

## 1.0 Executive Summary

Fitzgerald Henne & Associates, Inc., (Fitzgerald Henne) has performed a Phase I environmental site assessment (ESA) of the former Total Service Station site in Mt. Pleasant, Isabella County, Michigan. This site assessment was performed for Olson's Firestone Service Inc.

Fitzgerald Henne personnel conducted the Phase I site walkover on June 30, 1999. The walkover was followed by a review of government records, assembly and review of data from area maps and directories, assessment of aerial photographs, and interviews with the property owner, others familiar with the site, and government officials.

Based on the information obtained during Fitzgerald Henne's assessment, there are three recognized environmental conditions (RECs) on the site. The conditions are:

- 1) The site is a permanently-closed service station. Soil and groundwater contamination (including free-phase gasoline) has been identified on the property.
- 2) The site has been used as a service station since the 1920s. The former building associated with the original service station operation may have been used for repair work. Solvents or waste materials may have been improperly disposed on the site.
- 3) The CarQuest property south of the site was formerly a service station and auto repair shop. No records exist regarding whether this property is contaminated, however, groundwater flows north, and contaminants (if present) could migrate from this property onto the site.

## 2.0 Objectives and Scope of Phase I Site Assessment

The objective of this environmental site assessment (ESA) was to evaluate the property for evidence of hazardous substance disposal or releases from or onto the property, evidence of environmental threats from adjacent properties, and other current and historical recognized environmental conditions (RECs)<sup>1</sup>. Fitzgerald Henne used this information to decide whether

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<sup>1</sup> According to ASTM, an REC is defined as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

further environmental testing of the property is warranted. In conducting this site assessment, Fitzgerald Henne followed ASTM standards for ESAs (E1527-97).

The walkover investigation of the former Total Service Station site was performed on June 30, 1999 by Fitzgerald Henne representative Adam Heft. The assessment included a review of the site's current and previous occupancy and operations, a visual review of adjacent property uses and conditions from public rights-of-way, and a review of state and federal database records. In addition, the histories of the site and adjacent property uses were assessed by evaluating practically reviewable aerial photographs, street directory listings, and United States Geological Survey topographic maps, and by interviewing appropriate individuals who had knowledge of the site and surrounding area.

### **3.0 Site Location and Description**

The site is located in the northeast quarter section of Section 15, Town 14N, Range 4W, Union Township, Isabella County, Michigan (Figures 1 and 2 in Appendix A). The site is composed of two parcels of property (each 66 feet by 138 feet in area), as illustrated in Figure 3 in Appendix A.

At the time of Fitzgerald Henne's visit to the site, the predominant land use of the area was commercial. North Mission Street bounds the east side of the site, and East Pickard Street bounds the north side of the site. The site is occupied by a permanently-closed service station. At the time of Fitzgerald Henne's site visit, the property was vacant. Two filled excavations and four monitoring wells were present on the property.

## **4.0 Geologic Setting**

### **4.1 Surficial Soils**

Fitzgerald Henne reviewed the soil survey maps prepared by the U.S. Department of Agriculture, Natural Resources Conservation Services (formerly the Soil Conservation Service), for Isabella County to obtain general information about the surficial soils on the site. Where they were visible, Fitzgerald Henne also viewed surficial soils to better identify the on-site soil characteristics. Fitzgerald Henne did not dig any exploration holes as part of this Phase I assessment, thus no subsurface soils were viewed.

The soil conservation maps show that soils on the site fall within the "Urban Land - Thetford Complex, 0 to 3 percent slopes" classification. Urban Land soils are typically too disturbed or obscured to permit classification. The soils in the Thetford classification have moderately rapid

permeabilities and slow runoff. Surficial soils that could be seen appeared to be sandy loam. Sand and gravel backfill was present in the two excavations on the site.

## **4.2 Soils Overlying the Bedrock Formation**

The "Quaternary Geology of Southern Michigan Map" (Farrand and Bell, 1982) shows that the surficial on the site is composed of gray to dark brown clay, which is varved in some localities, and chiefly underlies extensive, flat, low-lying areas. These low-lying areas were formerly inundated by the glacial Great Lakes, but also occur in separate, small lake basins, and include small areas of lacustrine sand and clay-rich till.

Fitzgerald Henne obtained information about the geology of the site while reviewing soil boring logs installed by Compliance Inc., as part of the hydrogeologic study related to the leaking underground storage tanks on the site. The boring logs for the site show that approximately nine feet of sandy clay overlies at least six feet of fine- to medium-grained sand. Saturation occurs in the sand at approximately 11 feet below the ground surface.

