DATE 01/124/13		JOB NO.
REVISED BY sem		FIGURE 3
SCALE nts		

I:\Clients\S2880 Scoglio Rick\003 Paps Remediation, 002 Finalize Env Investigation\dwg\S003base.dwg 1/22/2014 7:16:03 AM CST



JOB NO.	S2880-002
BOOK NO.	Pap's General Store
DRAWN BY	JNM
CHECKED BY	SEM
DATE	November 6, 2000
REVISIONS	JANUARY 2014
REFERENCE FILE	S003base.dwg
DRAWING FILE	S003base.dwg

604 Wilson Avenue  
Menomonee, Wisconsin 54751

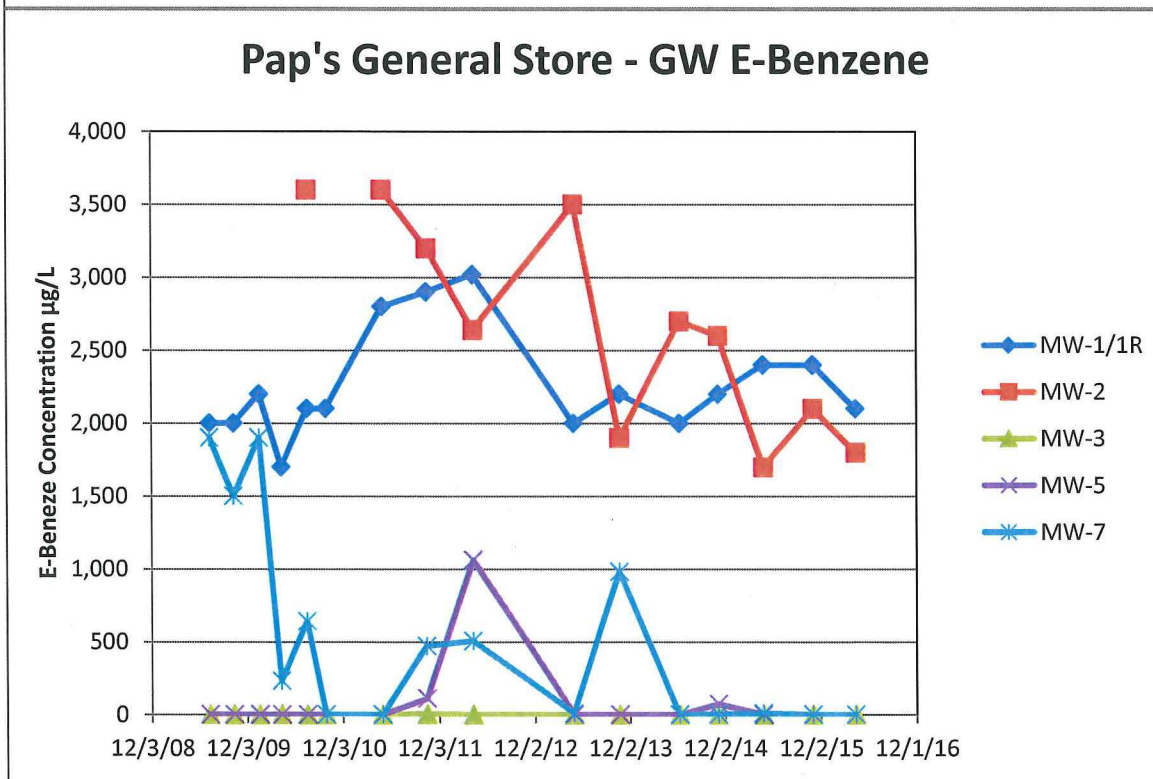
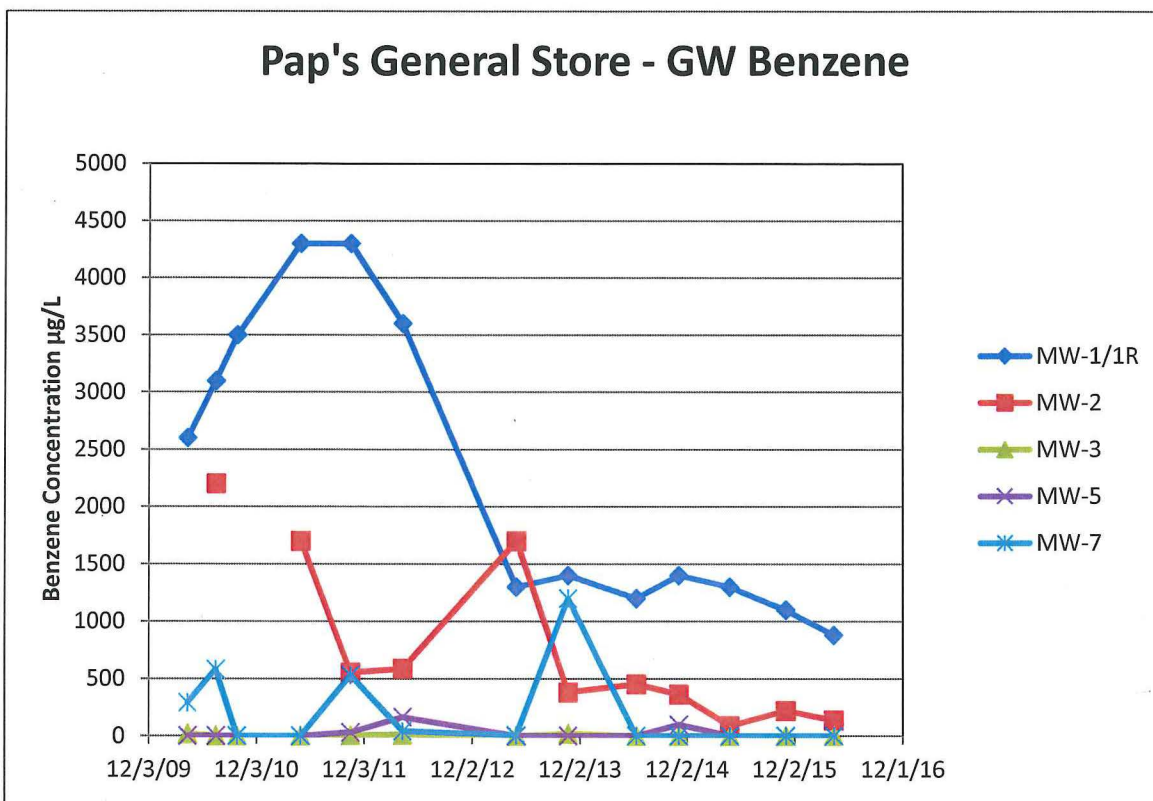
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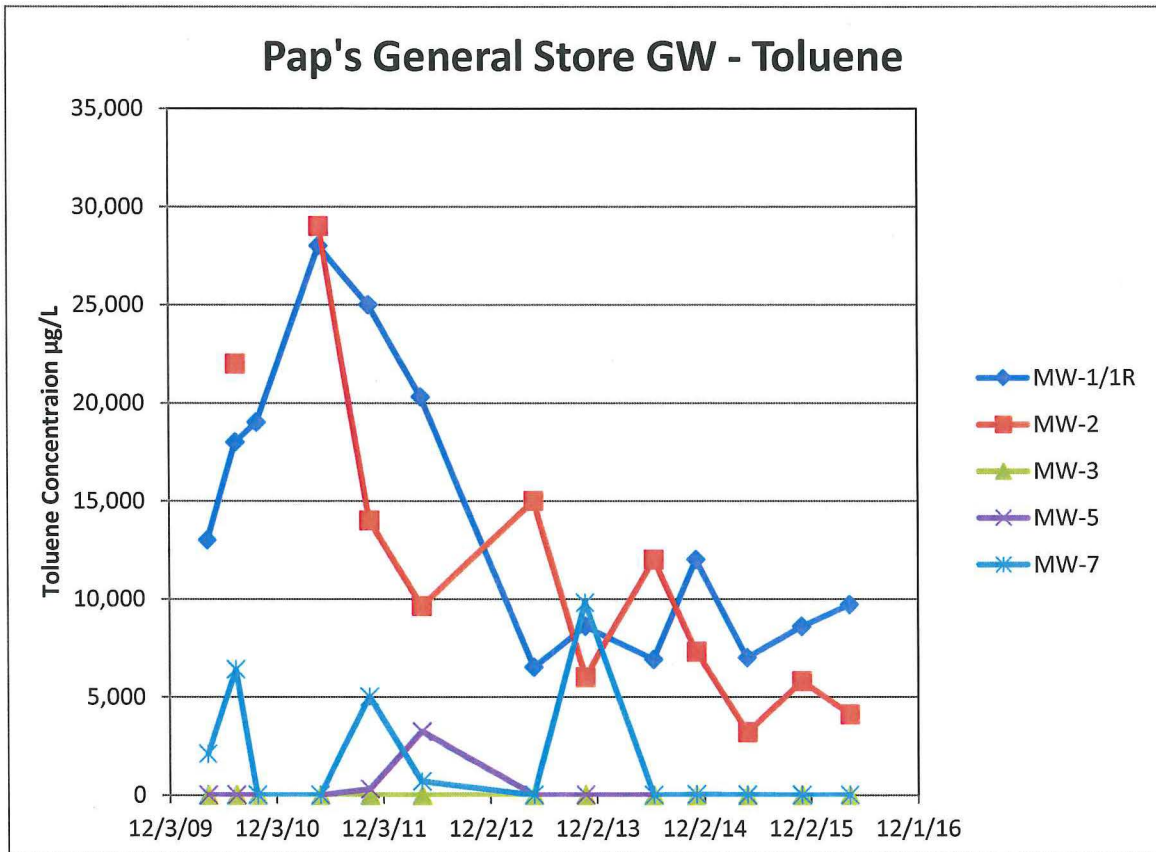
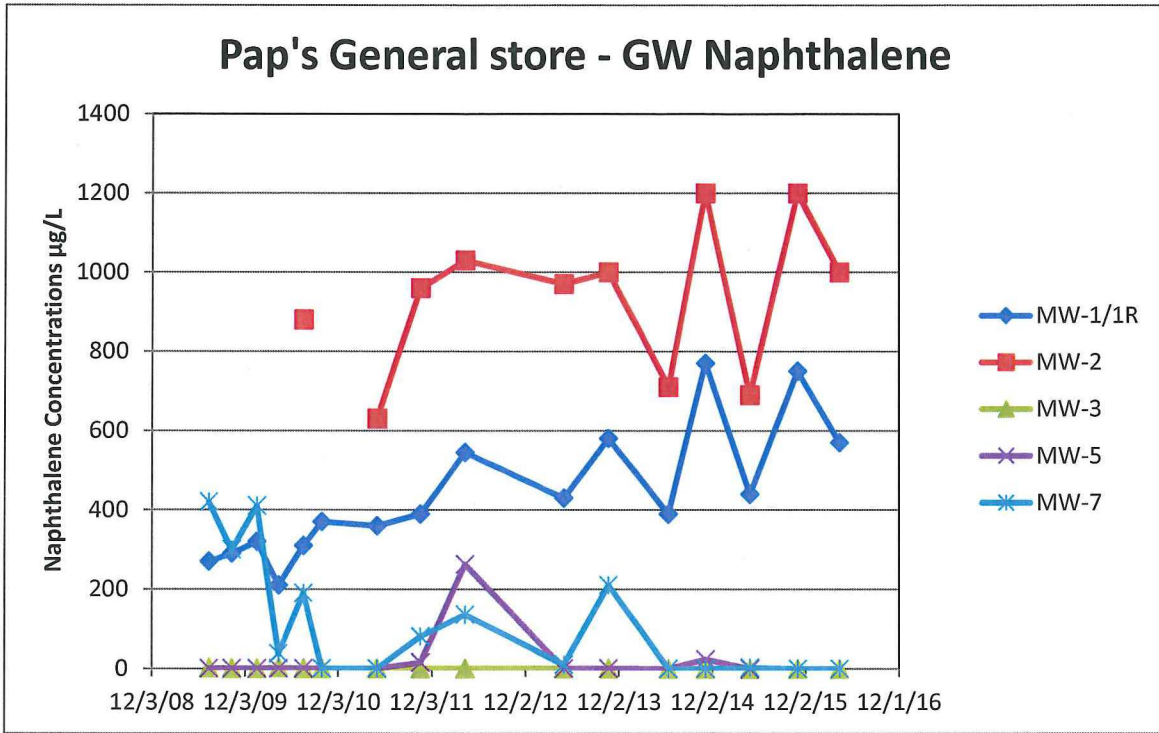
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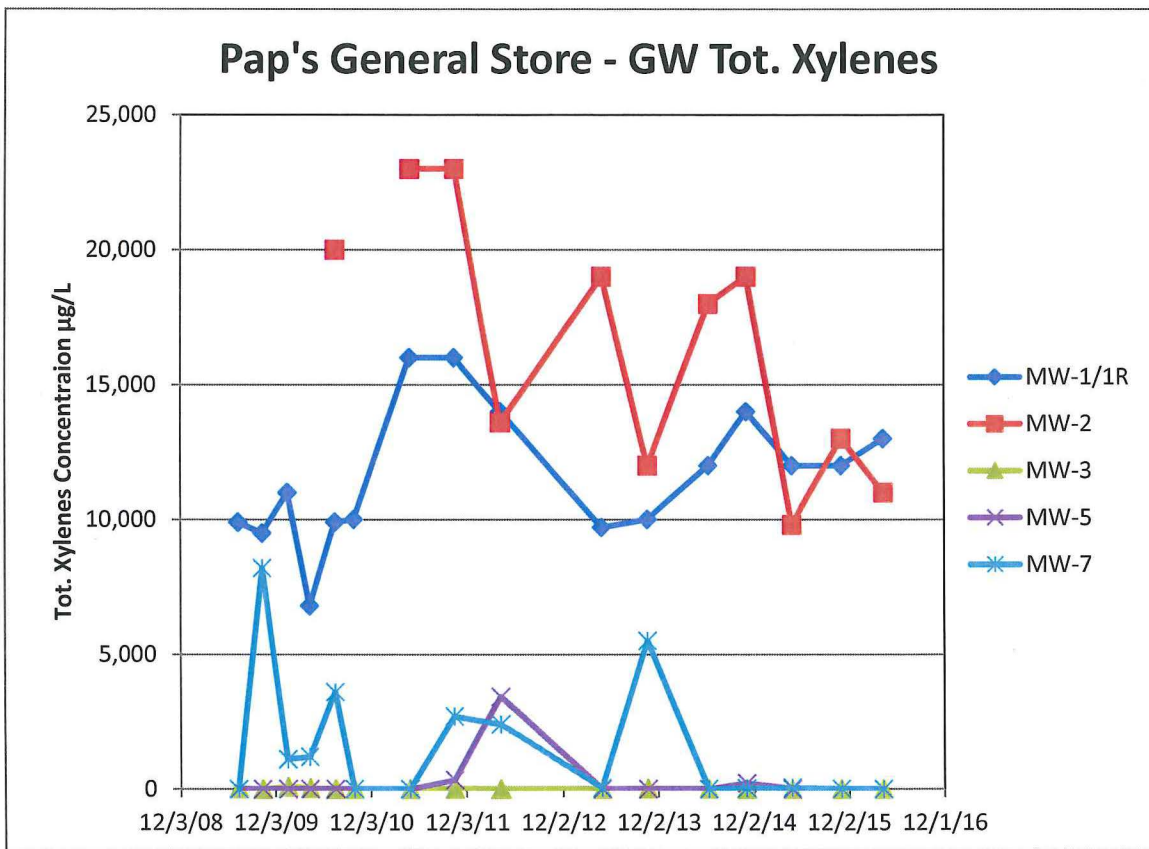
**PAPS GENERAL STORE  
RICK SCGLIO  
RESIDUAL SOIL CONTAMINATION**

