

**Site Name: Sunshine Laundry, Fort Dodge**

Extended Site Screening (ESS)

Project Manager: Hylton Jackson

Date: July 16, 2012

**CON 12-15  
Doc # 27272**

***Summarize the site history (past usages, past ownerships, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, S.W. burial, etc)***

The site was a former dry cleaning facility which operated for approximately eight years. Dry cleaning operations had ceased by the time the property was sold to the current owners (1994). The Phase II referenced EPA documents (dated 1992) that indicated waste containers of tetrachloroethene (PCE) stored in the shed on northern portion of the site had leaked on some occasions. No other reference to site history was provided.

***Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)***

As a result of the information obtained in the Phase I report, a soil and groundwater Phase II Environmental Site Assessment (dated April 15, 2008) was performed by Burns and McDonnell Engineering Company, Inc. Ten borings (DP-1 through DP-10) were advanced to depths from 20 to 26 feet below ground surface (bgs). A soil sample was collected from each boring after field screening for organic vapors using a photo ionization detector (PID). All ten soil samples were analyzed for volatile organic compounds (VOCs). A groundwater sample was collected from each boring and analyzed for VOCs. Two sub-slab vapor samples (SVP-1 and SPV-2) were collected below the slab of the main building. The soil vapor samples were analyzed for BTEX, PCE, TCE, chloroform, methylene chloride, and vinyl chloride. Results from this assessment indicated that soil and groundwater had been significantly impacted by the past release of PCE.

The Department required an additional assessment and the environmental consultants, Barker Lemar, conducted a Site Assessment and prepared a Remedial Action Plan (report dated June 2010). Six borings (MW-1 through MW-6) had been advanced onsite to depths from 10 to 20 feet bgs and each was converted to a permanent monitoring well. A soil sample was collected from borings MW-1, MW-2, MW-3, and MW-6 after field screening for organic vapors using a photo ionization detector (PID). All four soil samples were analyzed for PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and Vinyl Chloride. A groundwater sample was collected from each of the six permanent monitoring wells and analyzed for PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and Vinyl Chloride. The Barker Lemar site assessment did not fully define the extent of the chlorinated groundwater plume.

The Department obtained access permission from the Wells Fargo property that lies directly east of the Sunshine Laundry property. On December 6, 2010, the Department advanced three Geoprobe® screenpoint borings to depths of 15 to 19 feet bgs in the Wells Fargo parking lot and a groundwater sample was collected from each boring. Groundwater samples were also collected from five of the six permanent wells on the Sunshine laundry property. Monitoring well MW-3 could not be located. All groundwater samples were analyzed for PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and Vinyl Chloride.

For the last round of assessment activities, conducted on May 18, 2011, the Department obtained access permission for the Long John Silver's property that lies east of South 25<sup>th</sup> Street and east of the Wells Fargo property. Four Geoprobe® screenpoint borings were advanced to depths of 15 to 19 feet bgs on the Long John Silver's property. A groundwater sample was collected from two borings, PS-1 and PS-2. Borings PS-3 and PS-4 did not yield water. Groundwater samples were also collected from the six permanent wells on the Sunshine Laundry property. All groundwater samples were analyzed for PCE; TCE; 1,2-DCE (total); and Vinyl Chloride.

On December 19, 2011 the Department collected one last round of groundwater samples from the six permanent monitoring wells that remain on the Sunshine Laundry property. The groundwater samples were analyzed for PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and vinyl chloride.

***Summarize the findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.***

*Soil: 4/15/2008 Phase II by Burns and McDonnell Engineering Company, Inc*

PCE was detected in one soil sample above Statewide Standard. TCE, cis-1,2-DCE, trans-1,2-DCE, and 1,2-DCE were detected in one or more soil samples below their applicable Statewide Standard. No other soil contaminants were detected above laboratory detection limits. See Table below.