## **4.3 Bedrock Geology**

The "Bedrock Geology of Southern Michigan" Map (Wilson and Milstein, 1987) shows that the Grand River Formation is mixed with Late Jurassic-age "Red Beds". These red beds are composed of mainly sandstone, limestone, shale and clay, and occur in lens-shaped, discontinuous patches. This formation ranges from zero to 400 feet in thickness. Red bed deposits were likely formed in ancient lakes, ponds and stream valleys in a semi-arid environment (Dorr & Eschman, 1970).

## **4.4 Site Hydrology and Hydrogeology**

Isabella County is within the Central Lower Peninsula Hydrologic Province as defined by the U.S. Geological Survey. This region is characterized by glacial deposits of variable thickness that overlie high-yielding aquifers in Pennsylvanian-age bedrock. In the area of the subject site, the bedrock is the source of groundwater for municipal wells (Rheaume, 1991).

The surface topography of the site and the surrounding area is flat. According to the U.S.G.S. 7½-minute topographic map of the Mount Pleasant, Michigan Quadrangle, the site is approximately 766 feet above mean sea level (Figure 2 in Appendix A).

Surface water on the site drains into storm sewers. The direction of groundwater flow in the unconsolidated glacial materials above the bedrock is north, as determined by measurements collected from the monitoring wells on the site on May 12, 1999 by Compliance Inc.

## **4.5 Anticipated Susceptibility of Groundwater to Contamination**

Based on the geology of the site and the general area, Fitzgerald Henne believes that contaminants leaked or spilled on the site would have a moderate potential to migrate vertically to underlying water-bearing zones. Information obtained by Fitzgerald Henne suggests that the uppermost water-bearing zone is moderately permeable, thus lateral groundwater movement and contaminant migration from potentially impacted areas is expected to be moderately fast.

## **5.0 Site Reconnaissance**

The site consists of two adjacent 66-foot by 138-foot parcels (Lots 1 and 4 of the Kinney and Richmond Addition) with one structure. The building on the site is a permanently-closed convenience store associated with the service station operation. The site is situated at the southwest corner of the Mission Street/Pickard Street intersection. Commercial properties surround the site. Most of the exterior portion of the site is paved with concrete.

### **5.1 Viewing of On-site Structures**

Fitzgerald Henne viewed the interior areas of the structure on the site to identify the uses of the property, and whether potentially contaminating activities have taken place on the site. Fitzgerald Henne also searched for evidence of existing or former aboveground or underground storage tanks, and building materials that could contain asbestos. Fitzgerald Henne did not collect samples of any building materials to ascertain whether asbestos does or does not exist.

The building on the site was locked and inaccessible at the time of Fitzgerald Henne's site visit, however, the interior area of the structure was all one room, which was visible through the windows. The interior of the building contained empty shelves and a counter for the former convenience store. Glass coolers occupied the southwest wall of the room. A restroom was outside the southeast wall of the building. No floor drains were visible in the building. Fitzgerald Henne did not observe any RECs in the building.

### **5.2 Exterior Areas**

While on the subject site, Fitzgerald Henne looked for stains, stressed vegetation, and other evidence of RECs in exterior areas.

A metal canopy was northeast of the building. Concrete pump islands were present under the canopy, however, no dispenser pumps were present. The concrete surface under the canopy was partially demolished, indicating the area formerly occupied by the piping for the dispenser pumps.

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Two areas (one north of the building and the other southeast of the building) were occupied by sand and gravel backfill. These areas were the former underground storage tank (UST) locations. Fitzgerald Henne observed one monitoring well flush-mount protective cover in the excavation southeast of the building. Two other monitoring wells were visible on the site, one under the canopy, and the other north of the canopy. According to documentation completed by Compliance, Inc., a fourth monitoring well is present in the excavation area north of the building, however, Fitzgerald Henne was unable to locate it during the site visit.

The exterior areas of the property were primarily asphalt parking areas, however, grassy landscaped areas border the roads along the north and east sides of the site. A dumpster was southwest of the building. Housekeeping on the site was very good, and no debris was present on the site.

### **5.3 Utilities**

Fitzgerald Henne contacted the City of Mt. Pleasant offices to obtain information regarding the presence of water, sewer, and electrical utilities on the subject site. Ms. Nancy Blanshan reported that electrical service is provided by Consumers Energy, natural gas service is provided by Michcon, and sanitary and storm sewers and drinking water supplies are provided by the City of Mt. Pleasant.

