

Site Name: Nevada Auto Wash, Nevada, Iowa

Brownfield Initial Site Screening (ISS)

Project Manager: Jim Kacer

Date: December 21, 2009

3931 - Phase II Assessment Review - standard

Phase II submitted as part of standard real estate development, pre-purchase agreement, or other due diligence, not a part of a community grant project, or

3837 - Phase II Assessment – grant funded

Phase II submitted as part of an EPA grant funded community-wide or targeted assessment project – see Mel Pins if questions on this determination

Location:

Latitude: 42.0225 Longitude: -93.440278
(Decimal Degree format)

County: Story

USGS Quadrant: Nevada, Iowa

Site Size: 0.62

Site Dimension: Acres Square Feet
 Feet Square Miles Miles

Site Alias Name(s): _____

Congressional District: 4

Grant Recipient Name, Address & Contact: _____

Current Owner & Address: Scott's Sales Company, PO Box E, McCallsburg, IA 50154-0905

Responsible Party Name(s) & Address, if different from current owner:

Site Street Address or Tier, Range, Section & Subsections (if street address is unknown)
1120 15th Street and 1436 Lincoln Way, Nevada, IA

Directions to site: From Highway 30, take exit 158, turning north onto South 19th Street. Follow 19th Street north to Lincoln Way, turning left (west) onto Lincoln Way. The site is on the southwest corner of the intersection of 19th Street and Lincoln Way.

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, consisting of two adjoining lots, is located on the east side of Nevada at 1120 15th Street and 1436 Lincoln Way (Figure 1). A Phase I Environmental Site Assessment (ESA), completed November 18, 2009, indicates that this property and surrounding area was mixed commercial and residential as early as the 1930s, and primarily commercial since the 1950s:

- The Hut Restaurant was listed on the property in a 1949 street directory.
- Hunter Oil Company (gas station) was listed at 1436 Lincoln Way (the west side of the property) in the street directories from the 1950s through the 1970s. Hartzler House Restaurant was located at this address in the 1980s, while Kiddie Kampus day care was located at this address in the 1990s. The building at this address was demolished and a two-bay car wash was constructed in 2009.
- The original car wash was constructed on the east side of the property (1120 15th Street) in the mid-1960s, with additions constructed in the 1990s

The Phase I ESA identified no evidence of underground storage tanks during site reconnaissance, records review, or interviews. Information provided to DNR by the property owner indicates that petroleum storage tanks for Hunter Oil were above ground.

The Phase I ESA states that three underground tanks for water treatment were recently installed near the southeast corner of the new car wash.

The Phase I ESA identified the following recognized environmental condition (REC), as defined in ASTM Standard E1527-05 under which the Phase I ESA was conducted:

- Use of the west side of the property as a gas station from the 1950s through the 1970s.

No off-site RECs were identified in the Phase I ESA.

A Phase II ESA (report dated December 4, 2009) was conducted to evaluate this REC. Results of this assessment are discussed in the following paragraphs.

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.)

Four test borings (TB-1, TB-2, TB-3, and TB-4) were drilled on site (Figure 2), each to a depth of approximately 20 feet below ground surface (bgs). Groundwater was encountered between 8 and 11 feet bgs. The Phase II ESA did not include an explanation of how the boring locations were selected. One soil sample was collected above the water table from each boring from a depth of approximately 8 feet bgs. Temporary monitoring wells were installed in each borehole, and groundwater samples were collected for analysis of total extractable hydrocarbons (TEH), benzene, toluene, ethylbenzene, and xylenes (BTEX).

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.

Results of soil and groundwater analyses are summarized below.

Soil

Only TEH-diesel was present above the laboratory reporting limit, at TB-1. The soil analytical result did not exceed the statewide standard.

Table 1
Soil Sample Results, mg/kg
(Results exceeding statewide standards are listed in boldface type.)

Sample	NAW-1 (Boring TB-1)	NAW-2 (Boring TB-2)	NAW-3 (Boring TB-3)	NAW-4 (Boring TB-4)	Statewide Standard
Date	11/25/2009	11/25/2009	11/25/2009	11/25/2009	
Total Extractable Hydrocarbons (TEH)	59	<5	<5	<5	NA
TEH-Diesel	59	<5	<5	<5	3,800
TEH-Gasoline	<5	<5	<5	<5	NA
TEH-Waste Oil	<5	<5	<5	<5	NA
Benzene	<0.20	<0.20	<0.20	<0.20	0.54
Toluene	<0.20	<0.20	<0.20	<0.20	42
Ethylbenzene	<0.20	<0.20	<0.20	<0.20	15
Xylenes	<0.40	<0.40	<0.40	<0.40	NA

Source: Allender Butzke Engineers Inc., Nevada Auto Wash, Phase II Environmental Site Assessment, 1120 15th Street and 1436 Lincoln Way, Nevada, IA. December 4, 2009.