All units in mg/kg. Exceedances in **Bold**

Sample Location	Contaminant (mg/kg)				
	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,2-DCE
DP-1 (Dup)	0.319	0.008	0.0106	ND	0.0135
DP-2	0.034	ND	ND	ND	ND
DP-3	ND	ND	ND	ND	ND
DP-4	1.850	ND	ND	ND	ND
DP-5	0.0167	ND	ND	ND	ND
DP-6	0.291	ND	ND	ND	ND
DP-7	ND	ND	ND	ND	ND
DP-8	0.262	0.0105	0.0148	ND	0.0194
DP-9	<b>22.1</b>	0.052	ND	ND	ND
DP-10	ND	ND	ND	ND	ND
Statewide Standard	5.7	7.7	760	1500	34

ND - Compound not detected above laboratory detection limits

*Groundwater: 4/15/2008 Phase II by Burns and McDonnell Engineering Company, Inc*

PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and VC were detected in one or more groundwater samples above their applicable Statewide Standard. No other groundwater contaminants were detected above the applicable Statewide Standard.

All units ug/l. Exceedances in **BOLD**

Sample Location	PCE	TCE	1,2-DCE	cis-1,2-DCE	trans-1,2-DCE	1,2,4-trimethyl benzene	VC	chloroethane
DP-1	12	ND	ND	ND	ND	ND	ND	ND
DP-2	34	ND	ND	ND	ND	ND	ND	ND
DP-3	66.4	ND	ND	ND	ND	ND	ND	ND
DP-4	190	ND	26.4	24.3	2.1	ND	ND	ND
DP-5	24.8	ND	ND	ND	ND	ND	ND	ND
DP-6	1,040	37.9	7.0	7.0	ND	ND	ND	ND
DP-7	511	ND	ND	ND	ND	ND	ND	ND
DP-8	178	103	440	302	139	ND	2.3	1.4
DP-9	2,140	4.8	9.9	6.9	3.0	1.3	ND	ND
DP-10	ND	ND	ND	ND	ND	ND	ND	ND
Statewide Standard*	5	5	5	70	100	350	2	NA

\*Statewide Standard for Protected Groundwater

ND - Compound not detected above laboratory detection limits

*Soil Vapor: 4/15/2008 Phase II by Burns and McDonnell Engineering Company, Inc*

PCE; and m,p-xylene were detected in sub-slab vapor samples above the laboratory detection limits. The detection limit for sample # SVP-1/AR01 was 4.7 ug/m<sup>3</sup>. Due to a dilution factor, the detection limit for SPV-2/AR01 was 7,800 ug/m<sup>3</sup>. No other contaminants were detected above the detection limits. While there are no Statewide Standards for sub-slab soil vapors, the detected concentrations were converted to indoor air concentrations (using an attenuation factor of 0.1) and the results were entered into the Land Recycling Program (LRP) cumulative risk calculator. The site is not enrolled in the LRP and the use of the cumulative risk calculator to evaluate the detected contaminant concentrations does not infer that a risk assessment has been completed for this site. The results of the cumulative risk calculation are referenced here because it is the only method available to evaluate sub-slab soil vapor concentrations. See Table below for detected concentrations.

Concentrations that exceed the LRP cumulative risk calculator for site worker in **Bold**

Contaminant (ug/m <sup>3</sup> )	Sample Number/Location	
	SVP-1/AR01*	SPV-2/AR01
PCE	170	<b>630,000</b>
m,p-x ylenes	4.9	ND

\* Soil vapor sample SVP/AR01 failed the chemical leak test (helium) and the results are considered invalid.

PCE was detected in both sub-slab vapor samples at concentrations above the screening level of 67 ug/m<sup>3</sup>. SVP-1 was located in the utility room near the floor drain in the northeast portion of the facility and SVP-2 was located in the open area in the northwest portion of the facility. The calculated screening levels are based on the USEPA's 2002 *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)*. The sub-slab screening levels were developed by combining risk-based concentrations for indoor air with an attenuation factor to account for migration across a building slab. The indoor air screening levels were calculated based on a target cancer risk level of 1 in 100,000 (1E- 05) or a noncancer hazard index of 0.1, whichever value is more protective (i.e., lower). The calculated risk-based concentrations for indoor air were adjusted by a factor of 0.1 to account for attenuation through the concrete slab. The attenuation factor of 0.1 represents the conservative default value provided in the EPA Guidance. The concentration of PCE at SVP-1 was 170 ug/m<sup>3</sup> and the concentration at SPV-2 was 630,000 ug/m<sup>3</sup>. If the 10 per cent attenuation factor is used for the concentration of 630,000 ug/m<sup>3</sup> and the sample run through Department's LRP Cumulative Risk Calculator, that sample would grossly exceed all exposure scenarios (site resident, site worker, and construction worker). The site is not enrolled in the LRP program. m,p-Xylenes were also detected in the sub slab vapor sample at SVP-1 (4.9 ug/m<sup>3</sup> below the calculated screening level of 195 ug/m<sup>3</sup>). Xylenes were not detected in any soil or groundwater samples collected onsite during the Burns and McDonnell Phase II. No ESS site investigation activities were directed at addressing the sub slab soil vapor conditions identified onsite during the Burns and McDonnell Phase II (2008).