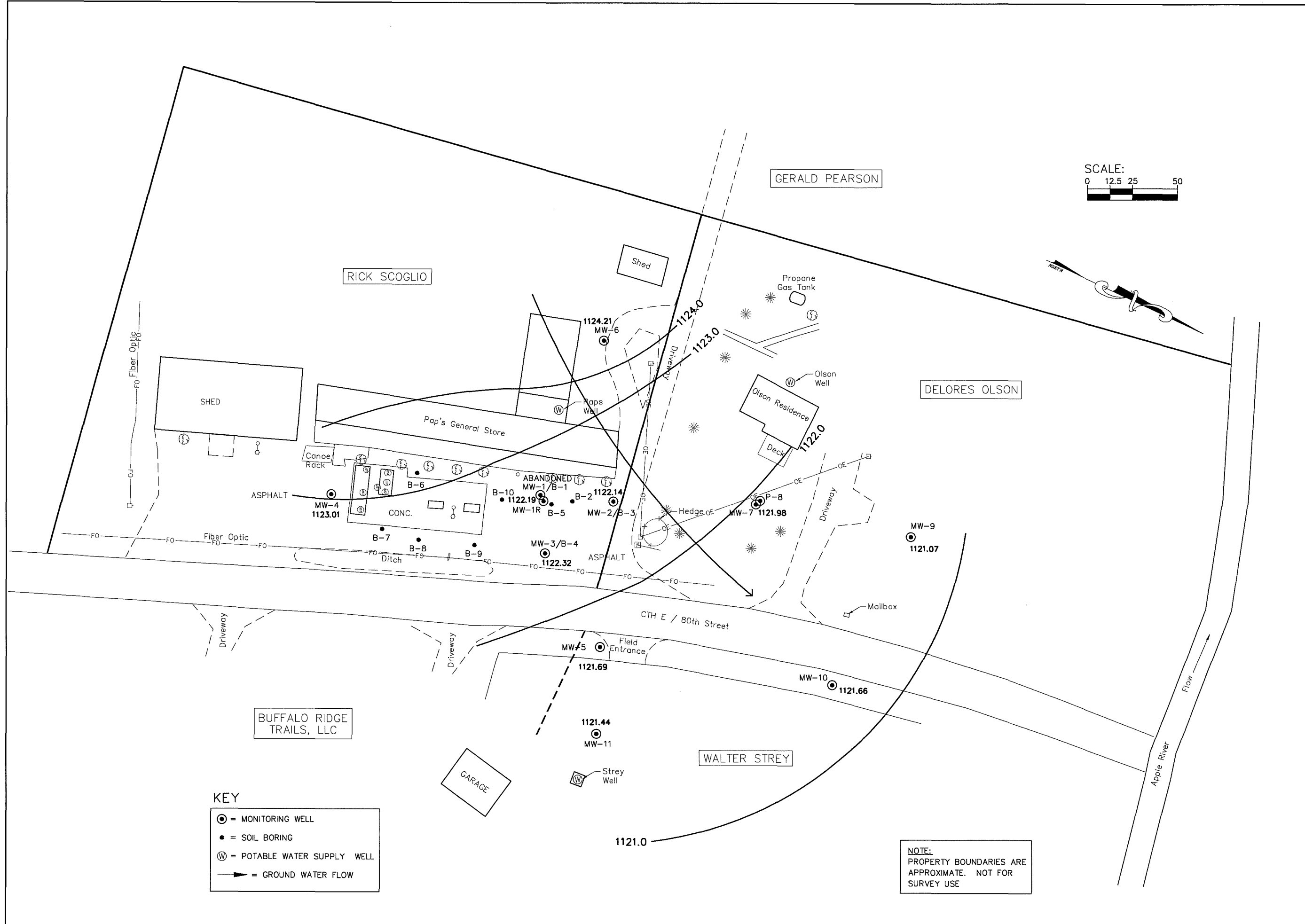












JOB NO.	S2880-002
BOOK NO.	
Client	Pap's General Store
DRAWN BY	MLW
CHECKED BY	SEM
DATE	JUNE 2016
REVISIONS	
REFERENCE FILE	S004base.dwg
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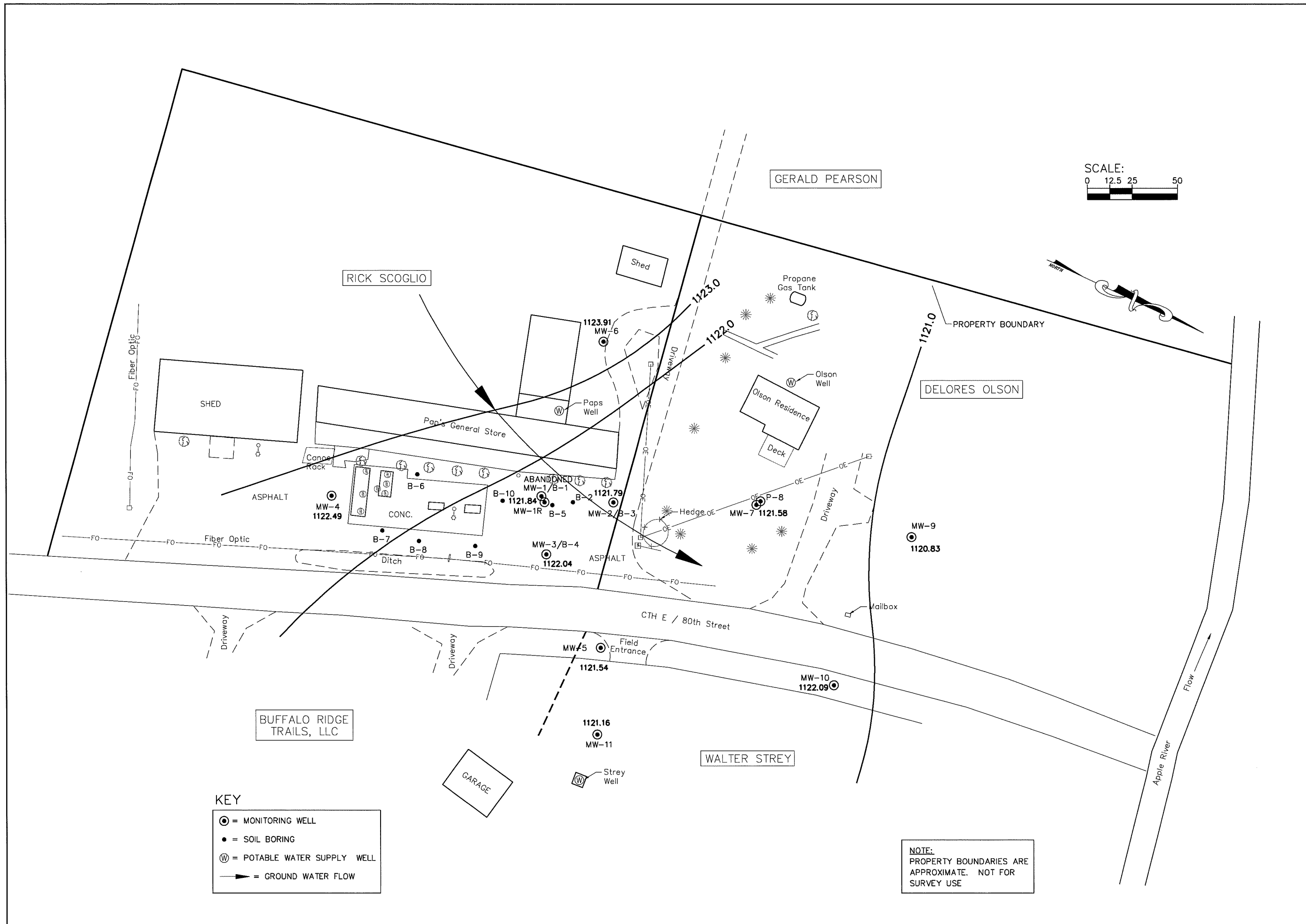
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**RICK SCOGLIO**  
 TOWN OF APPLE RIVER  
 GROUND WATER FLOW APRIL 13, 2016

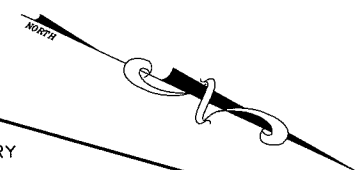
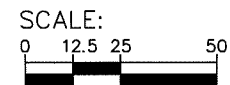
**KEY**

⊙	= MONITORING WELL
•	= SOIL BORING
⊕	= POTABLE WATER SUPPLY WELL
→	= GROUND WATER FLOW

**NOTE:**  
 PROPERTY BOUNDARIES ARE APPROXIMATE. NOT FOR SURVEY USE



JOB NO.	S2680-003
BOOK NO.	
PROJECT	Pap's General Store
DRAWN BY	MLW
CHECKED BY	SEM
DATE	JUNE 2016
REVISIONS	
REFERENCE FILE	S004base.dwg
DRAWING FILE	S004base.dwg



**KEY**

⊙	= MONITORING WELL
●	= SOIL BORING
⊕	= POTABLE WATER SUPPLY WELL
→	= GROUND WATER FLOW

**NOTE:**  
PROPERTY BOUNDARIES ARE APPROXIMATE. NOT FOR SURVEY USE

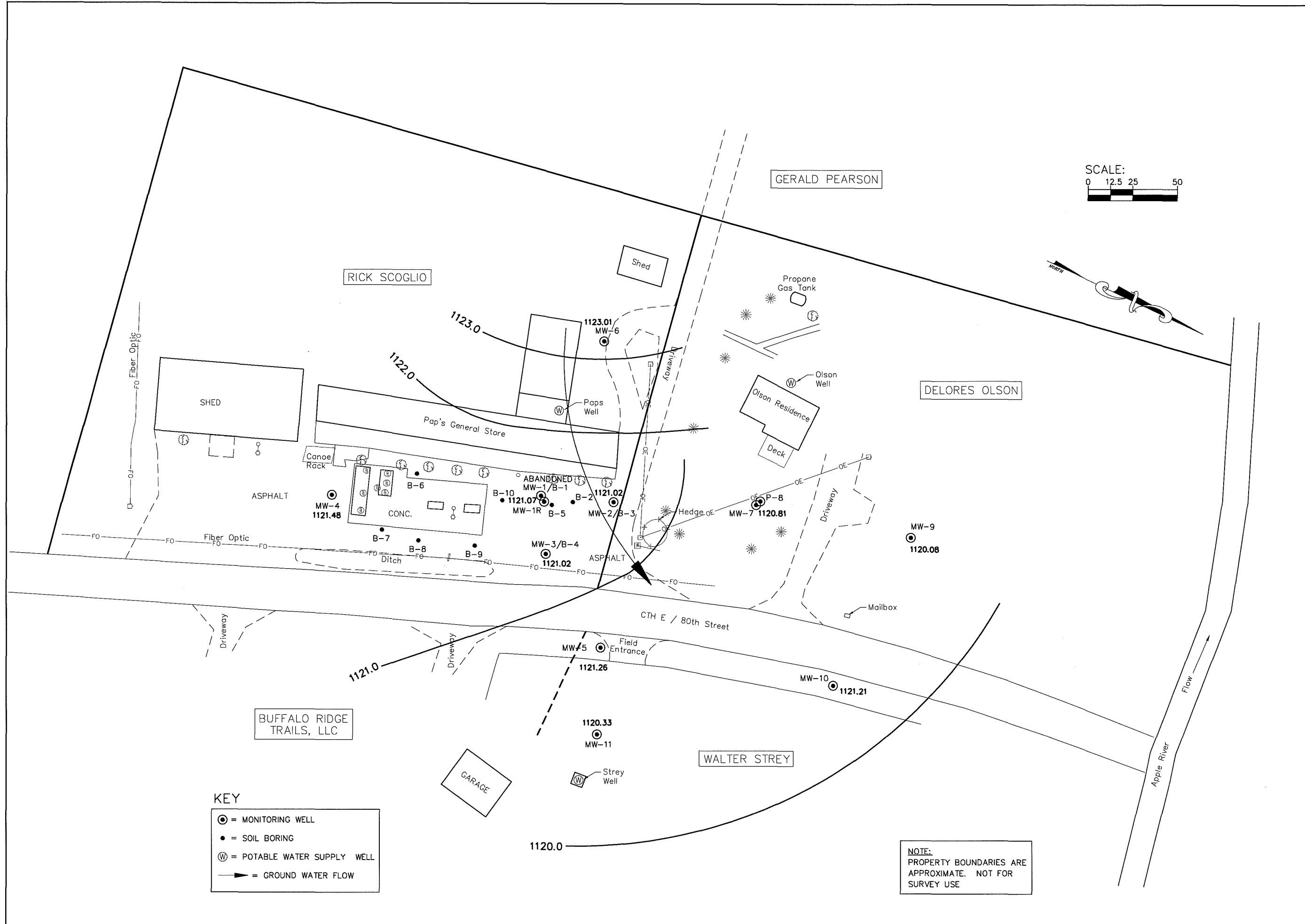
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**PAPS GENERAL STORE**  
RICK SCOGLIO  
TOWN OF APPLE RIVER  
GROUND WATER FLOW NOVEMBER 2, 2015



