



Antea USA, Inc.
985 Lincoln Road, Suite 220
Bettendorf, IA 52722 USA

24 March 2021

Mr. Bill Gross
Environmental Specialist
Iowa Department of Natural Resources
7900 Hickman Rd. Suite 200
Windsor Heights, Iowa 50324-4404
USA

RE: Annual Summary of 2020 Activities
Union Pacific Railroad, 605 S. Third Avenue
Marshalltown, IA - Fueling Facility
IDNR No. 06014-KL-1335

Dear Mr. Gross:

On behalf of Union Pacific Railroad Company (UP), Antea®Group is providing this annual summary of activities conducted in 2020 at the Union Pacific rail yard in Marshalltown, Iowa (Site). This work was performed by Antea Group.

UP had previously installed two vacuum-enhanced systems for recovery of light non-aqueous phase liquids (LNAPL) at the Site. The two systems are referred to as the Linn Creek Recovery System (LCRS) and the Fueling Area Recovery System (FARS). UP also maintains a network of observation wells at the Site. Figure 1, Site Map, illustrates the locations of the monitoring wells and extraction wells at the Site.

This report summarizes well gauging and LNAPL recovery at wells associated with the LCRS and FARS, as well as monthly operation and maintenance (O&M) activities for the LCRS. Groundwater gauging data, system operational data, and a site map are attached.

GROUNDWATER GAUGING

As part of routine O&M activities, Antea Group personnel gauged groundwater and LNAPL elevations in specific wells on a monthly basis throughout the reporting period. Additionally, LNAPL measured during monthly gauging was removed from wells using hand bailers, as applicable, then ran through the oil/water separator in the LCRS. Commonly bailed wells included MW-15, MW-31, MW-32, MW-33, MW-37, MW-43, MW-45, MW-49, MW-50, and MW-56.

Gauging measurements were collected on January 7th, February 13th, March 12th, June 29th, July 27th, August 20th-21st, September 29th-30th, October 21st, November 24th, and December 16th in 2020. Groundwater levels generally stayed flat throughout the year, with fluctuations being relatively independent of other wells. April and May Gauging events were postponed due to Covid-19. A limited scope of site activities on the LCRS system for data collection and monitoring were performed on April 30th and May 28th.



In General, LNAPL thickness in the wells fluctuated independently from groundwater elevations. However, some cases of rising groundwater elevation and thinning LNAPL thickness were observed. Groundwater elevation and in-well LNAPL thickness data for 2019 and 2020 are presented in Table 1, Groundwater Gauging Data.

LINN CREEK RECOVERY SYSTEM OPERATION

The LCRS was shut down during several periods during the reporting period to allow for system repairs, maintenance, and well gauging activities. Routine maintenance included an oil change and filter cleaning which occurred in October. Details pertaining to system repairs are reported below.

The system operated normally throughout much of the beginning of the year. Most months, the system was down upon inspection, but alarm history indicated that it usually ran for much of the month. System faults were related to float switches gumming up and sticking or due to weather related power outages. The Derecho that affected most of the state on August 10, 2020 also affected this site. There was some damage to the system trailer and the power line feeding one of the remote system buildings. The damage was repaired during the September, 2020 event and power was restored at the end of November, 2020.

In December, it was determined that a fluid transfer line from the vapor-liquid separator tank had a blockage and couldn't transfer fluids into the oil/water separator tank. The line was cleared of the blockage and restored temporary functionality to the system. Following the December event it was determined that the transfer pump was not able to transfer fluids into the oil/water separator tank. Fluid transfer lines were inspected during the January 20th, 2021 event and it was determined that the fluid transfer pump was not functioning. The pump impeller was suspected to have worn out and a replacement pump was subsequently installed.

During 2020, the LCRS pumped approximately 800,311 gallons of water and recovered approximately 78 gallons of LNAPL. The water was discharged from the LCRS to Union Pacific Railroad's on-site wastewater treatment plant, then discharged to the City of Marshalltown's wastewater treatment plant. The LNAPL recovery corresponds to the time period between January 7th, 2020, and January 20, 2021 gauging events. Historic fluid and LNAPL recovery data for the LCRS are presented in Table 2, Linn Creek Recovery System Operational Data.