*Soil; June 2010, Site Assessment and Remedial Action Plan, by Barker Lemar and subsequent Department assessments.*

No chlorinated solvent contamination was detected above its applicable Statewide Standard in any of the four soil samples submitted during the Barker Lemar assessment. During subsequent investigation activities, no other soil samples have been collected or analyzed.

*Groundwater; Sampling data from June 2010, Site Assessment and Remedial Action Plan, by Barker Lemar and subsequent Department assessments.*

All units in ug/l. Exceedances in **BOLD**

Sample Location	Date	PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	Vinyl Chloride
MW-1	1/19/2010	2.8	<b>6</b>	3.7	20.1	ND
	12/6/2010	ND	<b>7</b>	ND	18	ND
	5/18/2011	ND	ND	ND	8	ND
	12/19/2011	ND	<b>5</b>	*	9*	
MW-2	1/19/2010	<b>57.8</b>	<b>10.8</b>	13.7	46.8	ND
	12/6/2010	<b>350</b>	<b>89</b>	85	<b>400</b>	ND
	5/18/2011	<b>690</b>	<b>230</b>	<b>120</b>	<b>500</b>	<b>26</b>
	12/19/2011	<b>790</b>	<b>200</b>	*	<b>640*</b>	<b>67</b>
MW-3	1/19/2010	<b>1,970</b>	<b>281</b>	<b>518</b>	<b>1,110</b>	<b>6.2</b>
	12/6/2010	NS	NS	NS	NS	NS
	5/18/2011	<b>4,000</b>	<b>360</b>	<b>590</b>	<b>1,100</b>	<b>11</b>
	12/19/2011	<b>3700</b>	<b>420</b>	*	<b>1,500*</b>	<b>11</b>
MW-4	1/19/2010	<b>7.3</b>	1.1	1.4	2.9	ND
	12/6/2010	<b>22</b>	ND	ND	ND	ND
	5/18/2011	ND	ND	ND	ND	ND
	12/19/2011	ND	ND	ND*	ND*	ND
MW-5	4/22/2010	<b>111</b>	4.5	ND	ND	ND
	12/6/2010	<b>160</b>	<b>14</b>	ND	ND	ND
	5/18/2011	<b>160</b>	<b>20</b>	ND	8	ND
	12/19/2011	<b>190</b>	<b>13</b>	ND*	ND*	ND
MW-6	4/22/2010	<b>75.3</b>	<b>5.1</b>	2.5	3.5	ND
	12/6/2010	<b>100</b>	<b>17</b>	10	33	ND
	5/18/2011	<b>67</b>	<b>6</b>	ND	8	ND
	12/19/2011	<b>110</b>	<b>15</b>	*	11*	ND
WF-1	12/6/2010	<b>130</b>	<b>270</b>	<b>170</b>	<b>1,100</b>	ND
WF-2	12/6/2010	<b>400</b>	<b>210</b>	<b>180</b>	<b>430</b>	ND
WF-3	12/6/2010	<b>1,000</b>	<b>310</b>	<b>650</b>	<b>1,300</b>	ND
PS-1	5/18/2011	ND	ND	ND	ND	ND
PS-2	5/18/2011	ND	ND	ND	ND	ND
Statewide Standard		5	5	100	70	2

\*Concentrations of cis-1,2-DCE and trans-1,2-DCE were combined and reported as total 1,2-DCE in 12/19/2011 sampling event. This table lists that total concentration as cis-1,2-DCE, the compound with the lower Statewide Standard.

***Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.***

The site is located in a light industrial/commercial area on the east side of Fort Dodge. The nearest residence appears to be approximately 1,300 feet west of the site. Water service to the Sunshine Laundry is marked as a 2-inch copper line. Service line location and composition to the neighboring Wells Fargo property is unknown. The water main (along 5<sup>th</sup> Ave. South) is marked as 8-inch cast iron. Barker Lemar determined groundwater conductivity at three monitoring wells, MW-1 (0.548 m/day); MW-3 (0.481 m/day); and MW-4 (0.193 m/day). Groundwater flow direction is indicated to be to the northeast. The nearest well to the site is a private well 840 to the southwest – up gradient from the site. The site is 2,800 feet outside the source water protection zone for Fort Dodge’s municipal system.