### **5.4 Electric Transformers and Capacitors**

Fitzgerald Henne observed two pole-mounted transformers at the northwest corner of the site. No evidence of leakage or staining was evident on either of the transformers or on the ground around the transformers. Based on their appearance, Fitzgerald Henne estimates that the transformers were installed within the last 10 years. Fitzgerald Henne does not believe that the transformers are an REC.

Fitzgerald Henne has contacted Consumers Energy for information regarding transformers for many locations in the State of Michigan. Consumers Energy's policy is that they do not keep records regarding their transformers unless a leak or spill is reported, or a test of a transformer is requested by a property owner. Consumers Energy has indicated that when it checked its transformers, they found that only a very small percentage of all transformers contained any PCBs. In the event that a transformer owned by Consumers Energy leaks, the leak is the responsibility of Consumers Energy, and full cleanup and testing is performed at that time.

### **5.5 Storage Tanks**

Fitzgerald Henne did not observe any aboveground storage tanks, underground storage tanks, or vent or fill pipes indicating the presence of underground storage tanks on the site, however,

four underground storage tanks were formerly on the site. One 12,000-gallon and three 6,000-gallon USTs were removed from the site in February 1999. All four tanks were constructed of bare steel, and reportedly contained gasoline. One of the 6,000-gallon tanks was north of the building, while the other three tanks were southeast of the building. According to information in the Michigan Department of Environmental Quality's files, the tanks leaked, and soil and groundwater contamination exists at the site. Free product was reported in the excavation near the south edge of the site, and also in the monitoring well under the canopy northeast of the building. Fitzgerald Henne believes that the former presence of the tanks is an REC.

## **6.0 Adjacent Property Review**

The site investigation included a review of the conditions and uses of adjoining properties to identify potential environmental problems that might adversely impact the subject site. Fitzgerald Henne viewed adjoining properties from either the subject site boundary or readily accessible public rights-of way. The adjoining properties included:

*Adjacent to the north:*

- East Pickard Street
- J.W. Filmore's Family Restaurant (former service station)
- Farm Bureau Insurance
- Wendel's Furniture

*Adjacent to the south:*

- CarQuest (former service station)

*Adjacent to the east:*

- North Mission Street
- Parking areas
- The Green Spot Pub

*Adjacent to the west:*

- Olson's Firestone Service Inc.

During its reconnaissance of adjacent properties, Fitzgerald Henne attempted to identify the current and historic activities on adjoining properties, and whether potentially contaminating

substances were used as part of these activities. Fitzgerald Henne believes that potentially contaminating substances have been used at the CarQuest and J.W. Filmore's facilities (both are former service stations). The potential impact of contaminants at these facilities is discussed in Section 9.0 of this report.

## **7.0 Review of Historical Information**

Fitzgerald Henne interviewed individuals with knowledge of the history of the site, and searched for practically reviewable<sup>2</sup> documents and photographs to assist in the compilation of information about the historical use of the site. These practically reviewable items included aerial photographs, street directory listings, and fire insurance maps.

### **7.1 Personal Interviews**

#### **7.1.1 Interview with Mr. Greg Azzoli**

Fitzgerald Henne interviewed Mr. Greg Azzoli the TPI (Total Petroleum, Inc.) representative (property owner) regarding the current and historical use the site. Mr. Azzoli reported that the site has been used for a service station for a long time (he is unsure of the actual length of time, however, he recalls hearing from Mr. John Olson that it may have been as early as the 1920s).

Mr. Azzoli indicated that the four USTs on the site were removed in February 1999. All four tanks contained gasoline. He was not present during the tank removal, however, he is aware that soil contamination was found on the property. Mr. Azzoli further indicated that soil is scheduled to be removed from the site to address the area of highest contamination.

#### **7.1.2 Interview with Mr. John Hafer**

Fitzgerald Henne interviewed Mr. John Hafer on July 19, 1999 regarding the current and historical use the site. Mr. Hafer is a longtime area resident who grew up on the property north of the site. Mr. Hafer reported that the site has been a service station since approximately 1932. The site was a field with billboards prior to the construction of the "Rosevelt Refinery" service station. The original building had one repair bay where oil was changed.

The property south of the site was also a service station, however, Mr. Hafer did not know when it was first developed, however, he did know that the original station was built by Mr. Olson's grandfather.

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<sup>2</sup> ASTM Standard E1527-97 states: "information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data...Records that cannot be feasibly retrieved by reference to the location of the property or a geographic area in which the property is located are not generally practically reviewable..."

According to Mr. Hafer, the property north of the site was a service station that he constructed in 1927. His mother's house was also present on that property. His service station was in operation until approximately 1970, when he turned it into a snowmobile repair facility. Mr. Hafer sold the property in 1980, and the USTs on this property were removed at that time. He was unaware of the presence of any contamination on the property. When the property was sold, the house was demolished, and the former service station building was remodeled into the existing restaurant.