JOB NO.	S2880-003
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RICK SCOGLIO  
TOWN OF APPLE RIVER  
GROUND WATER FLOW APRIL 28, 2015

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⊕	= POTABLE WATER SUPPLY WELL
→	= GROUND WATER FLOW

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JOB NO.	S2880-002
BOOK NO.	
Pap's General Store	
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DATE	JUNE 2016
REVISIONS	
REFERENCE FILE	S004base.dwg
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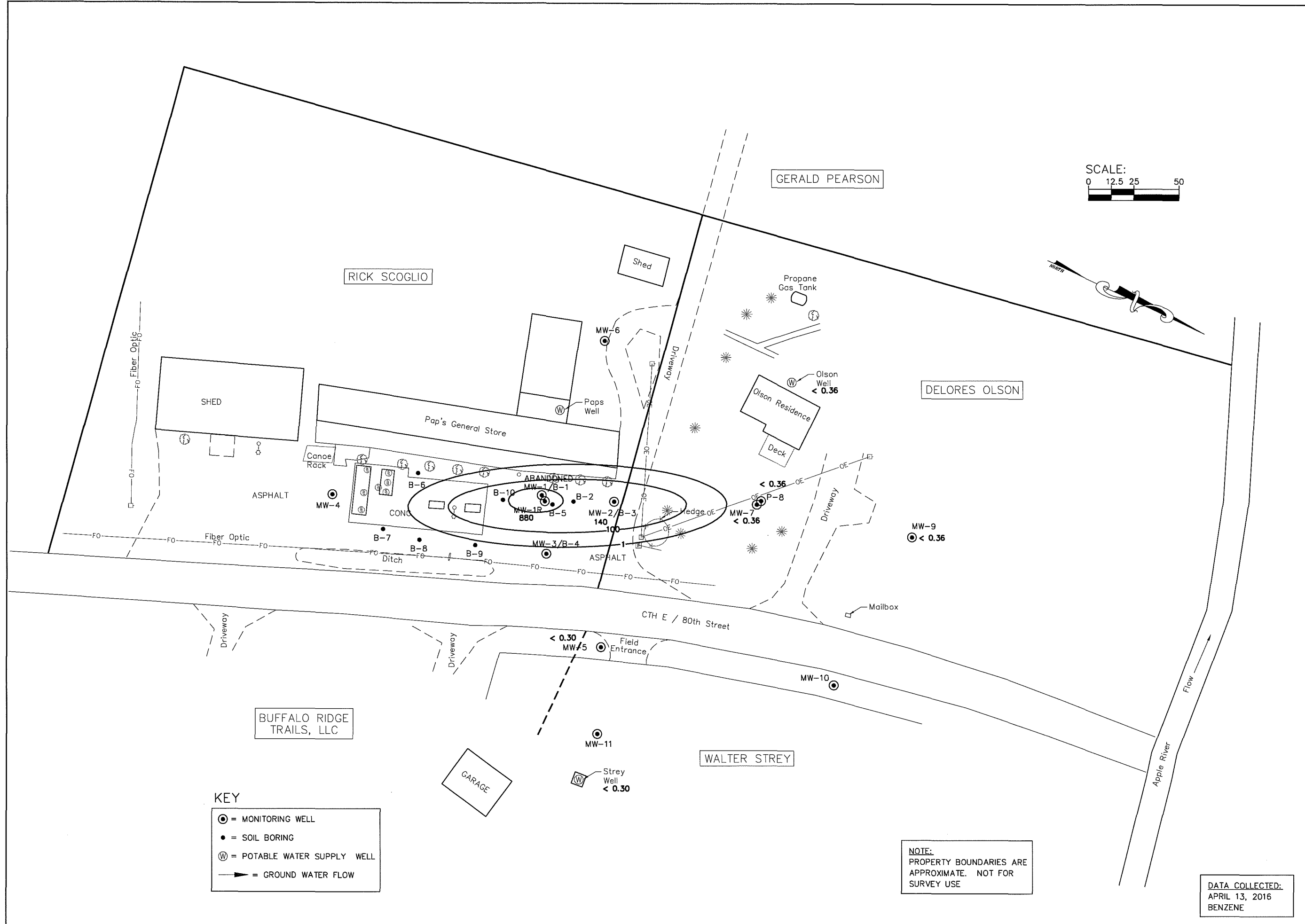
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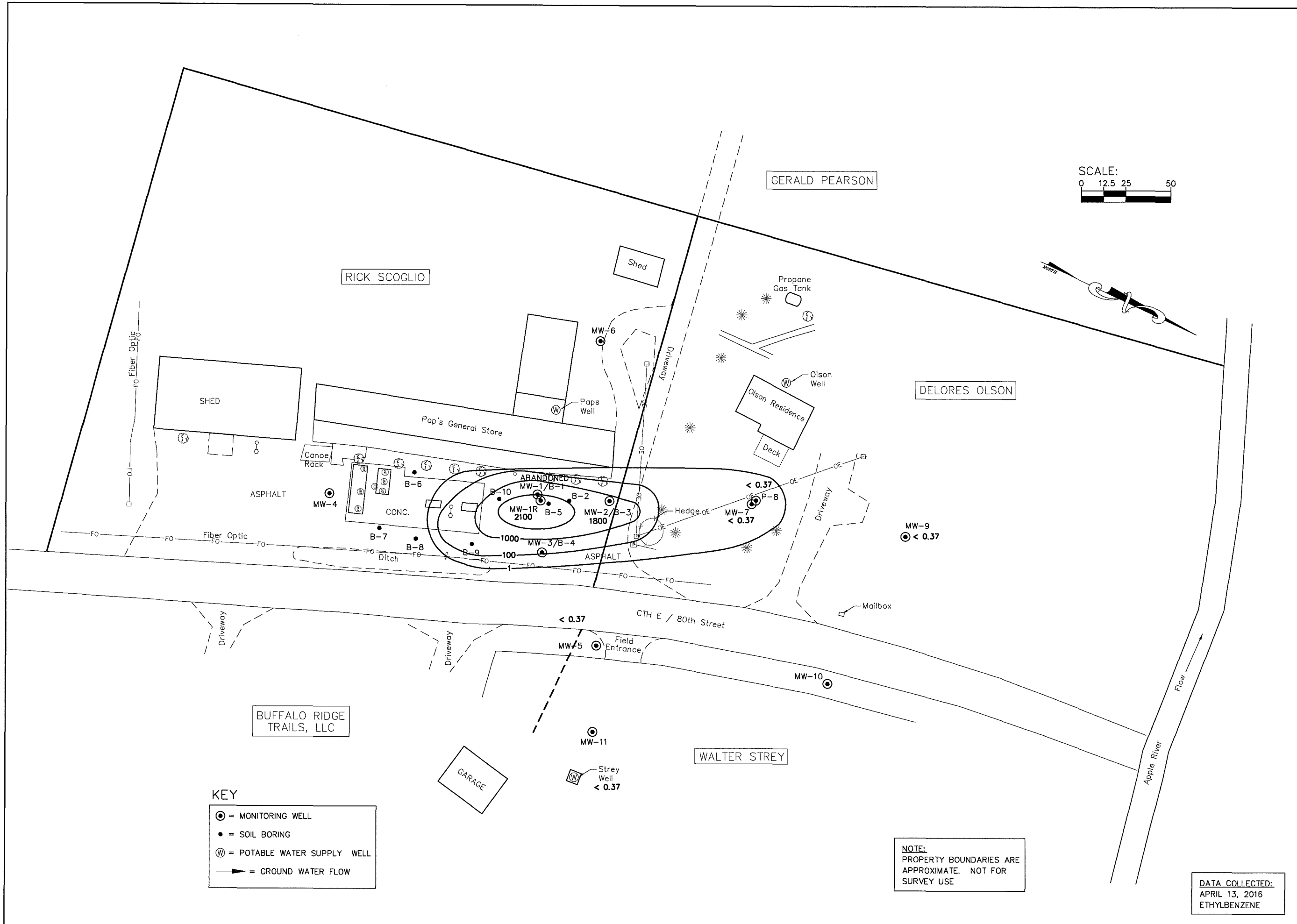
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RICK SCOGLIO  
TOWN OF APPLE RIVER  
BENZENE ISOCONCENTRATION MAP APRIL 2016