**Summarize the reasoning, knowledge or any other information used in determining your response regarding your review of this site.**

ESS site investigation activities were conducted in an attempt to determine the off site impact of the contaminated groundwater plume. These activities were partially driven by the pending intent to purchase the property, demolish the onsite building, and expand the parking lot of the neighboring Nestle Purina Pet Care Company facility to the west. Contaminated groundwater has been shown to extend offsite to the northeast impacting the parking lot north of the neighboring Wells Fargo Bank. Reduction is occurring at the leading edge of the plume. The plume does not appear to extend east of South 25<sup>th</sup> Street. Soil conditions and geographic settings would seem to indicate that further delineation of the groundwater plume would not be necessary at this time unless chlorinated concentrations prove to be increasing. With only four rounds of sampling to date, annual monitoring of the six permanent wells located on the Sunshine property is recommended. If possible, a soil gas sample collected at the northwest corner of the Wells Fargo building may also be warranted.

**Site recommended for:**

- No further action
- Additional investigation under state program (activity code 2824)
- Additional investigation by responsible party
- Transfer to LUST/UST

Form Reviewed: Cal Sunday Date Reviewed: 7/17/12



**REGION VII U.S. EPA SUPERFUND  
NO DISCOVERY DATE**

**PRE-CERCLIS INITIATION FORM**

NPL Status = **O-NOT A VALID SITE OR INCIDENT**

Site Name: Sunshine Laundry, Fort Dodge

Identified By: \_\_\_\_\_

- Removal  Site Assessment  Federal Facilities  States  
 Other Federal Agency Check if:  FUD Site

Address: 2422 5th Ave. S

County Name: Webster

City, State, Zip: Fort Dodge, IA 50501

State ID (if one exists): \_\_\_\_\_

Congressional District: 4

NPL Status: = : Not a Valid Site or Incident Federal Facility Indicator:  Federal Facility  Not a Federal Facility  Status Undetermined

- Section:  C-(STAR) SPFD Technical Assistance/Re-Use Branch  L-(EFLR) Enfr/Fund Lead RV Branch  F-(FFSE) Federal Facilities/Special Emphasis Branch  
 M-(MOKS) MO/KS remedial Branch  I-(IANE) IA/NE Remedial Branch  O-(ER&R) Emergency Response & RV Branch

List Site Alias Name (s): \_\_\_\_\_

Directions to Site: From U. S. 20 south of Fort Dodge, take the Quail Avenue exit, proceed 3.5 miles north. Turn west on Quail Avenue (5th Avenue South), proceed 1.75 miles west. Arrive at 2422 5th Avenue South on the right.

Site Description: Former Dry Cleaner

USGS Quadrant: Fort Dodge N 7.5' USGS Hydro Unit: \_\_\_\_\_  
main

Latitude: 42.503510 Longitude: 94.164003  
(Decimal Degree format) (with release of 3.17 see attached required location data form)

Lat/Long Accuracy:  Seconds  Miles  Feet  
 Degrees  Minutes  Kilometers  Meters

- Owner  Bank/Loan Company  Municipality  
Operator  County Owned  Other  
Type  District Owned  Private  
 Federally-Owned  Mixed Ownership  
 Former Federally Owned or Operated  State Owned  
 Former Federally Owned or Operated  State Owned  
 Government Owned/Contractor Operated  Trustee, Federal  
 Privately Owned/Government Operated  Trustee, State  
 Property Defaulted Back to Government  Unknown  
 Brownfields/Public

Operational Status:  Active  Inactive  Unknown  Blank  
Native American Interest:  Yes  No

Non-NPL Status (Choose one):

- Not a Valid Site or Incident  Not a Valid Site or Incident: NRC Lead  
 Not a Valid Site or Incident: RCRA Lead  Not a Valid Site or Incident: State Lead  
 Not a Valid Site or Incident: Tribal Lead

Add Action: OU\_00

PRE-CERCLIS SCREENING: Planned Complete: 7/12/2012

Actual Complete: 7/12/2012

Lead code (choose one)