## **7.2 Prior Environmental Report**

Fitzgerald Henne was provided with an Initial Assessment Report (IAR) prepared by Compliance, Inc., and submitted to the MDEQ in May, 1999. According to the IAR, the subject property is a "Class 1" site, based on the presence of free product in MW-2. Soil and groundwater contamination was believed to be the result of a leak from the bottom of one of the USTs as evidenced by the fact that no soil contamination above the groundwater interface was identified at either tank excavation location, however, shallow soil contamination was later discovered near one of the dispensers.

Groundwater on the site is reportedly encountered approximately 11 feet below the ground surface, and the direction of groundwater flow is generally north, with a slight westward component. The delineation of groundwater contamination at the site was not completed at the time the IAR was submitted to the MDEQ. A final assessment report (FAR), including full delineation of soil and groundwater contamination is scheduled to be submitted by February 2000.

Fitzgerald Henne believes that the presence of soil and groundwater contamination, and the presence of free product is an REC.

## **7.3 Street Directories**

Fitzgerald Henne searched for city, county, and suburban directories for the subject site at the Library of Michigan in Lansing, Michigan on July 7, 1999. US Marketing Resources Mount Pleasant, Michigan Directory had coverage for the area surrounding the site from 1949 through 1990. No coverage for the area was available prior to 1949. The subject site has been listed at 815 North Mission since 1953 under various names. The listings for the site include: Super Stop, Sack & Snack, Mt. Pleasant Total/College Town Party Store, Charley's Leonard Service, Bud's Nortown Service/Smith Oil Company, and Bob's Super Service/Smith Oil Company. No listing for the site was available in 1949.

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CarQuest occupied the property south of the site at 801 North Mission in 1990. Jartran Truck Rental was listed at this address in 1984, and from 1953 until 1980 this address was listed as Saller's Union 76/Saller's Pure Oil. In 1949, Merrifield Auto Repair was listed at this address.

The Green Spot Pub was listed at address 808 North Mission since 1949. Olson's Firestone Service Inc. was listed at 704 Pickard from 1970 until 1990. In 1963, Howard Ford Tractor occupied this address, and Roberts Boiler Repair was listed from 1953 and 1958.

The property north of the site (address 901 and 903 North Mission) was occupied by restaurants (the Flap Jack Shack and J. W. Filmore's) from 1984 until 1990. This property was vacant (or no listing was available) from 1970 until 1980. From 1958 through 1963, Bud's North Town Service (and in 1952 and 1958, Smith Oil Company) was listed at 901 North Mission. Hafer Oil Company was listed in 1949.

### **7.4 Aerial Photographs**

Aerial photographs for the years 1938, 1952, 1958, 1972, and 1982 were obtained from the Michigan State University Center for Remote Sensing on July 6, 1999. A blue-line aerial photograph for 1984 was obtained from the Mt. Pleasant Department of Public Works on July 7, 1999. Portions of the aerial photographs containing the site and surrounding properties were scanned and enlarged, and are included in Appendix B. The scales of the original photographs are provided in the following discussions.

#### *1938 Aerial Photograph*

The clarity of the photograph (scale of approximately 1"=1,800') was fair. The subject site was occupied by one small building. Dirt pullouts were visible on the north and east sides of the building, and the remainder of the site was grassy. A service station was north of the site, and another service station was south of the site. A building was east of the site where the Green Spot Pub was located during Fitzgerald Henne's site visit. A gravel drive was west of the site, and residential areas occupied the western portion of the block. Residential areas were farther west and south of the site. A railroad spur line was northwest of the site, extending south almost to East Pickard Street. This area was surrounded by many parallel roads with small structures between the roads.

#### *1952 Aerial Photograph*

The clarity of the photograph (scale of approximately 1"=1,800') was fair. The conditions on the site and in the surrounding area were similar to those in the 1938 photograph, however, the building on the site was larger (north to south) than it was previously. The gravel drive west of the site was no longer present. Several vehicles were parked west of the building. Several small buildings were northeast of the site. The roads by the railroad spur line northwest of the

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site were configured differently, and the structures between the roads were no longer present. A water tower was west of the railroad spur line.

### *1958 Aerial Photograph*

The clarity of the photograph (scale of approximately 1"=1,800') was fair. The conditions on the site and in the surrounding area were similar to those in the 1938 photograph, however, two buildings were east of the site. A commercial building occupied the north end of the west part of the block (formerly residential property west of the site) that includes the site.