JOB NO.	S2880-002
BOOK NO.	
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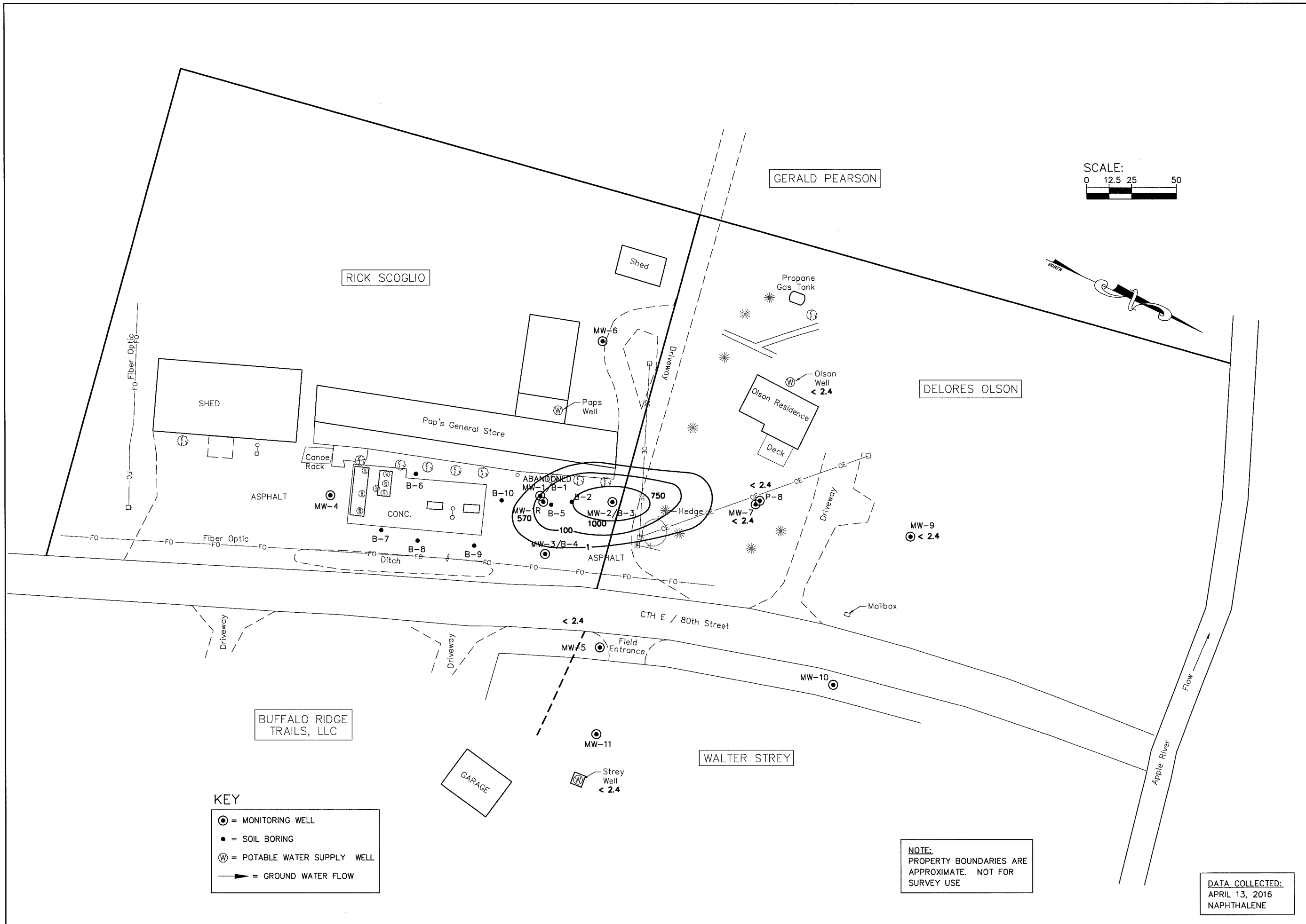
**PAPS GENERAL STORE**  
**RICK SCOGLIO**  
 TOWN OF APPLE RIVER  
**ETHYLBENZENE ISOCONCENTRATION MAP APRIL 2016**

**KEY**

⊙	= MONITORING WELL
•	= SOIL BORING
⊕	= POTABLE WATER SUPPLY WELL
→	= GROUND WATER FLOW

**NOTE:**  
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**DATA COLLECTED:**  
 APRIL 13, 2016  
 ETHYLBENZENE



JOB NO.	S2880-002
BOOK NO.	
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TOWN OF APPLE RIVER  
NAPHTHALENE ISOCONCENTRATION MAP APRIL 2016

**KEY**

⊙	= MONITORING WELL
•	= SOIL BORING
⊕	= POTABLE WATER SUPPLY WELL
→	= GROUND WATER FLOW

**NOTE:**  
PROPERTY BOUNDARIES ARE APPROXIMATE. NOT FOR SURVEY USE

**DATA COLLECTED:**  
APRIL 13, 2016  
NAPHTHALENE

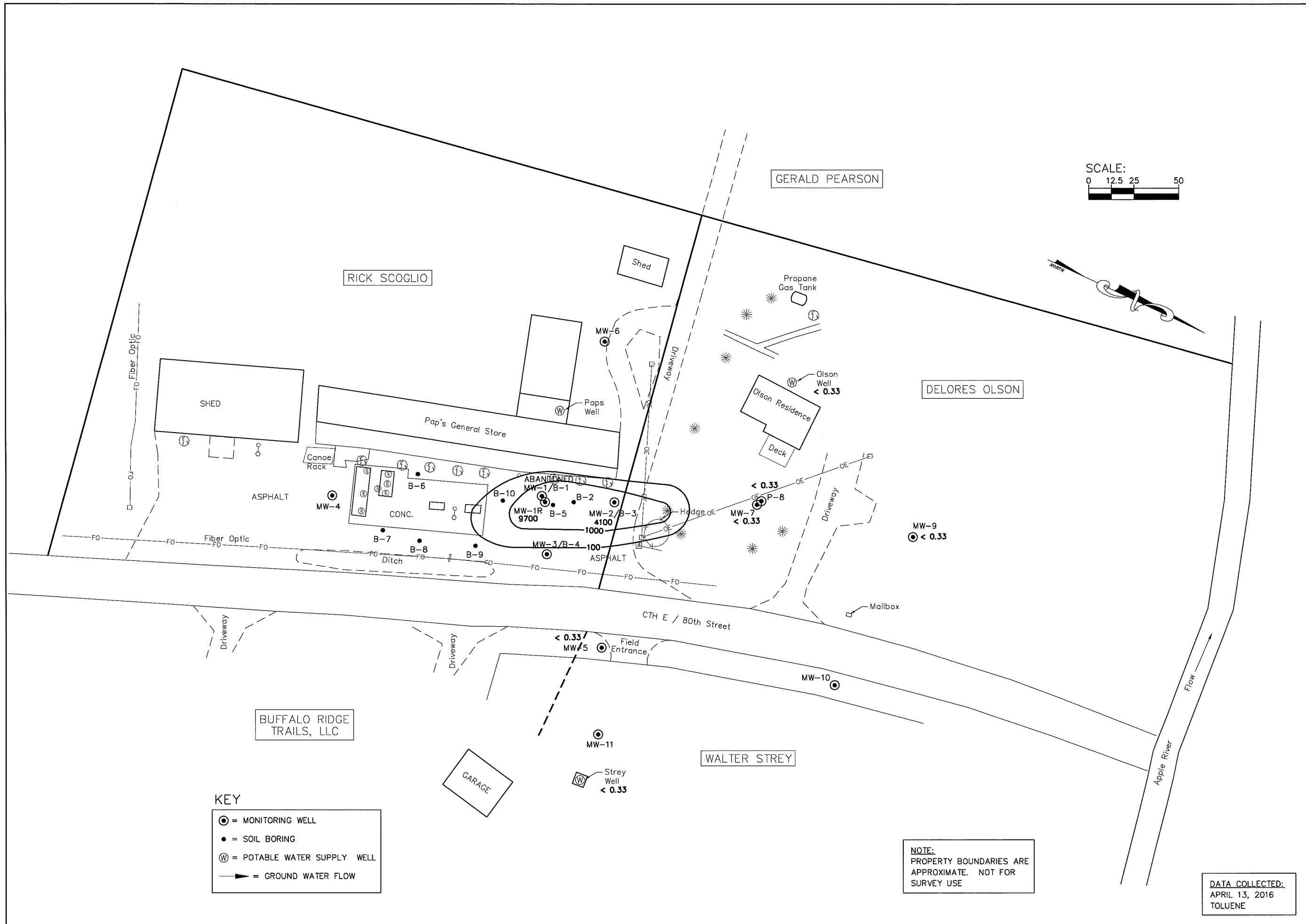
JOB NO.	S2880-002
BOOK NO.	
PROJECT	Pap's General Store
DRAWN BY	MLW
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DATE	JUNE 2016
REVISIONS	
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**RICK SCOGLIO**  
**TOWN OF APPLE RIVER**  
**TOLUENE ISOCONCENTRATION MAP APRIL 2016**