- F-EPA Fund Financed  FF - Federal Facility  S - State, Fund Financed

SCAP Note: \_\_\_\_\_

Add below Action (if No Further Action):

OU\_00 Lead: EP  
 PRE-CERCLIS ARCHIVE Actual Complete: \_\_\_\_/\_\_\_\_/\_\_\_\_

SCAP Note: \_\_\_\_\_  
Comments:  Site or  Action: \_\_\_\_\_

Signatures: Carl Sundberg Date: 7/17/12 RPM/OSC/SAM: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Site Type: (Choose all that apply - for every main category chosen in bold at least one sub- category must be selected; if more than one and sub-category is selected indicate which is primary):

- Primary Designation: \_\_\_\_\_
- MP-Manufacturing/Processing/Maintenance** - *Applicable sub-categories:*  
 CA-Chemicals and allied products  
 CG-Coal gasification  
 CP-Coke production  
 EP-Electric power generation and distribution.  
 FT-Fabrics/textiles  
 EE-Electronic/electrical equipment  
 LW-Lumber and wood products/pulp and paper  
 WP-Lumber and wood products/wood preserving/preserving/treatment  
 MF-Metal fabrication/finishing/coating and allied industries  
 OR-Oil and gas refining  
 OP-Ordnance production  
 PR-Plastics and rubber products  
 PM-Primary metals/mineral processing  
 RA-Radioactive products  
 TA-Tanneries  OT-Other-Description(needed): \_\_\_\_\_  
 TS-Trucks/ships/trains/aircraft and related components
- MI-Mining** - *Applicable sub-categories*  
 CO-Coal  ME-Metals  NM-Non-metal minerals  
 OG-Oil and Gas  OT-Other-Description(needed): \_\_\_\_\_
- WM-Waste Management** - *Applicable sub-categories*  
 CL-Co-disposal landfill (municipal and industrial)  
 ID-Illegal disposal/open dump  
 IF-Industrial waste facility (non-generator)  
 MD-Mine tailings disposal  OT-Other-Desc.(needed): \_\_\_\_\_  
 ML-Municipal solid waste landfill  
 RW-Radioactive waste treatment, storage, disposal (non-generator)
- OT-Other** - *Applicable sub-categories*  
 AG-Agricultural (e/g., grain elevator)  
 CS-Contaminated sediment site with no identifiable source  
 DC-Dust control  OT-Other-Desc (needed): Former Dry Cleaner  
 GP-Ground water plume site with no identifiable source  
 MO-Military/Other Ordinance  
 PS-Product Storage/distribution  
 RD-Research, development, and testing facility  
 RC-Retail/commercial  
 SE-Spill or other one-time event  
 TP-Transportation (e.g., railroad yards, airport, barge docking, site)  
 TW-Treatment works/septic tanks/other sewage treatment
- RE-Recycling** - *Applicable sub-categories*  
 AT-Automobiles/tires  DT-Drums/tanks  WO-Waste/used  
 BS-Batteries/scrap metals/secondary smelting/precious metal recovery  
 CC-Chemicals/chemical waste (e.g., solvent recovery)  
 OT-Other-Description(needed): \_\_\_\_\_



**REGION VII**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

ENFORCEMENT SENSITIVE INFORMATION  
FOR INTERNAL USE ONLY

**LOCATION FORM** - (Required information highlighted in red)

SITE NAME: Sunshine Laundry, Fort Dodge

EPA ID: \_\_\_\_\_

Latitude: 42.503510 Longitude: 94.164003  
(Decimal Degree format)

Measurement Sequence: \_\_\_\_\_  
(See Comment A)

- Lat/Long Source:  Contractor  EPA Headquarters  (Blank)  
 Dun & Bradstreet  Epic  
 EPA Region 7  Other  
 Geograph  Private  
 Other Federal Agency  SNAP  
 Regulated Entity  Tribe  
 State  Unknown
- Designate Lat/Long:  Primary  NPL Coordinate