### *1972 Aerial Photograph*

The clarity of the photograph (scale of approximately 1"=2,600') was good. One building was on the site (the existing structure), replacing the building formerly present. The conditions in the areas south and east of the site were similar to conditions observed in the 1958 photograph. The building west of the site was larger (to the south) than it was previously. The roads and railroad spur line northwest of the site were replaced by several buildings; small buildings were present along Pickard Street, and a large building surrounded by parking areas was farther north. A junkyard was present northeast of the site beyond the buildings at the intersection of Pickard and Mission Streets.

### *1982 Aerial Photograph*

The clarity of the photograph (scale of approximately 1"=2,600') was very good. The conditions on the site and in the surrounding area were similar to those in the 1972 photograph, however, a canopy had been added to the site northeast of the building. Conditions in the areas south, east, and west of the site appeared to be similar to those in the 1972 photograph. Paved parking areas were added to the buildings north of the site. Wendel's Furniture replaced many of the small buildings northeast of the site, and the junkyard in this area appeared to have been recently removed (as evidenced by marks in the grass – the vehicles were gone).

### *1984 Aerial Photograph*

The clarity of the photograph (scale of approximately 1"=50') was excellent. The conditions on the site and in the surrounding area were similar to those in the 1982 photograph, however, a concrete patch southeast of the building was visible. Several small trucks were parked along the south site boundary.

## **7.5 Sanborn Maps**

During the late 1800's and throughout much of the 1900's, the Sanborn Map Company periodically prepared detailed maps showing the locations and types of buildings, and uses of properties in areas of many towns and cities throughout the United States. Included on these

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maps are the locations of above-ground and underground storage tanks, and other features now recognized as RECs. EDR Sanborn, Inc. (EDR Sanborn) of Southport, Connecticut now possesses the most complete archive of these maps.

Fitzgerald Henne requested EDR Sanborn to search for fire insurance maps for the site. EDR Sanborn reported that two historic maps, from 1950 and a 1961 had coverage of the site. Portions of the Sanborn maps containing the site and surrounding properties were scanned and are included in Appendix C. The conditions on the two available maps are described below.

### *1950 Sanborn Map*

The 1950 map shows that the site was occupied by one "L-shaped" building, which was operated as a filling station. Filling stations were present on the properties north and south of the site, and another was approximately 400 feet southeast of the site. The 1950 map was based on a survey map dated January 1931.

### *1961 Sanborn Map*

The 1961 map showed that the site was still operated as a service station, however, the building shown on the 1950 map was replaced by the existing structure. Conditions on the properties surrounding the site were similar to those shown on the 1950 map.

## **7.6 Summary of Historical Review**

Based upon the foregoing historical information, it appears as though the site was originally a field, and has been a service station since approximately 1932. The surrounding area has historically been commercial, with two other service stations on the properties north and south of the site.

## **8.0 State and Federal Records Review**

### **8.1 Review of State and Federal Databases**

Databases maintained by various state and federal agencies were reviewed for information regarding the site and nearby properties. The compilation of data was performed by Environmental Data Resources, Inc. (EDR) of Southport, Connecticut. EDR is an information search firm that uses computer search techniques to query governmental agency database information for ASTM search ranges around the site. Information regarding the listed facilities is included in the EDR report in Appendix D.

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EDR distinguishes between sites of higher and lower elevation when identifying facilities. Because of the minimal surface relief in the area, and the poor correlation between surface elevations and groundwater flow, Fitzgerald Henne does not believe that this distinction is material when evaluating the potential for contaminants to migrate from other properties onto the Site.

The search distances range from one-quarter to one mile depending on the database. (Please refer to the EDR search report in Appendix D for search ranges). The EDR report in Appendix D includes information regarding the search results for the following databases:

Database Abbreviation	Database Name	Mapped Sites	Unmapped Sites
NPL	National Priority List	0	0
Delisted NPL	Delisted National Priority List	0	0
RCRIS-TSD	Hazardous Waste Treatment, Storage, or Disposal facilities monitored by RCRIS	0	0
State Hazardous Waste (SHWS)	State Hazardous Waste Site	3	0
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Act Information System	0	0
CERC-NFRAP	Comprehensive Environmental Response, Compensation and Liability Act Information System – No Further Remedial Action Planned	0	0
CORRACTS	Corrective Action Report	0	0
State Landfill (SWL/LF)	State-permitted Solid Waste Facilities and Landfills	0	0
LUST	Leaking Underground Storage Tanks	9	0
UST	Underground Storage Tanks	6	1
AST	Aboveground Storage Tanks	0	0
RAATS	RCRA Administrative Action Tracking System	0	0
RCRIS Sm. Quan. Gen.	Small Quantity Generators of Hazardous Waste	2	5
RCRIS Lg. Quan. Gen.	Large Quantity Generators of Hazardous Waste	0	0
HMIRS	Hazardous Materials Information Reporting System	0	0
PADS	PCB Activity Database System	0	0
ERNS(Spills)	Emergency Response Notification System	0	0
FINDS	Facility Index System	0	5
TRIS	Toxic Chemical Release Inventory System	0	0
NPL Lien	NPL Liens	0	0
TSCA	Toxic Substances Control Act	0	0
MLTS	Material Licensing Tracking System	0	0