Groundwater

Only benzene was present above the laboratory reporting limit, at TB-1. The analytical result exceeded the statewide standard.

Table 2
Groundwater Sample Results, µg/l
(Results exceeding statewide standards are listed in boldface type.)

Sample	NAW-1 (Boring TB-1)	NAW-2 (Boring TB-2)	NAW-3 (Boring TB-3)	NAW-4 (Boring TB-4)	Statewide Standard
Date	11/30/2009	11/25/2009	11/25/2009	11/30/2009	
Total Extractable Hydrocarbons (TEH)	800	<100	<100	<100	NA
TEH-Diesel	800	<100	<100	<100	1,200
TEH-Gasoline	<100	<100	<100	<100	NA
TEH-Waste Oil	<100	<100	<100	<100	400
Benzene	15.2	<1.0	<5.0	<1.0	5
Toluene	<1.0	<1.0	<5.0	<1.0	1,000
Ethylbenzene	<1.0	<1.0	<5.0	<1.0	700
Xylenes	<2.0	<2.0	<10.0	<2.0	10,000

Source: Allender Butzke Engineers Inc., Nevada Auto Wash, Phase II Environmental Site Assessment, 1120 15th Street and 1436 Lincoln Way, Nevada, IA. December 4, 2009.

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 area surrounding the site is primarily commercial and residential to the south and west, residential and agricultural to the north, and agricultural to the northeast, with a school (Nevada Middle School) located to the east and southeast. The Phase I ESA states that shallow groundwater flow is likely from the southwest to the northeast.

No water wells were identified on site.

Numerous wells were identified within ½ mile of the property boundary:

- One municipal well within ¼ mile of the project boundary (approximately 320 feet northwest of the site, total depth 87 feet bgs), and two deep municipal wells (approximately 2,500 feet northwest of the site, approx. 2,791 feet bgs) between ¼ mile and ½ mile of the project boundary, both located west-northwest of the project boundary. In addition, four shallower (approx. 80 feet), possibly inactive, municipal wells were identified between ¼ mile and ½ mile of the project boundary.
- One abandoned private well within ¼ mile of the project boundary, (approximately 760 feet west-southwest of the site, total depth 32 feet bgs), and one active private well between ¼ mile and ½ mile of the project boundary (approximately 2,540 feet west of the site, total depth 25 feet bgs).
- Six plugged household wells and eight other plugged monitoring wells between ¼ mile and ½ mile of the project boundary.
- One standby irrigation well and three heat pump wells are located between ¼ mile and ½ mile of the project boundary.

Four leaking underground storage tank (LUST) sites were identified within ¼ mile of the site:

- 9LTL68, Nevada Comm. Schools, approximately 660 feet southeast (presumably cross-gradient) of the site. Status: no action required.
- 8LTQ78, Nevada Schools Transportation Building, approximately 240 feet northwest (presumably cross-gradient) of the site. Status: no action required.
- 7LTO83, Casey's General Store #2306, approximately 900 feet west (presumably up-gradient) of the site. Status: no action required.
- 9LTD63, Donnelly Marketing, approximately 940 feet northwest (presumably cross-gradient) of the site. Status: no action required.

In addition, three LUSTs were identified between ¼ and ½ mile of the site:

- 8LTM13, Story County Shed, approximately 2,190 feet west-northwest (presumably cross-gradient) of the site. Status: no action required.
- 8LTF89, Former Vista, approximately 2,280 feet west (presumably up-gradient) of the site. Status: no action required.

- 7LTY59, Kum & Go #533, approximately 2,450 feet west (presumably up-gradient) of the site. Status: no action required.

Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.

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Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.

The Phase I ESA identified historic use of the site as a gasoline station as a recognized environmental condition. The Phase II ESA indicates that benzene was detected (15.2 µg/L) in the groundwater on site at a concentration exceeding the statewide standard (5 µg/L) at the sampling location (TB-1) near the northeast corner of the property. Total extractable hydrocarbons-diesel was detected (59 mg/kg) in the soil at this sample location at a concentration below the statewide standard (3,800 mg/kg). No petroleum constituents were detected in soil or groundwater at the other three onsite sample locations.

