Site Name: UPRR Fauser Oil Lease-West, Oelwein

CON 12-15
Doc #18165

Brownfield Initial Site Screening (ISS)

Project Manager: Hylton Jackson

Date: 12/12/2007

☒ **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· 672578 *Longitude:* 91 ·918156 ***County:*** Fayette
(Decimal Degree format)

USGS Quadrant: Oelwein 7.5'

Site Size: 0.41

Site Dimension: ☒ Acres ☐ Square Feet ☐ Feet ☐ Square Miles ☐ Miles

Site Alias Name(s): _____

Congressional District: 1

Grant Recipient Name, Address & Contact: _____

Current Owner & Address:
Union Pacific Railroad Company
1400 Douglas Street, STOP 1030
Omaha, NE 68179

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

Site Street Address or Tier, Range, Section & Subsections (if street address is unknown)
T 91 N, R 9 W, NW1/4 Sec 21

Directions to site:_____
From IA-150 south of Oelwein, turn left onto 6th St. SW, proceed 0.3 miles. Site is just west of the intersection of 6th Street SW and 3rd Avenue SW on north side of 6th St.

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)
ASTs were first installed in the early 1940s. The parcel was leased to Fauser Oil Company in 1980 and used until recently as a petroleum bulk storage facility. ASTs were "clustered" on the east and west ends of the property. The site is now vacant and no specific date was given for the equipment/tanks removal.

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.)
Seven soil borings were advanced on the property on May 23, 2007. GP-1 through GP-6 were advanced to 25 feet bgs and GP-7 was terminated at 20 feet bgs. Soil samples were continuously field screened for classification and Flame Ionization Detector (FID) readings. In general, soil types encountered were 1-3 feet of silty top soil overlying sand with silt and gravel to the depth of boring. One boring encountered clay at 20 feet bgs. Soil samples were collected from the interval with the highest FID reading and submitted for volatile organic compounds (VOC - method 8260) and total extractable hydrocarbon (TEH – method OA-2) analysis. Temporary wells were installed in the borings with groundwater detected from 9.42 to 18.14 feet bgs. Six groundwater samples were collected and submitted for VOC (8260) and TEH (OA-2) analysis. Free product was detected in GP-6 (0.04 feet thick) and a groundwater sample was not submitted.

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:
TEH diesel was detected in GP-5 and GP-6 at 6,600 mg/kg and 4,370 mg/kg respectively. Both concentrations exceed the Tier 1 standard for soils leaching to groundwater of 3,800 mg/kg. TEH motor oil and 16 VOCs were detected in at least 1 soil sample, all below applicable Tier 1 or Statewide Standard.

Groundwater:
Free product (diesel) was detected in groundwater from GP-6. No groundwater sample from GP-6 was submitted for analysis.

TEH diesel was detected above the Tier 1 standard (1,200 ug/L) in 4 of the 6 groundwater samples:

GP-3: 1,440 ug/L	GP-5: 13,300 ug/L
GP-7: 113,000ug/L	GP-8: 12,900 ug/L

TEH motor oil was detected above the Tier 1 standard (400 ug/L) in 3 of the 6 groundwater samples

GP-4: 491 ug/L	GP-7: 14,600 ug/L
GP-5: 1,120 ug/L	

Benzene was detected in GP-5 at 6.04 ug/L, above the Statewide Standard of 5 ug/L.

1,2,4-trimethylbenzene was detected in GP-7 at 441 ug/L, above the Statewide Standard of 70 ug/L

Fourteen VOCs were detected in one or more groundwater samples at concentrations below their respective Tier 1 or 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 mixed use area (residential/commercial) of southwestern Oelwein. The nearest residence is 100 feet south of the site. The temporary monitoring well with free product is located 200 feet from the City of Oelwein Municipal Well # 5 (1,200 feet deep). It is assumed that the area is served by municipal water and sewer. Records indicate a public water supply well (69 feet deep, finished in bedrock) located 1,150 feet northwest of the property. Records do not indicate any other water supply wells within 1,500 feet of the site. The city of Oelwein and Fayette County do not appear on the Department's *LISTING OF APPROVED CITY AND COUNTY PRIVATE WELL ORDINANCES.*