Database Abbreviation	Database Name	Mapped Sites	Unmapped Sites
ROD	Records of Decision	0	0
CONSENT	Superfund Consent Decrees	0	0
Coal Gas	Former Manufactured Gas (Coal Gas) Sites	1	0

When sites were identified as being within the ASTM search distance, they were included and mapped in the EDR report. Several facilities in the EDR report are unmapped (referred to as "orphan" sites) due to an incomplete address, an inaccurate address, or a street address that could not be accurately identified. The above table shows the number of mapped and unmapped sites in the EDR report. Where possible, Fitzgerald Henne ascertained the locations of the unmapped sites, and evaluated the potential impact of these sites for this assessment. A brief summary of each database that contained facility listings within the specified search range is presented below.

#### **8.1.1 SHWS (Former ACT 307) Sites: State Hazardous Waste Sites**

The Natural Resource and Environmental Protection Act, Public Act 451 of 1994, as amended (NREPA), and its administrative rules, provides for the identification, risk assessment, evaluation and cleanup of contaminated sites in Michigan. These State Hazardous Waste Sites, formally known as Act 307 Sites, are identified through information provided by concerned citizens, environmental groups, industry, local health departments, MDEQ staff and others. EDR gets information regarding these facilities from the Michigan Department of Environmental Quality (MDEQ). This database was last updated in December 1998.

The facilities identified in the search did not include the subject site or the immediately adjacent properties listed in Section 6.0 of this report. Fitzgerald Henne identified the locations of listed facilities and believes that they are at distances which do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix D.

#### **8.1.2 Leaking USTs: Leaking Underground Storage Tanks**

Leaking underground storage tank (LUST) information is obtained from the Michigan Department of Environmental Quality, Storage Tank Division. The database contains information about the locations of leaking tanks, the identity of leaked material, and the status of site cleanup. This database was last updated in March 1999.

The facilities identified in the search did not include the subject site or the immediately adjacent properties listed in Section 6.0 of this report. Fitzgerald Henne identified the locations of listed facilities and believes that they are at distances which do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix D.

### **8.1.3 USTs: Underground Storage Tank**

Data regarding registered Underground Storage Tanks (UST) is gathered by the Michigan Department of Environmental Quality, Storage Tank Division. The information includes facility, owner and tank information as submitted on the registration forms. This database was last updated in November 1998.

The facilities identified in the search did not include the subject site or the immediately adjacent properties listed in Section 6.0 of this report. Fitzgerald Henne identified the locations of listed facilities and believes that they are at distances which do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix D. Fitzgerald Henne identified two adjacent properties not listed in the EDR report that were former service stations. The CarQuest property south of the site, and the J. W. Filmore's Restaurant north of the site were former service stations. These two facilities are discussed in Section 9.0 of this report.

### **8.1.4 RCRIS: Generators**

The Resource Conservation and Recovery Act – Generators Database contains data compiled in accordance with the 1984 Hazardous and Solid Waste Amendments (HSWA) to RCRA. RCRA Generator Facilities are divided into three categories: Fully Regulated Generators (FRGs) producing more than 1000 kilograms of hazardous and/or one kilogram of acutely hazardous waste per month, Small Quantity Generators (SQGs) producing between 100 and 1000 kilograms of hazardous and/or less than one kilogram of acutely hazardous waste per month, and Conditionally Exempt SQGs (CESQGs) producing less than 100 kilograms of hazardous waste and less than one kilogram of acutely hazardous waste. The CESQGs are not included in the database search. This database was last updated in April 1999.

The facilities identified in the search did not include the subject site or the immediately adjacent properties listed in Section 6.0 of this report. Fitzgerald Henne identified the locations of listed facilities and believes that they are at distances which do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix D.

### **8.1.5 FINDS: Facility Index System**

The Facility Index System (FINDS) contains a computerized inventory of over 600,000 facilities regulated by the Environmental Protection Agency (EPA). FINDS is used as a cross-check for sites identified through other sources. EDR has on-line access to the FINDS system.