FUELING AREA RECOVERY SYSTEM OPERATION

The FARS system has been shut down since 2016. Hand bailing of LNAPL in FARS wells has continued during monthly gauging events in 2020 and will continue to be the recommended method of LNAPL recovery in 2021.

From November 2002 through October 2016, the FARS recovered approximately 12,912 gallons of LNAPL. Approximately 9.5 gallons of LNAPL was recovered from FARS wells via hand bailing in 2020. This volume was added to the total volume of product recovered by the LCRS as presented above.

Mr. Bill Gross
Iowa Department of Natural Resources
March 24, 2021



STATUS AND SCHEDULE

The Annual Summary Report for activities performed during the 2021 calendar year will be reported in January 2022. Regularly scheduled LNAPL monitoring and maintenance activities related to the recovery systems will continue to be conducted monthly.

If you have questions concerning this summary or the status of the Marshalltown project, please contact Matt McDermott at (563) 723-5990. Thank you.

Sincerely,

Antea Group

A handwritten signature in black ink that reads "Collin Schohn".

Collin Schohn
Staff Professional
collin.schohn@anteagroup.com

A handwritten signature in black ink that reads "Matt McDermott".

Matt McDermott
Project Manager
matt.mcdermott@anteagroup.com

Attachments: Table 1: Groundwater Gauging Data
 Table 2: Linn Creek Recovery System Operational Data
 Figure 1: Site Map

cc: Ms. Kelly Gearhart, Union Pacific Railroad

TABLE 1

Groundwater Gauging Data
 Union Pacific Railroad
 Marshalltown, IA - Fueling Facility

	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft.)	Water Table Elevation (ft amsl)	Corrected (WTE)
MW-1						
03/12/2020	880.57	13.52	—	0.00	867.05	867.05
06/29/2020	880.57	7.32	—	0.00	873.25	873.25
09/29/2020	880.57	9.63	—	0.00	870.94	870.94
12/16/2020	880.57	11.11	—	0.00	869.46	869.46
MW-3						
01/07/2020	879.86	10.40	—	0.00	869.46	869.46
07/24/2020	879.86	10.53	—	0.00	869.33	869.33
10/21/2020	879.86	12.35	—	0.00	867.51	867.51
MW-4						
01/07/2020	879.47	3.01	—	0.00	876.46	876.46
07/24/2020	879.47	12.69	—	0.00	866.78	866.78
01/20/2021	879.47	9.89	—	0.00	869.58	869.58
MW-5						
01/07/2020	881.00	14.56	—	0.00	866.44	866.44
02/13/2020	881.00	14.73	—	0.00	866.27	866.27
03/12/2020	881.00	14.60	—	0.00	866.40	866.40
07/24/2020	881.00	14.54	—	0.00	866.46	866.46
08/20/2020	881.00	14.80	—	0.00	866.20	866.20
09/29/2020	881.00	14.84	—	0.00	866.16	866.16
10/21/2020	881.00	15.22	—	0.00	865.78	865.78
MW-6						
01/07/2020	881.49	14.75	—	0.00	866.74	866.74
02/13/2020	881.49	12.53	—	0.00	868.96	868.96
03/12/2020	881.49	12.17	—	0.00	869.32	869.32
06/29/2020	881.49	8.18	—	0.00	873.31	873.31
07/24/2020	881.49	11.19	—	0.00	870.30	870.30
08/20/2020	881.49	9.34	—	0.00	872.15	872.15
09/29/2020	881.49	9.35	—	0.00	872.14	872.14
10/21/2020	881.49	11.51	—	0.00	869.98	869.98
11/24/2020	881.49	11.23	—	0.00	870.26	870.26
12/16/2020	881.49	12.27	—	0.00	869.22	869.22
01/20/2021	881.49	12.27	—	0.00	869.22	869.22
MW-9						
01/07/2020	883.34	16.00	15.77	0.23	867.34	867.52
02/13/2020	883.34	16.28	16.09	0.19	867.06	867.21
03/12/2020	883.34	16.30	16.12	0.18	867.04	867.18
06/29/2020	883.34	13.10	12.46	0.64	870.24	870.75
07/24/2020	883.34	16.07	15.74	0.33	867.27	867.53
08/20/2020	883.34	14.97	14.67	0.30	868.37	868.61
09/29/2020	883.34	15.83	15.73	0.10	867.51	867.59
10/21/2020	883.34	16.83	16.75	0.08	866.51	866.57
11/24/2020	883.34	16.70	16.61	0.09	866.64	866.71
12/16/2020	883.34	16.87	16.82	0.05	866.47	866.51
01/20/2021	883.34	17.14	17.09	0.05	866.20	866.24
MW-10						
01/07/2020	882.35	13.97	13.82	0.15	868.38	868.50
02/13/2020	882.35	14.75	14.59	0.16	867.60	867.73
03/12/2020	882.35	14.11	13.95	0.16	868.24	868.37
06/29/2020	882.35	10.46	9.95	0.51	871.89	872.30
07/24/2020	882.35	13.21	12.67	0.54	869.14	869.57
08/20/2020	882.35	14.94	14.38	0.56	867.41	867.86
09/29/2020	882.35	13.61	13.01	0.60	868.74	869.22
10/21/2020	882.35	15.01	14.32	0.69	867.34	867.89