- Collection Method:  Address Matching -House Number  Address Matching - Block Face  Address Matching - Street Centerline  
 Address Matching -Nearest Intersection  Address Matching - Primary Name  Address Matching - Digitized  
 Address Matching - Other  Census Block - 1990 - Centroid  Census Block/Group 1990-Centroid  
 Census Block/Tract - 1990 - Centroid  Classical Surveying Techniques  Census - Other  
 GPS Carrier Phase Static Relative Position  GPS Carrier Phase Kinematic Relative Position  GPS, with Canadian Active Control System  
 GPS Code (Pseudo Range) Differential  GPS Code (Pseudo Range) Precise Position  GPS Code (Pseudo Range) Standard Position (SA-Off)  
 GPS Code (Pseudo Range) Standard Position Service SA-On  GPS-Unspecified  Interpolation-Digital Map Source (TIGER)  
 Interpolation-Map  Interpolation -MSS  Interpolation -Photo  Interpolation - Satellite  Interpolation - SPOT  
 Interpolation-TM  Interpolation - Other  LORAN C  Public Land Survey-Eighth Section  Public Land Survey-Footing  
 Public Land Survey-Quarter Section  Public Land Survey-Section  Public Land Survey-Sixteenth Section  
 ZIP+2 Centroid  ZIP+4 Centroid  ZIP Code - Centroid  Unknown

- Reference Point:  Administrative Building  Air Monitoring Station  Air Release Stack  Air Release Vent  
 Atmos. Emissions Trtmt Unit  Boundary Point  Building Entrance  Facility/Centroid Cent  Facility/Station Bldg Entrance  
 Intake Point  Lagoon or Settling Pond  Liquid Waste Treatment Unit  Loading Area Centroid  Loading Facility  
 Monitoring Point  NE Corner of Land Parcel  NW Corner of Land Parcel  Other  Plant Entrance (Freight)  
 Plant Entrance (General)  Plant Entrance (Personnel)  Process Unit Area Centroid  Process Unit  SE Corner of Land Parcel  
 Solid Waste Storage Area  Solid Waste Trtmt/Disp. Unit  Storage Tank  SW Corner of Land Parcel  Unknown  
 Water Monitoring Station  Water Release Pipe  Well  Well Protection Area  Release Point  Treatment/Storage Plant

Reference Datum:  NAD27  NAD83  Other  Unknown  WGS84

Accuracy Meters +/-: \_\_\_\_\_  Accuracy Unknown Collection Date: 7/12/2012

- Verification Method:  Ground Truth Conducted  Point In Polygon (County)  Blank  
 Point in Polygon (Zip)  Proximity to Alternative Facility Coordinate  Not Verified  
 Proximity to Polygon Centroid(Other)  Proximity to Polygon Centroid (Zip Code)  
 Verified Relative to Map Features (1:100K/Tiger)  Verified Relative to Map Features (1:24K)  
 Verified Relative to Map Features (Other)  Verified, Unknown Method  
 Proximity to Polygon Centroid (County)  Point in Polygon (Other)

Point/ Line/ Area:  AREA  LINE  POINT  REGION  ROUTE  (BLANK)

Source Map Scale:  1:10,000  1:12,000  1:15,840  1:20,000  1:24,000  1:25,000  1:50,000  
 1:62,500  1:63,360  1:100,000  1:125,000  1:250,000  1:500,000  NONE  UNKNOWN  
 OTHER \_\_\_\_\_