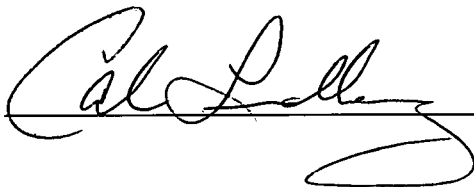
Neither the Phase I ESA nor the Phase II ESA identified a continuing source of contamination. No drinking water wells were identified in the presumed downgradient direction (northeast) from the site.

Further action is not required under CERCLA or State authority.

Site recommended for:

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

Form Reviewed:

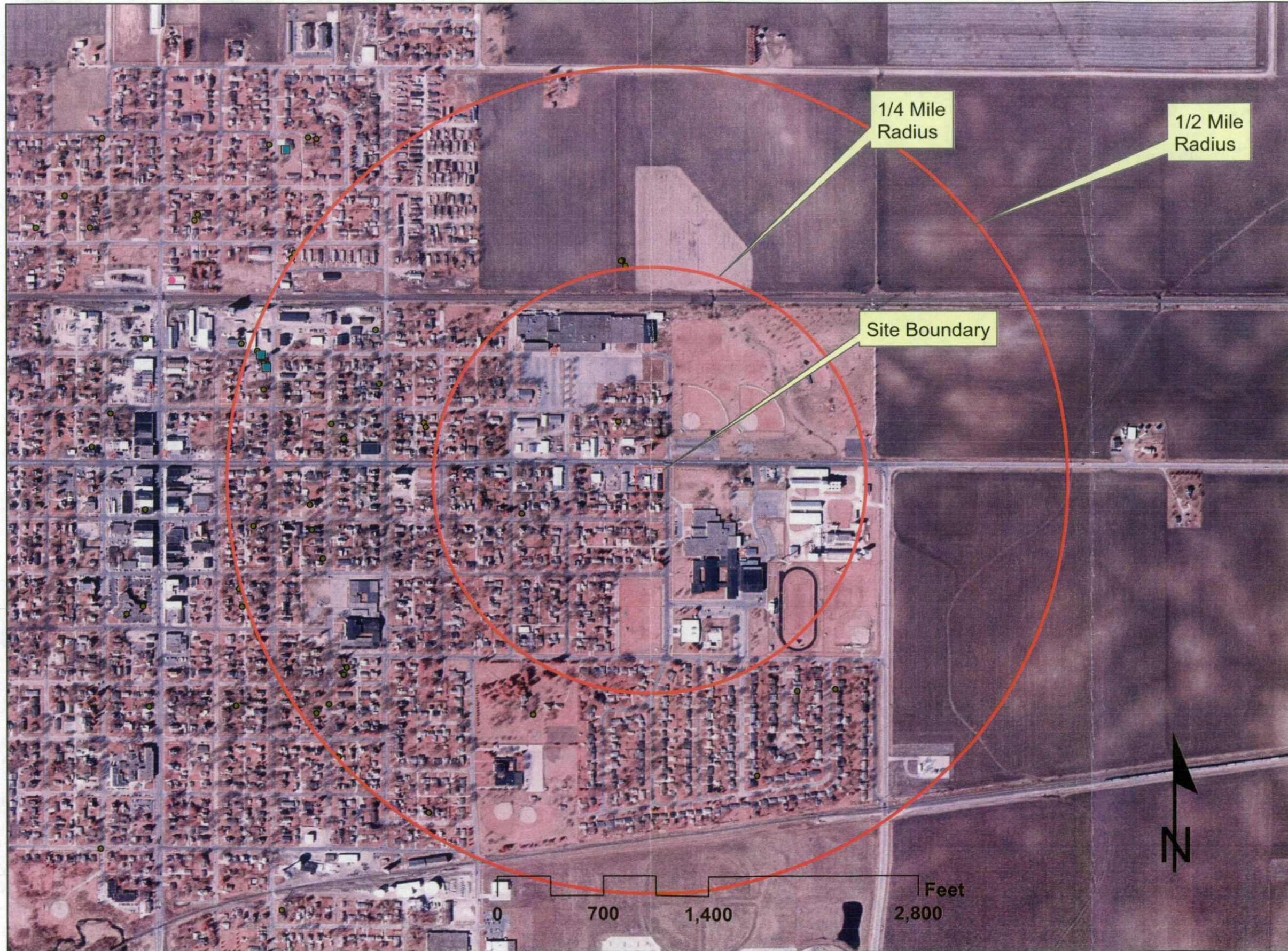


Date Reviewed:

1/5/10

Revised 7/2007

Figure 1
Nevada Auto Wash
Nevada, Iowa



- Legend**
- Municipal wells
 - all_wells_public
 - Manugas.shp
 - ★ LUST sites

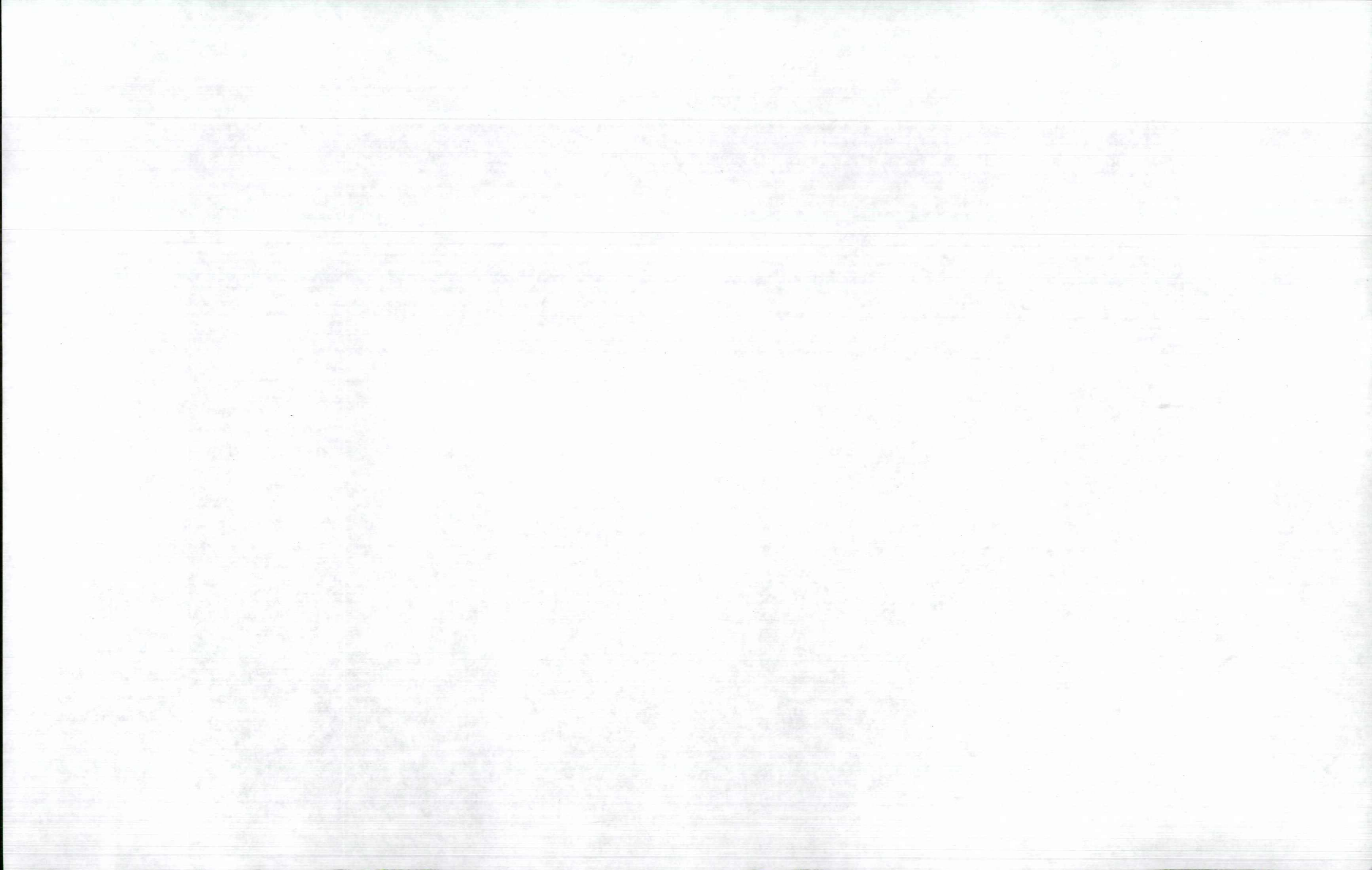


Figure 2
Sample Locations