TABLE 1

Groundwater Gauging Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft.)	Water Table Elevation (ft amsl)	Corrected (WTE)
11/24/2020	882.35	15.05	14.26	0.79	867.30	867.93
12/16/2020	882.35	14.92	14.85	0.07	867.43	867.49
01/20/2021	882.35	15.14	14.99	0.15	867.21	867.33
MW-15						
01/07/2020	883.19	15.85	—	0.00	867.34	867.34
03/12/2020	883.19	15.03	14.98	0.05	868.16	868.20
06/29/2020	883.19	15.04	13.49	1.55	868.15	869.39
07/24/2020	883.19	15.79	15.07	0.72	867.40	867.98
08/20/2020	883.19	15.51	15.09	0.42	867.68	868.02
09/29/2020	883.19	15.10	14.46	0.64	868.09	868.60
10/21/2020	883.19	15.15	14.88	0.27	868.04	868.26
11/24/2020	883.19	15.97	15.94	0.03	867.22	867.24
12/16/2020	883.19	16.13	16.11	0.02	867.06	867.08
MW-16						
01/07/2020	880.95	3.15	—	0.00	877.80	877.80
02/13/2020	880.95	10.11	—	0.00	870.84	870.84
03/12/2020	880.95	3.15	—	0.00	877.80	877.80
06/29/2020	880.95	4.77	—	0.00	876.18	876.18
07/24/2020	880.95	11.05	—	0.00	869.90	869.90
08/20/2020	880.95	9.89	—	0.00	871.06	871.06
09/29/2020	880.95	8.80	—	0.00	872.15	872.15
10/21/2020	880.95	13.62	—	0.00	867.33	867.33
11/24/2020	880.95	12.66	—	0.00	868.29	868.29
12/16/2020	880.95	12.99	—	0.00	867.96	867.96
01/20/2021	880.95	13.81	—	0.00	867.14	867.14
MW-17						
01/07/2020	879.70	10.58	—	0.00	869.12	869.12
07/24/2020	879.70	12.78	—	0.00	866.92	866.92
10/21/2020	879.70	13.58	—	0.00	866.12	866.12
01/20/2021	879.70	12.52	—	0.00	867.18	867.18
MW-18						
01/07/2020	884.04	16.95	—	0.00	867.09	867.09
07/24/2020	884.04	16.83	—	0.00	867.21	867.21
10/21/2020	884.04	17.60	—	0.00	866.44	866.44
12/16/2020	884.04	17.71	—	0.00	866.33	866.33
01/20/2021	884.04	17.93	—	0.00	866.11	866.11
MW-20						
03/12/2020	884.28	15.02	—	0.00	869.26	869.26
06/29/2020	884.28	11.89	—	0.00	872.39	872.39
12/16/2020	884.28	16.33	—	0.00	867.95	867.95
MW-25						
02/13/2020	878.95	12.31	12.22	0.09	866.64	866.71
08/20/2020	878.95	12.66	12.61	0.05	866.29	866.33
10/21/2020	878.95	13.12	—	0.00	865.83	865.83
11/24/2020	878.95	15.20	—	0.00	863.75	863.75
12/16/2020	878.95	13.05	—	0.00	865.90	865.90
01/20/2021	878.95	13.13	—	0.00	865.82	865.82
MW-27						
01/07/2020	879.78	12.81	—	0.00	866.97	866.97
07/24/2020	879.78	12.78	—	0.00	867.00	867.00
10/21/2020	879.78	13.63	—	0.00	866.15	866.15
01/20/2021	879.78	10.41	—	0.00	869.37	869.37
MW-28						
01/07/2020	883.72	17.12	16.87	0.25	866.60	866.80