COMMENTS: \_\_\_\_\_

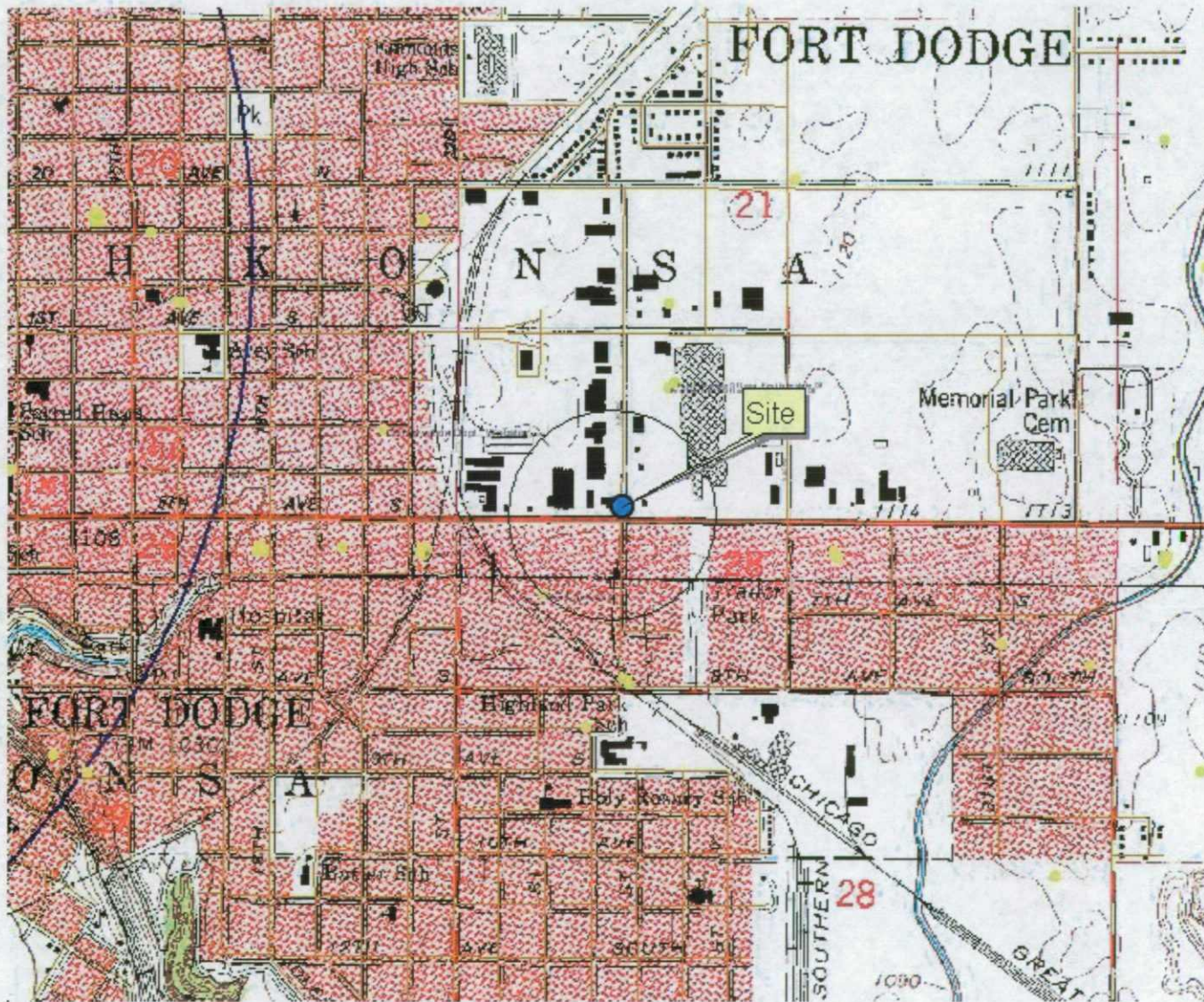
Signatures:

RPM/OSC: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ BRANCH CHIEF: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

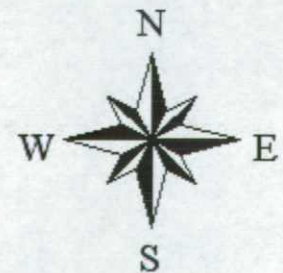
A) A sequential number to indicate the order in which points on a line or area are connected. For an area, the maximum point is connected to the first. Required if the feature is polygonal or linear 3 numeric.



# Sunshine Laundry, Fort Dodge



- All\_wells\_public.shp
- roads\_2006\_94.shp - Webster Co.
- ▲ Nonmunicipal PWS
- Municipal wells
- Source Water Protection Area
  - 2-year
  - 5-year
  - 10-year
  - 2500-foot
  - 1-mile
  - primary protection area
  - surface runoff area
  - hydrologic boundary
  - County







LEGEND

SCALE

0 50 FT.