The facilities identified in the search did not include the subject site or the immediately adjacent properties listed in Section 6.0 of this report. Fitzgerald Henne identified the locations of listed facilities and believes that they are at distances which do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix D.

### **8.1.6 Coal Gas**

Coal Gas was manufactured at numerous facilities throughout the United States in the late 1800's and early 1900's. Wastes generated at these facilities often were poorly handled, and many of these former plant sites contain impacted soil and groundwater. The locations of many of these facilities were researched by Property Scan, Inc., and are included in the EDR database.

The facility identified in the search was not the subject site or any of the immediately adjacent properties listed in Section 6.0 of this report. Fitzgerald Henne identified the location of the listed facility and believes it is at a distance which does not pose a risk of environmental contamination to the Site. Further information regarding this facility is in the EDR report in Appendix D.

## **8.2 Review of Agency Records**

### **8.2.1 Isabella County Health Department**

Fitzgerald Henne requested file information regarding contamination, water supply well log records and septic system permits from the Isabella County Health Department for the subject property on July 8, 1999. Mike (last name withheld) of the Health Department responded to Fitzgerald Henne's request, and indicated that the Department has no records regarding the site.

### **8.2.2 City of Mt. Pleasant Fire Department**

Fitzgerald Henne contacted Captain Andy Theisen of the City of Mt. Pleasant Fire Department to discover whether any fires or chemical spills had occurred on the subject site, or if records of other contamination on the site or adjacent properties existed. Captain Theisen indicated that the Department has no record of fires or chemical spills occurring at the site, however, the Department has records of the removal of the USTs. Captain Theisen was on the site in February when the tanks were removed, and he stated that there was an obvious release from the tanks (visible and olfactory evidence of soil contamination existed).

## **9.0 Nearby Properties of Environmental Concern**

Using information gathered as part of this Phase I environmental site assessment, Fitzgerald Henne evaluated nearby facilities as to their possible impact to the site. To assess these sites, Fitzgerald Henne used its best professional efforts to evaluate the possible contaminants that could be present, the toxicity and mobility of these contaminants, and geological factors that could influence the migration of possible contaminants. Nearby facilities with known or possible contamination identified through the Phase I research, and their potential impact to the subject site are discussed below.

## **9.1 Nearby Facilities Potentially Impacting the Site**

### **9.1.1 CarQuest**

The property adjacent to the south side of the site was formerly a service station that operated until the 1960s. According to the Fire Department records, the USTs at this facility were removed (probably at the time that the existing building was constructed). Soil and groundwater testing was not done when the tanks were removed. No records exist regarding whether contamination exists at this facility, however, groundwater in the vicinity of the site flows north, and any contaminants in the groundwater would be carried from this property toward the site.

## **9.2 Nearby Facilities Not Believed to Impact the Site**

### **9.2.1 J. W. Filmore's**

The property north of the site (across Pickard) was a service station from 1927 to 1963. No records exist regarding whether any soil or groundwater contamination exists on the property. Mr. John Hafer (a longtime resident and the person who originally installed the service station) reported that the USTs associated with the service station were removed in 1980 when he sold the property. Because groundwater flows north-northwest from the site towards this property, Fitzgerald Henne does not believe that contaminants on this property (if present) are likely to impact the site.

## **10.0 Conclusions**

Fitzgerald Henne & Associates, Inc., (Fitzgerald Henne) has performed a Phase I environmental site assessment (ESA) of the former Total Service Station site in Mt. Pleasant, Isabella County, Michigan. This site assessment was performed for Olson's Firestone Service Inc.

Fitzgerald Henne personnel conducted the Phase I site walkover on June 30, 1999. The walkover was followed by a review of government records, assembly and review of data from area maps and directories, assessment of aerial photographs, and interviews with the property owner, others familiar with the site, and government officials.

Based on the information obtained during Fitzgerald Henne's assessment, there are three recognized environmental conditions (RECs) on the site. The conditions are:

- 1) The site is a permanently-closed service station. Soil and groundwater contamination (including free-phase gasoline) has been identified on the property.

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- 2) The site has been used as a service station since the 1920s. The former building associated with the original service station operation may have been used for repair work. Solvents or waste materials may have been improperly disposed on the site.
- 3) The CarQuest property south of the site was formerly a service station and auto repair shop. No records exist regarding whether this property is contaminated, however, groundwater flows north, and contaminants (if present) could migrate from this property onto the site.