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07/24/2020	883.72	17.32	17.19	0.13	866.40	866.50
10/21/2020	883.72	18.13	18.00	0.13	865.59	865.69
MW-30						
03/12/2020	881.09	13.68	13.62	0.06	867.41	867.46
09/29/2020	881.09	16.26	13.32	2.94	864.83	867.18
12/16/2020	881.09	15.99	13.99	2.00	865.10	866.70
MW-31						
01/07/2020	881.11	14.43	13.59	0.84	866.68	867.35
02/13/2020	881.11	14.12	—	0.00	866.99	866.99
03/12/2020	881.11	13.81	13.58	0.23	867.30	867.48
06/29/2020	881.11	12.22	12.08	0.14	868.89	869.00
07/24/2020	881.11	14.14	13.35	0.79	866.97	867.60
08/20/2020	881.11	16.02	13.53	2.49	865.09	867.08
09/29/2020	881.11	14.67	13.71	0.96	866.44	867.21
10/21/2020	881.11	15.27	14.20	1.07	865.84	866.70
11/24/2020	881.11	14.44	13.66	0.78	866.67	867.29
12/16/2020	881.11	14.65	14.28	0.37	866.46	866.76
01/20/2021	881.11	14.85	14.28	0.57	866.26	866.72
MW-32						
01/07/2020	881.50	14.30	—	0.00	867.20	867.20
02/13/2020	881.50	14.24	—	0.00	867.26	867.26
03/12/2020	881.50	14.20	—	0.00	867.30	867.30
06/29/2020	881.50	10.80	—	0.00	870.70	870.70
07/24/2020	881.50	12.88	12.87	0.01	868.62	868.63
08/20/2020	881.50	14.17	—	0.00	867.33	867.33
09/29/2020	881.50	14.32	14.30	0.02	867.18	867.20
10/21/2020	881.50	14.73	14.72	0.01	866.77	866.78
11/24/2020	881.50	14.45	14.41	0.04	867.05	867.08
12/16/2020	881.50	14.75	14.71	0.04	866.75	866.78
01/20/2021	881.50	15.05	14.86	0.19	866.45	866.60
MW-33						
01/07/2020	881.42	17.12	13.88	3.24	864.30	866.89
02/13/2020	881.42	17.43	14.31	3.12	863.99	866.49
03/12/2020	881.42	17.67	13.55	4.12	863.75	867.05
06/29/2020	881.42	15.98	12.08	3.90	865.44	868.56
07/24/2020	881.42	17.25	13.63	3.62	864.17	867.07
08/20/2020	881.42	17.64	14.01	3.63	863.78	866.68
09/29/2020	881.42	17.61	13.91	3.70	863.81	866.77
10/21/2020	881.42	17.87	14.57	3.30	863.55	866.19
11/24/2020	881.42	17.92	14.30	3.62	863.50	866.40
12/16/2020	881.42	18.05	14.50	3.55	863.37	866.21
01/20/2021	881.42	17.19	14.56	2.63	864.23	866.33
MW-34						
01/07/2020	880.84	15.33	15.32	0.01	865.51	865.52
02/13/2020	880.84	15.24	15.20	0.04	865.60	865.63
03/12/2020	880.84	15.55	15.54	0.01	865.29	865.30
06/29/2020	880.84	15.37	15.36	0.01	865.47	865.48
07/24/2020	880.84	15.33	15.33	0.00	865.51	865.51
08/20/2020	880.84	15.60	15.58	0.02	865.24	865.26
09/29/2020	880.84	15.72	15.64	0.08	865.12	865.18
10/21/2020	880.84	15.81	—	0.00	865.03	865.03
11/24/2020	880.84	15.71	15.67	0.04	865.13	865.16
12/16/2020	880.84	15.83	15.82	0.01	865.01	865.02
MW-35						