**KEY**

⊙	= MONITORING WELL
•	= SOIL BORING
Ⓜ	= POTABLE WATER SUPPLY WELL
→	= GROUND WATER FLOW

**NOTE:**  
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**DATA COLLECTED:**  
APRIL 13, 2016  
TOLUENE



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-110336-1  
Client Project/Site: Pap's General Store - 2880

For:  
Cedar Corporation  
604 Wilson Avenue  
Menomonie, Wisconsin 54751

Attn: Matt Taylor



*Authorized for release by:  
4/27/2016 4:38:59 PM*

Sandie Fredrick, Project Manager II  
(920)261-1660  
sandie.fredrick@testamericainc.com

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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## Case Narrative

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

---

**Job ID: 500-110336-1**

---

**Laboratory: TestAmerica Chicago**

**Narrative**

---

**Job Narrative**  
**500-110336-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 4/16/2016 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

**GC VOA**

Method(s) WI-GRO: Surrogate recovery for the following sample was outside control limits: MW-1R (500-110336-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**VOA Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Detection Summary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

### Client Sample ID: MW-1R

Lab Sample ID: 500-110336-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2100		5.0	3.0	ug/L	10		WDNR	Total/NA
1,3,5-Trimethylbenzene	620		5.0	3.0	ug/L	10		WDNR	Total/NA
Benzene	880		5.0	3.6	ug/L	10		WDNR	Total/NA
Ethylbenzene	2100		5.0	3.7	ug/L	10		WDNR	Total/NA
Methyl tert-butyl ether	170		5.0	2.4	ug/L	10		WDNR	Total/NA
Naphthalene	570		50	24	ug/L	10		WDNR	Total/NA
Toluene	9700		50	33	ug/L	100		WDNR	Total/NA
Xylenes, Total	13000		150	58	ug/L	100		WDNR	Total/NA

### Client Sample ID: MW-2

Lab Sample ID: 500-110336-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	3700		50	30	ug/L	100		WDNR	Total/NA
1,3,5-Trimethylbenzene	1200		50	30	ug/L	100		WDNR	Total/NA
Benzene	140		50	36	ug/L	100		WDNR	Total/NA
Ethylbenzene	1800		50	37	ug/L	100		WDNR	Total/NA
Methyl tert-butyl ether	290		50	24	ug/L	100		WDNR	Total/NA
Naphthalene	1000		500	240	ug/L	100		WDNR	Total/NA
Toluene	4100		50	33	ug/L	100		WDNR	Total/NA
Xylenes, Total	11000		150	58	ug/L	100		WDNR	Total/NA

### Client Sample ID: MW-3

Lab Sample ID: 500-110336-3

No Detections.

### Client Sample ID: MW-5

Lab Sample ID: 500-110336-4

No Detections.

### Client Sample ID: MW-7

Lab Sample ID: 500-110336-5

No Detections.

### Client Sample ID: P-8

Lab Sample ID: 500-110336-6

No Detections.

### Client Sample ID: MW-9

Lab Sample ID: 500-110336-7

No Detections.

### Client Sample ID: Olson

Lab Sample ID: 500-110336-8

No Detections.

### Client Sample ID: Strey

Lab Sample ID: 500-110336-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.30	J	0.50	0.24	ug/L	1		WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

**Client Sample ID: Trip**

**Lab Sample ID: 500-110336-10**

No Detections.



This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

---

<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH

---

**Protocol References:**

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-110336-1	MW-1R	Water	04/13/16 12:40	04/16/16 09:35
500-110336-2	MW-2	Water	04/13/16 12:50	04/16/16 09:35
500-110336-3	MW-3	Water	04/13/16 13:00	04/16/16 09:35
500-110336-4	MW-5	Water	04/13/16 12:30	04/16/16 09:35
500-110336-5	MW-7	Water	04/13/16 11:30	04/16/16 09:35
500-110336-6	P-8	Water	04/13/16 11:30	04/16/16 09:35
500-110336-7	MW-9	Water	04/13/16 11:20	04/16/16 09:35
500-110336-8	Olson	Water	04/13/16 11:45	04/16/16 09:35
500-110336-9	Strey	Water	04/13/16 12:10	04/16/16 09:35
500-110336-10	Trip	Water	04/13/16 00:00	04/16/16 09:35

# Client Sample Results

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

**Client Sample ID: MW-1R**

Date Collected: 04/13/16 12:40

Date Received: 04/16/16 09:35

**Lab Sample ID: 500-110336-1**

Matrix: Water

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)									
Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2100		5.0	3.0	ug/L			04/26/16 15:04	10
1,3,5-Trimethylbenzene	620		5.0	3.0	ug/L			04/26/16 15:04	10
Benzene	880		5.0	3.6	ug/L			04/26/16 15:04	10
Ethylbenzene	2100		5.0	3.7	ug/L			04/26/16 15:04	10
Methyl tert-butyl ether	170		5.0	2.4	ug/L			04/26/16 15:04	10
Naphthalene	570		50	24	ug/L			04/26/16 15:04	10
Toluene	9700		50	33	ug/L			04/27/16 12:57	100
Xylenes, Total	13000		150	58	ug/L			04/27/16 12:57	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	124	X	80 - 120					04/26/16 15:04	10
a,a,a-Trifluorotoluene	100		80 - 120					04/27/16 12:57	100

**Client Sample ID: MW-2**

Date Collected: 04/13/16 12:50

Date Received: 04/16/16 09:35

**Lab Sample ID: 500-110336-2**

Matrix: Water

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)									
Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	3700		50	30	ug/L			04/26/16 16:06	100
1,3,5-Trimethylbenzene	1200		50	30	ug/L			04/26/16 16:06	100
Benzene	140		50	36	ug/L			04/26/16 16:06	100
Ethylbenzene	1800		50	37	ug/L			04/26/16 16:06	100
Methyl tert-butyl ether	290		50	24	ug/L			04/26/16 16:06	100
Naphthalene	1000		500	240	ug/L			04/26/16 16:06	100
Toluene	4100		50	33	ug/L			04/26/16 16:06	100
Xylenes, Total	11000		150	58	ug/L			04/26/16 16:06	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		80 - 120					04/26/16 16:06	100
a,a,a-Trifluorotoluene	110		80 - 120					04/27/16 05:33	100

**Client Sample ID: MW-3**

Date Collected: 04/13/16 13:00

Date Received: 04/16/16 09:35

**Lab Sample ID: 500-110336-3**

Matrix: Water

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)									
Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 17:08	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 17:08	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 17:08	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 17:08	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 17:08	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 17:08	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 17:08	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		80 - 120					04/26/16 17:08	1

TestAmerica Chicago



## Client Sample Results

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

**Client Sample ID: MW-5**

**Lab Sample ID: 500-110336-4**

Date Collected: 04/13/16 12:30

Matrix: Water

Date Received: 04/16/16 09:35

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 17:40	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 17:40	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 17:40	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 17:40	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 17:40	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 17:40	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 17:40	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 17:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		80 - 120					04/26/16 17:40	1

**Client Sample ID: MW-7**

**Lab Sample ID: 500-110336-5**

Date Collected: 04/13/16 11:30

Matrix: Water

Date Received: 04/16/16 09:35

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 18:11	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 18:11	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 18:11	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 18:11	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 18:11	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 18:11	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 18:11	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 18:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		80 - 120					04/26/16 18:11	1

**Client Sample ID: P-8**

**Lab Sample ID: 500-110336-6**

Date Collected: 04/13/16 11:30

Matrix: Water

Date Received: 04/16/16 09:35

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 18:42	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 18:42	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 18:42	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 18:42	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 18:42	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 18:42	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 18:42	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 18:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		80 - 120					04/26/16 18:42	1

# Client Sample Results

Client: Cedar Corporation  
 Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

**Client Sample ID: MW-9**

**Lab Sample ID: 500-110336-7**

Date Collected: 04/13/16 11:20

Matrix: Water

Date Received: 04/16/16 09:35

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 19:13	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 19:13	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 19:13	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 19:13	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 19:13	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 19:13	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 19:13	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 19:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		80 - 120					04/26/16 19:13	1

**Client Sample ID: Olson**

**Lab Sample ID: 500-110336-8**

Date Collected: 04/13/16 11:45

Matrix: Water

Date Received: 04/16/16 09:35

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 19:44	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 19:44	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 19:44	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 19:44	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 19:44	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 19:44	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 19:44	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 19:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	93		80 - 120					04/26/16 19:44	1

**Client Sample ID: Strey**

**Lab Sample ID: 500-110336-9**

Date Collected: 04/13/16 12:10

Matrix: Water

Date Received: 04/16/16 09:35

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 20:15	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 20:15	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 20:15	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 20:15	1
<b>Methyl tert-butyl ether</b>	<b>0.30</b>	<b>J</b>	0.50	0.24	ug/L			04/26/16 20:15	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 20:15	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 20:15	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 20:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		80 - 120					04/26/16 20:15	1

TestAmerica Chicago

# Client Sample Results

Client: Cedar Corporation  
 Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

**Client Sample ID: Trip**

**Date Collected: 04/13/16 00:00**

**Date Received: 04/16/16 09:35**

**Lab Sample ID: 500-110336-10**

**Matrix: Water**

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 14:32	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 14:32	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 14:32	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 14:32	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 14:32	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 14:32	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 14:32	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 14:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>a,a,a-Trifluorotoluene</i>	96		80 - 120					04/26/16 14:32	1

# Definitions/Glossary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

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## Qualifiers

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### GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Reported value was between the limit of detection and the limit of quantitation.