### **11.0 General Qualifications**

In the professional judgement of Fitzgerald Henne, the scope of this investigation was sufficient to determine whether further investigation is needed, given the nature and specific circumstances of the site. Fitzgerald Henne performed this Phase I ESA in conformance with the care and skill currently exercised by reputable environmental consulting firms practicing under similar conditions in the State of Michigan. No other warranty or representation of any kind, expressed or implied, at common law or created by statute, is extended, made or intended by Fitzgerald Henne's rendering of consulting services or furnishing oral and/or written reports of its findings.

Fitzgerald Henne has no obligation to any third party who intends to or will rely on this report and specifically disclaims such responsibility. Fitzgerald Henne assumes no obligation for reporting any facts revealed by the environmental site assessment or contained in the Phase I ESA report to anyone other than Olson's Firestone Service Inc., and its lenders.

This report does not constitute legal advice, nor does Fitzgerald Henne purport to give legal advice. Environmental conditions and regulations are subject to constant change and reinterpretation. It should not be assumed that current conditions and/or regulatory positions will remain constant. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

Certain information contained in this report may have been obtained from agencies or through personal interviews. Fitzgerald Henne cannot warrant that such information is accurate. Except as discussed in the report, Fitzgerald Henne has not verified the accuracy of such information.

Contaminants may be hidden in the subsurface materials, having been intentionally covered, or because they were covered by foliage, water, snow, concrete, asphalt, or other materials. This contamination may not be present in predictable locations. The most that Fitzgerald Henne can do is formulate a logical assessment program to reduce the client's risk of later discovering

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previously unknown contamination. The greater the extent of exploration on a property, the greater the probability of finding contamination, if present. Even with extensive exploration, it is not possible to say with total certainty that contaminants are not present at a particular site.

Many environmental assessments are undertaken to satisfy the "due diligence" requirement in the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Part 201 of the Michigan Natural Resources and Environmental Protection Act (NREPA-Michigan Public Act 451 of 1994, as amended). The level of investigative work required to demonstrate "due diligence" has not been legislatively defined by Congress, the USEPA, the Michigan Department of Environmental Quality, or the Michigan Legislature. Although Fitzgerald Henne strives to investigate each site sufficiently to discover all possible sources of contamination, it cannot warrant that the work undertaken for this report will provide a due diligence defense asserted under CERCLA, NREPA, or any other federal, state or local laws.

No warranty can be made that conditions observed were representative of areas not observed. Tests or data collected for this report were obtained only for the purposes stated in this report, and should not be used for reasons other than those intended.

## **12.0 References**

### *Professional Standards*

"E 1527-97, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," in *ASTM Standards on Environmental Site Assessments for Commercial Real Estate, Third Edition*, American Society of Testing and Materials, West Conshohocken, PA, 1997.

### *Geology References*

Dorr, J.A. and Eschman, D.F., *Geology of Michigan*, University of Michigan Press, 1970.

Farrand, W.R. and Bell, D.L., *Quaternary Geology of Southern Michigan*, University of Michigan Department of Geological Sciences, 1982.

Grant, R.P. and Pringle, C.H., *Topographic Map of the Bedrock Surface of the Southern Peninsula of Michigan*, Miscellaneous Map Number 3585, Michigan Department of Natural Resources, Geological Survey Division, 1943.

Rheaume, S.J., *Hydrologic Provinces of Michigan*, U.S. Geological Survey Water Resources Investigation Report 91-4120, 1991.

Wilson, S. and Milstien, R.L., *Bedrock Geology of Southern Michigan*, Michigan Department of Natural Resources, Geological Survey Division, 1987.

### *State & Federal Database Report:*

Former Total Service Station, 815 North Mission, Mt. Pleasant, Michigan, July 6, 1999, Environmental Data Resources, Inc. Southport, Connecticut.

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## *Aerial Photographs:*

Michigan State University, Center for Remote Sensing (1938, 1952, 1958, 1972, 1982).  
Mt. Pleasant Department of Public Works (1984).

## *Topographic Maps:*

U.S. Geological Survey, 7½-Minute Series, Mount Pleasant, Michigan Quadrangle, 1973.

## *City Directories*

US Marketing Resources City of Mt. Pleasant, Michigan Directory (1949 through 1990)

## *Personal Interviews and Contacts:*

Mr. John Olson, Olson's Firestone Service Inc., (517) 773-7978  
Captain Andy Theisen, City of Mt. Pleasant Fire Department, (517) 773-7971 x230  
Mr. Greg Azzoli, TPI Petroleum, (313) 770-5188  
Mr. John Hafer, longtime area resident, (517) 772-2035  
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