MW-1

APPROXIMATE MONITORING WELL LOCATION - BARKER LEMAR

BH-1

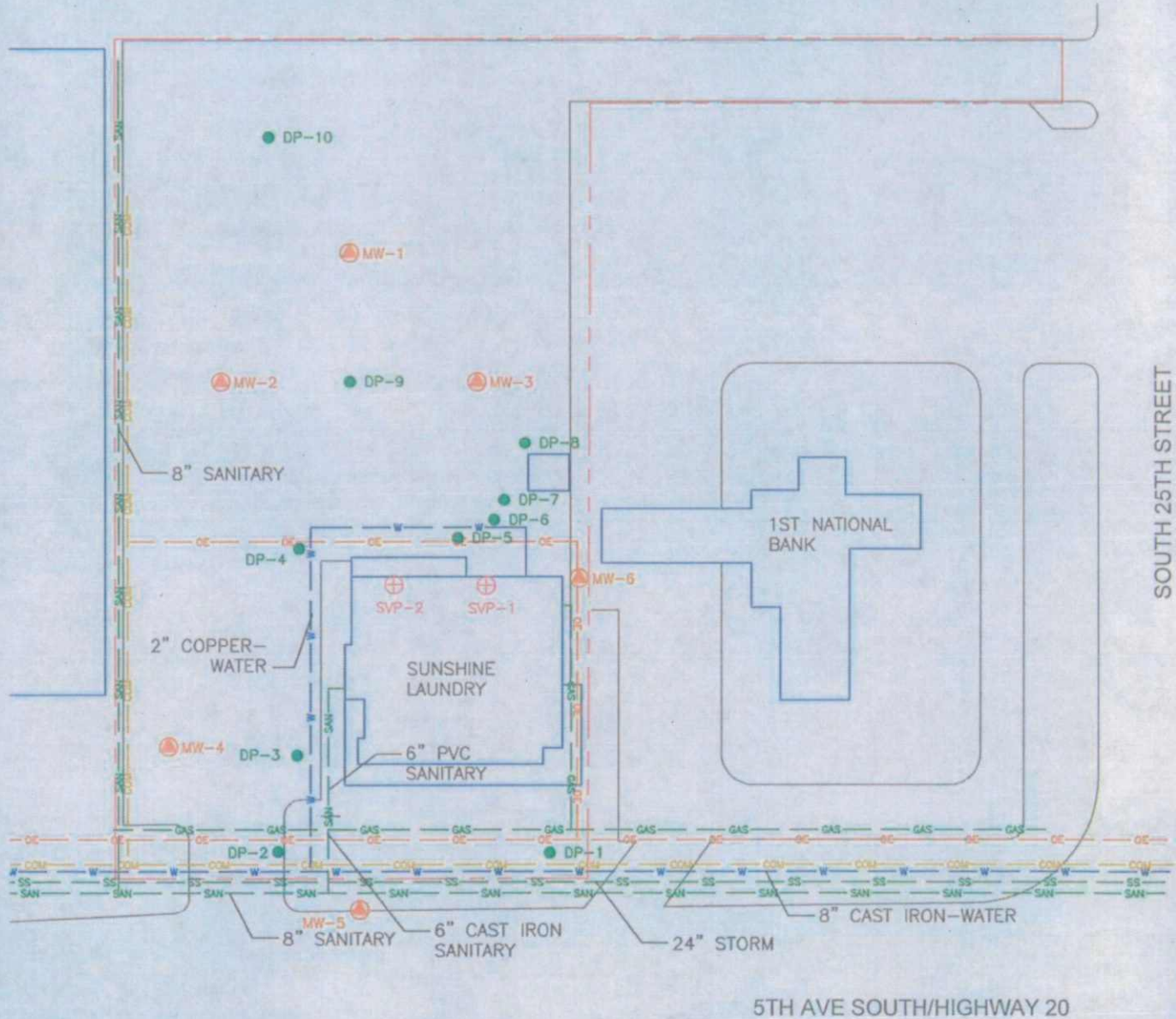
APPROXIMATE LOCATION OF BOREHOLE - INSTALLED MARCH 2008

SG-1

APPROXIMATE LOCATION OF SOIL GAS WELL - INSTALLED MARCH 2008

- GAS NATURAL GAS LINE
- COM COMMUNICATIONS CABLE
- PROPERTY BOUNDARY
- OE OVERHEAD ELECTRIC LINE

- W WATER SUPPLY
- SAN SANITARY SEWER
- SS STORM SEWER



SITE MAP  
 SUNSHINE LAUNDRY  
 FORT DODGE, IOWA  
 PROJECT NO. SNSHN 09000  
 DRAWING DATE: APRIL 2010

**BARKER LEMAR**  
 ENGINEERING CONSULTANTS  
 1801 Industrial Circle - West Des Moines, Iowa - 50265  
 Phone: 515.256.8814 - Fax: 515.256.0152 - www.barkerlemar.com

FIGURE  
 1

Filename: M:\SUNSHINE\CAD\CHIEF SURVEY\09-10\_recover.dwg - Last Updated: Jun 15, 2010 14:30 - 197 feet



# Sunshine Laundry, Fort Dodge