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## Glossary

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Abbreviation	These commonly used abbreviations may or may not be present in this report.
±	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# QC Association Summary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

## GC VOA

### Analysis Batch: 334523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-110336-1	MW-1R	Total/NA	Water	WDNR	
500-110336-2	MW-2	Total/NA	Water	WDNR	
500-110336-2	MW-2	Total/NA	Water	WDNR	
500-110336-3	MW-3	Total/NA	Water	WDNR	
500-110336-4	MW-5	Total/NA	Water	WDNR	
500-110336-5	MW-7	Total/NA	Water	WDNR	
500-110336-6	P-8	Total/NA	Water	WDNR	
500-110336-7	MW-9	Total/NA	Water	WDNR	
500-110336-8	Olson	Total/NA	Water	WDNR	
500-110336-9	Strey	Total/NA	Water	WDNR	
500-110336-10	Trip	Total/NA	Water	WDNR	
LCS 490-334523/3	Lab Control Sample	Total/NA	Water	WDNR	
LCSD 490-334523/4	Lab Control Sample Dup	Total/NA	Water	WDNR	
MB 490-334523/28	Method Blank	Total/NA	Water	WDNR	
MB 490-334523/7	Method Blank	Total/NA	Water	WDNR	

### Analysis Batch: 334883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-110336-1	MW-1R	Total/NA	Water	WDNR	
LCS 490-334883/4	Lab Control Sample	Total/NA	Water	WDNR	
LCSD 490-334883/5	Lab Control Sample Dup	Total/NA	Water	WDNR	
MB 490-334883/7	Method Blank	Total/NA	Water	WDNR	

# Surrogate Summary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TFT (80-120)					
500-110336-1	MW-1R	124 X					
500-110336-1	MW-1R	100					
500-110336-2	MW-2	103					
500-110336-2	MW-2	110					
500-110336-3	MW-3	96					
500-110336-4	MW-5	96					
500-110336-5	MW-7	96					
500-110336-6	P-8	96					
500-110336-7	MW-9	96					
500-110336-8	Olson	93					
500-110336-9	Strey	98					
500-110336-10	Trip	96					
LCS 490-334523/3	Lab Control Sample	97					
LCS 490-334883/4	Lab Control Sample	100					
LCSD 490-334523/4	Lab Control Sample Dup	102					
LCSD 490-334883/5	Lab Control Sample Dup	99					
MB 490-334523/28	Method Blank	98					
MB 490-334523/7	Method Blank	98					
MB 490-334883/7	Method Blank	96					

### Surrogate Legend

TFT = a,a,a-Trifluorotoluene

## QC Sample Results

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: MB 490-334523/28**  
**Matrix: Water**  
**Analysis Batch: 334523**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 22:19	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 22:19	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 22:19	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 22:19	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 22:19	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 22:19	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 22:19	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 22:19	1
<b>MB MB</b>									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene	98		80 - 120				04/26/16 22:19	1	

**Lab Sample ID: MB 490-334523/7**  
**Matrix: Water**  
**Analysis Batch: 334523**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 11:26	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/26/16 11:26	1
Benzene	<0.36		0.50	0.36	ug/L			04/26/16 11:26	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/26/16 11:26	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/26/16 11:26	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/26/16 11:26	1
Toluene	<0.33		0.50	0.33	ug/L			04/26/16 11:26	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/26/16 11:26	1
<b>MB MB</b>									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene	98		80 - 120				04/26/16 11:26	1	

**Lab Sample ID: LCS 490-334523/3**  
**Matrix: Water**  
**Analysis Batch: 334523**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	100	95.6		ug/L		96	70 - 130
Benzene	100	95.2		ug/L		95	69 - 129
Ethylbenzene	100	95.3		ug/L		95	70 - 130
Methyl tert-butyl ether	100	99.7		ug/L		100	57 - 138
m-Xylene & p-Xylene	200	187		ug/L		93	65 - 127
Naphthalene	100	92.8		ug/L		93	69 - 133
o-Xylene	100	94.6		ug/L		95	64 - 128
Toluene	100	96.6		ug/L		97	66 - 127
Xylenes, Total	300	282		ug/L		94	
<b>LCS LCS</b>							
Surrogate	%Recovery	Qualifier	Limits				
a,a,a-Trifluorotoluene	97		80 - 120				

TestAmerica Chicago

# QC Sample Results

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

**Lab Sample ID: LCSD 490-334523/4**

**Matrix: Water**

**Analysis Batch: 334523**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	100	92.9		ug/L		93	60 - 131	1	43
1,3,5-Trimethylbenzene	100	94.6		ug/L		95	70 - 130	1	20
Benzene	100	94.0		ug/L		94	69 - 129	1	33
Ethylbenzene	100	94.7		ug/L		95	70 - 130	1	35
Methyl tert-butyl ether	100	97.4		ug/L		97	57 - 138	2	40
m-Xylene & p-Xylene	200	184		ug/L		92	65 - 127	1	39
Naphthalene	100	93.2		ug/L		93	69 - 133	0	48
o-Xylene	100	93.7		ug/L		94	64 - 128	1	35
Toluene	100	95.6		ug/L		96	66 - 127	1	34
Xylenes, Total	300	278		ug/L		93		1	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	102		80 - 120

**Lab Sample ID: MB 490-334883/7**

**Matrix: Water**

**Analysis Batch: 334883**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/27/16 11:21	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/27/16 11:21	1
Benzene	<0.36		0.50	0.36	ug/L			04/27/16 11:21	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/27/16 11:21	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/27/16 11:21	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/27/16 11:21	1
Toluene	<0.33		0.50	0.33	ug/L			04/27/16 11:21	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/27/16 11:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		80 - 120		04/27/16 11:21	1

**Lab Sample ID: LCS 490-334883/4**

**Matrix: Water**

**Analysis Batch: 334883**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	100	93.2		ug/L		93	60 - 131
1,3,5-Trimethylbenzene	100	95.1		ug/L		95	70 - 130
Benzene	100	94.8		ug/L		95	69 - 129
Ethylbenzene	100	95.1		ug/L		95	70 - 130
Methyl tert-butyl ether	100	100		ug/L		100	57 - 138
m-Xylene & p-Xylene	200	185		ug/L		93	65 - 127
Naphthalene	100	93.2		ug/L		93	69 - 133
o-Xylene	100	94.2		ug/L		94	64 - 128
Toluene	100	96.3		ug/L		96	66 - 127
Xylenes, Total	300	279		ug/L		93	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	100		80 - 120

TestAmerica Chicago



## QC Sample Results

Client: Cedar Corporation  
 Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Lab Sample ID: LCSD 490-334883/5  
 Matrix: Water  
 Analysis Batch: 334883

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	100	91.8		ug/L		92	60 - 131	2	43
1,3,5-Trimethylbenzene	100	93.6		ug/L		94	70 - 130	2	20
Benzene	100	93.6		ug/L		94	69 - 129	1	33
Ethylbenzene	100	93.5		ug/L		94	70 - 130	2	35
Methyl tert-butyl ether	100	97.8		ug/L		98	57 - 138	2	40
m-Xylene & p-Xylene	200	183		ug/L		91	65 - 127	1	39
Naphthalene	100	93.9		ug/L		94	69 - 133	1	48
o-Xylene	100	92.7		ug/L		93	64 - 128	2	35
Toluene	100	94.9		ug/L		95	66 - 127	1	34
Xylenes, Total	300	276		ug/L		92		1	

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
<i>a,a,a-Trifluorotoluene</i>	99		80 - 120

# Lab Chronicle

Client: Cedar Corporation  
 Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

**Client Sample ID: MW-1R**

**Lab Sample ID: 500-110336-1**

Date Collected: 04/13/16 12:40

Matrix: Water

Date Received: 04/16/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		10	334523	04/26/16 15:04	GWM	TAL NSH
Total/NA	Analysis	WDNR		100	334883	04/27/16 12:57	GWM	TAL NSH

**Client Sample ID: MW-2**

**Lab Sample ID: 500-110336-2**

Date Collected: 04/13/16 12:50

Matrix: Water

Date Received: 04/16/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		100	334523	04/26/16 16:06	GWM	TAL NSH
Total/NA	Analysis	WDNR		100	334523	04/27/16 05:33	GWM	TAL NSH

**Client Sample ID: MW-3**

**Lab Sample ID: 500-110336-3**

Date Collected: 04/13/16 13:00

Matrix: Water

Date Received: 04/16/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 17:08	GWM	TAL NSH