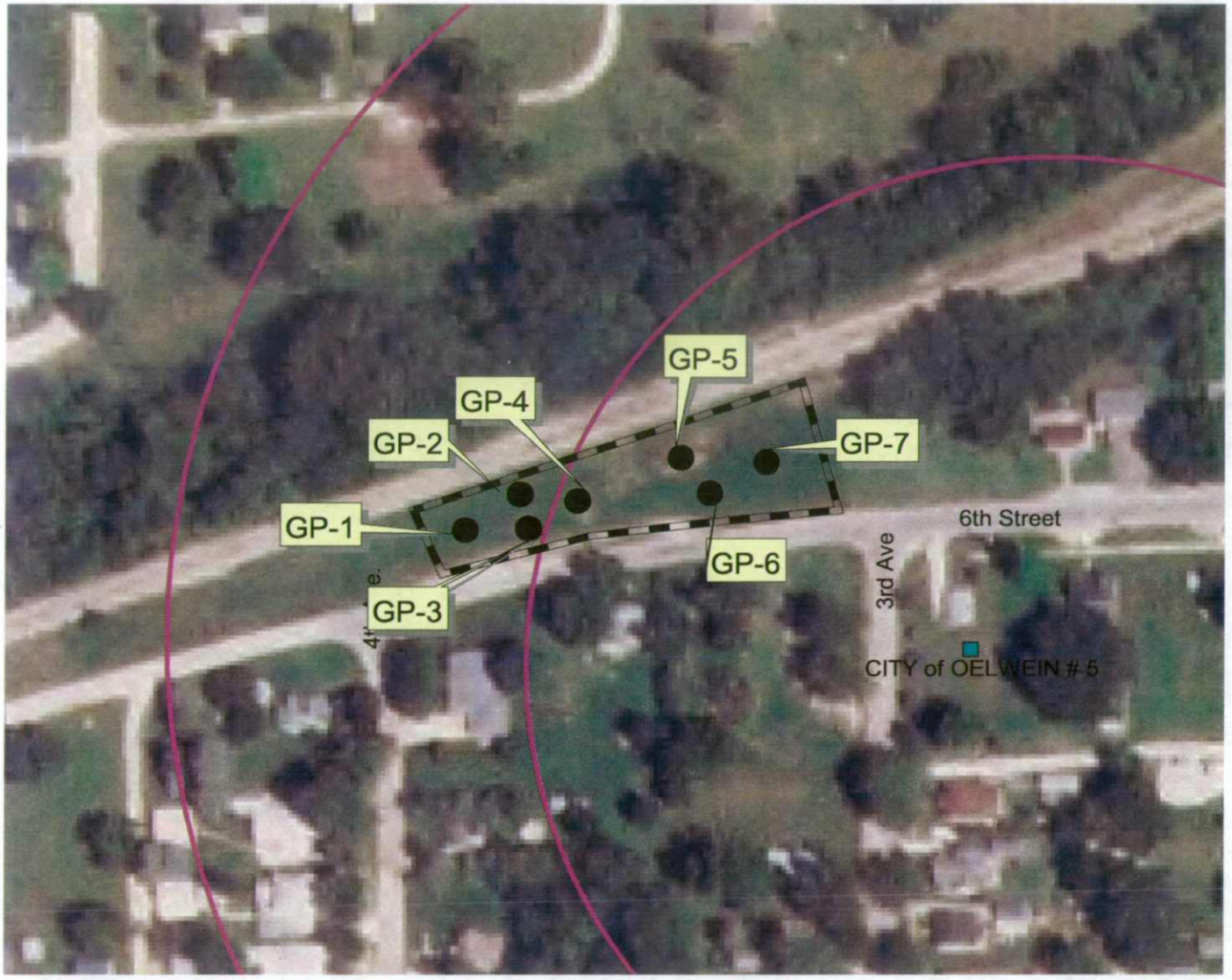
Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.
2

Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.
Free product petroleum has been detected on site. The extent of contamination has not been defined. The RP will be informed as to the requirement to recover free product and also required to submit a work plan for a further site assessment under 567 IAC 133.

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

Form Reviewed: _____ **Date Reviewed:** 12/13/07

UPRR - Fauser Property - West
Sample Locations



0.05 0 0.05 0.1 Miles

- 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

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