**Client Sample ID: MW-5**

**Lab Sample ID: 500-110336-4**

Date Collected: 04/13/16 12:30

Matrix: Water

Date Received: 04/16/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 17:40	GWM	TAL NSH

**Client Sample ID: MW-7**

**Lab Sample ID: 500-110336-5**

Date Collected: 04/13/16 11:30

Matrix: Water

Date Received: 04/16/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 18:11	GWM	TAL NSH

**Client Sample ID: P-8**

**Lab Sample ID: 500-110336-6**

Date Collected: 04/13/16 11:30

Matrix: Water

Date Received: 04/16/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 18:42	GWM	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

## Client Sample ID: MW-9

Date Collected: 04/13/16 11:20

Date Received: 04/16/16 09:35

Lab Sample ID: 500-110336-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 19:13	GWM	TAL NSH

## Client Sample ID: Olson

Date Collected: 04/13/16 11:45

Date Received: 04/16/16 09:35

Lab Sample ID: 500-110336-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 19:44	GWM	TAL NSH

## Client Sample ID: Strey

Date Collected: 04/13/16 12:10

Date Received: 04/16/16 09:35

Lab Sample ID: 500-110336-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 20:15	GWM	TAL NSH

## Client Sample ID: Trip

Date Collected: 04/13/16 00:00

Date Received: 04/16/16 09:35

Lab Sample ID: 500-110336-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	334523	04/26/16 14:32	GWM	TAL NSH

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



# Certification Summary

Client: Cedar Corporation  
Project/Site: Pap's General Store - 2880

TestAmerica Job ID: 500-110336-1

## Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-16

## Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998020430	08-31-16



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To (optional)  
Contact: Matt Taylor  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

Bill To (optional)  
Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#/Reference#: \_\_\_\_\_

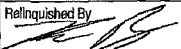
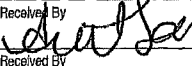
## Chain of Custody Record

Lab Job #: 500-110336  
Chain of Custody Number: \_\_\_\_\_  
Page 1 of 1  
Temperature °C of Cooler: 2.6

Client		Client Project #		Preservative		Parameter		Matrix		 500-110336 COC 8. ... 9. Other
Cedar Corporation		2880		1						
Project Name		Lab Project #		# of Containers		Matrix				
Paps General Store				2		W		X		
Project Location/State		Lab PM		Date		Time				Comments
WI		Sandie Fredrick		4-13-16		12:40				
Sampler		Sample ID		Date		Time				
KJB / RDS		MW-1R								
Lab ID		MS/MSD		Date		Time				
1										
2		MW-2				12:50				
3		MW-3				13:00				
4		MW-5				12:30				
5		MW-7				11:30				
6		P-8				11:30				
7		MW-9				11:20				
8		Olson				11:45				
9		Strey		↓		12:10		↓ ↓ ↓		
10		Trip								

Turnaround Time Required (Business Days)  
 1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
 Requested Due Date \_\_\_\_\_

Sample Disposal  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	Cedar Corp	4-13-16	16:00		TA-CMS	Office file	09:35
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: \_\_\_\_\_  
 Shipped: \_\_\_\_\_  
 Hand Delivered: \_\_\_\_\_

- Matrix Key
- WW - Wastewater
  - W - Water
  - S - Soil
  - SL - Sludge
  - MS - Miscellaneous
  - OL - Oil
  - A - Air
  - SE - Sediment
  - SO - Soil
  - L - Leachate
  - WI - Wipe
  - DW - Drinking Water
  - O - Other

Client Comments

Lab Comments:

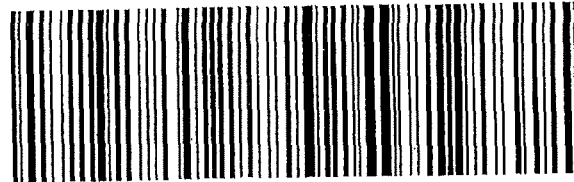
TAL-4124-500 (1209)

FedEx  
TRK# 8097 0423 0366  
0215

SATURDAY 12:00P  
PRIORITY OVERNIGHT

60484  
IL-US  
ORD

X0 JOTA



FD 543099 16APR16 EAVA 539C1/1042/401D

FedEx Express Package US Airbill

FedEx Tracking Number 8097 0423 0366

1 From Date 4-15-16

Sender's Name Kevin Bartel Phone 715 235 9031

Company Cedar Corporation

Address 604 Wilson Ave

City Milwaukee State WI ZIP 53211

2 Your Internal Billing Reference

3 To Recipient Name SAMPLE RECEIPT Phone 708 504-5200

Company TESTAMERICA CHICAGO

Address 2417 BOND ST

We cannot deliver to R.O. boxes or P.O. ZIP codes.

Address UNIVERSITY PARK

City UNIVERSITY PARK State IL ZIP 60484-3101



8097 0423 0366

4 Express Package Service

Next Business Day

FedEx First Overnight

FedEx Priority Overnight

FedEx Standard Overnight

2 or 3 Business Days

FedEx 2Day A.M.

FedEx 2Day

FedEx Express Saver

5 Packaging

FedEx Envelope\*  FedEx Pak\*  FedEx Box  Other

6 Special Handling and Delivery Signature

Saturday Delivery

No Signature Required  Direct Signature

Does this shipment contain dangerous goods?

No  Yes

7 Payment Bill to:

Sender  Recipient  Third Party  Credit Card  Cash/Check

Total Packages Total Weight

Your liability is limited to US\$100 unless you declare a higher value.

Rev. Date 5/15 • Part #109124 • ©1994-2015 FedEx • PRINTED IN U.S.A. SPM

Align Open End of FedEx Pouch Here

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## COOLER RECEIPT FORM



500-110336 Chain of Custody

Cooler Received/Opened On 4/19/2016 @ 1015

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1658 (2 Hour Window)

1. Tracking # 3384 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 96210146 pH Strip Lot HC568401 Chlorine Strip Lot 1211515B

2. Temperature of rep. sample or temp blank when opened: 4.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1 front 1 Back

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) JK

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # N/A

I certify that I unloaded the cooler and answered questions 7-14 (initial) ACS

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) ACS

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) ACS

I certify that I attached a label with the unique LIMS number to each container (initial) ACS

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO # N/A

**TestAmerica Chicago**

2417 Bond Street  
 University Park, IL 60484  
 Phone (708) 534-5200 Fax (708) 534-5211

**Chain of Custody Record**



**TestAmerica**  
 THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Fredrick, Sandie J		Carrier Tracking No(s):		COC No: 500-72400.1	
Client Contact: Shipping/Receiving		Phone:		E-Mail: sandie.fredrick@testamericainc.com				Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc				<b>Analysis Requested</b>				Job #: 500-110336-1	
Address: 2960 Foster Creighton Drive, City: Nashville State, Zip: TN, 37204		Due Date Requested: 4/28/2016		Field Filtered Sample (Yes or No) Yes No WT GRO/5030B (MOD) WISC PVOC + Nap				Preservation Codes: A - HCL M - Hexane B - NaOH N - NaOH C - Zn Ac D - Nitric E - NaHS F - MeOH G - Amoh H - Ascort I - Ice J - DI Water K - EDTA L - EDA Other:	
Project Name: Pap's General Store - 2880		TAT Requested (days):							
Site:		PO #:							
Project #: 50006556		WO #:							
SSOW#:									
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A=Air)</b>	
								<b>Field Filtered Sample (Yes or No)</b>	
								<b>WT GRO/5030B (MOD) WISC PVOC + Nap</b>	
								<b>Total Number of Containers</b>	
								<b>Special Instructions/Note:</b>	
MW-1R (500-110336-1)		4/13/16		12:40 Central		Water		X	
MW-2 (500-110336-2)		4/13/16		12:50 Central		Water		X	
MW-3 (500-110336-3)		4/13/16		13:00 Central		Water		X	
MW-5 (500-110336-4)		4/13/16		12:30 Central		Water		X	
MW-7 (500-110336-5)		4/13/16		11:30 Central		Water		X	
P-8 (500-110336-6)		4/13/16		11:30 Central		Water		X	
MW-9 (500-110336-7)		4/13/16		11:20 Central		Water		X	
Olson (500-110336-8)		4/13/16		11:45 Central		Water		X	
Strey (500-110336-9)		4/13/16		12:10 Central		Water		X	
Trip (500-110336-10)		4/13/16		Central		Water		X	
<b>Possible Hazard Identification</b>				<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>					
Unconfirmed				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <i>[Signature]</i>		Date/Time: 04/18/16 1600		Company: TAL		Received by: <i>[Signature]</i>		Date/Time: 4/19/16 1015	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 4.6°C					

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4/27/2016



## Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-110336-1

**Login Number: 110336**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Sanchez, Ariel M**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-110336-1

**Login Number: 110336**  
**List Number: 2**  
**Creator: Stvartak, Anthony Q**

**List Source: TestAmerica Nashville**  
**List Creation: 04/19/16 04:54 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-110336-1

**Login Number: 110336**  
**List Number: 3**  
**Creator: Stvartak, Anthony Q**

**List Source: TestAmerica Nashville**  
**List Creation: 04/19/16 04:55 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	