TABLE 1

Groundwater Gauging Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft.)	Water Table Elevation (ft amsl)	Corrected (WTE)
08/20/2020	878.72	12.36	—	0.00	866.36	866.36
11/24/2020	878.72	11.14	—	0.00	867.58	867.58
MW-36						
01/07/2020	878.88	12.44	12.40	0.04	866.44	866.47
02/13/2020	878.88	17.69	17.68	0.01	861.19	861.20
03/12/2020	878.88	12.42	12.38	0.04	866.46	866.49
06/29/2020	878.88	8.93	8.91	0.02	869.95	869.97
07/24/2020	878.88	12.28	12.20	0.08	866.60	866.66
08/20/2020	878.88	12.62	12.58	0.04	866.26	866.29
09/29/2020	878.88	12.60	12.54	0.06	866.28	866.33
10/21/2020	878.88	13.03	13.00	0.03	865.85	865.87
11/24/2020	878.88	10.09	—	0.00	868.79	868.79
12/16/2020	878.88	12.75	—	0.00	866.13	866.13
MW-37						
01/07/2020	879.43	15.23	12.25	2.98	864.20	866.58
03/12/2020	879.43	13.39	12.50	0.89	866.04	866.75
06/29/2020	879.43	14.93	11.28	3.65	864.50	867.42
07/24/2020	879.43	14.07	12.50	1.57	865.36	866.62
08/20/2020	879.43	14.22	12.76	1.46	865.21	866.38
09/29/2020	879.43	14.73	12.81	1.92	864.70	866.24
10/21/2020	879.43	14.40	13.06	1.34	865.03	866.10
11/24/2020	879.43	14.21	12.86	1.35	865.22	866.30
12/16/2020	879.43	15.03	12.90	2.13	864.40	866.10
01/20/2021	879.43	14.67	13.09	1.58	864.76	866.02
MW-38						
01/07/2020	879.25	12.58	12.40	0.18	866.67	866.81
02/13/2020	879.25	12.85	12.58	0.27	866.40	866.62
03/12/2020	879.25	12.54	12.42	0.12	866.71	866.81
06/29/2020	879.25	11.46	—	0.00	867.79	867.79
07/24/2020	879.25	12.81	12.42	0.39	866.44	866.75
08/20/2020	879.25	13.39	12.64	0.75	865.86	866.46
09/29/2020	879.25	13.04	12.77	0.27	866.21	866.43
10/21/2020	879.25	13.97	12.95	1.02	865.28	866.10
11/24/2020	879.25	13.94	12.68	1.26	865.31	866.32
01/20/2021	879.25	13.45	12.98	0.47	865.80	866.18
MW-43						
01/07/2020	879.34	12.59	—	0.00	866.75	866.75
03/12/2020	879.34	13.55	12.43	1.12	865.79	866.69
06/29/2020	879.34	15.25	11.16	4.09	864.09	867.36
07/24/2020	879.34	13.72	12.51	1.21	865.62	866.59
08/20/2020	879.34	14.26	12.64	1.62	865.08	866.38
09/29/2020	879.34	14.96	12.71	2.25	864.38	866.18
10/21/2020	879.34	13.25	—	0.00	866.09	866.09
12/16/2020	879.34	13.90	13.10	0.80	865.44	866.08
MW-44						
08/20/2020	884.61	15.55	—	0.00	869.06	869.06
11/24/2020	884.61	17.16	—	0.00	867.45	867.45
MW-45						
01/07/2020	884.61	18.09	17.23	0.86	866.52	867.21
02/13/2020	884.61	18.61	17.59	1.02	866.00	866.82
03/12/2020	884.61	18.39	17.18	1.21	866.22	867.19
07/24/2020	884.61	17.86	17.12	0.74	866.75	867.34
08/20/2020	884.61	17.92	17.35	0.57	866.69	867.15
09/29/2020	884.61	17.90	17.39	0.51	866.71	867.12

TABLE 1

Groundwater Gauging Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft.)	Water Table Elevation (ft amsl)	Corrected (WTE)
10/21/2020	884.61	19.22	17.96	1.26	865.39	866.40
11/24/2020	884.61	18.95	17.77	1.18	865.66	866.60
01/20/2021	884.61	19.45	18.10	1.35	865.16	866.24
MW-46						
08/20/2020	884.76	16.15	16.11	0.04	868.61	868.64
11/24/2020	884.76	17.02	16.94	0.08	867.74	867.80
MW-47						
02/13/2020	884.65	17.01	16.86	0.15	867.64	867.76
08/20/2020	884.65	16.13	16.08	0.05	868.52	868.56
11/24/2020	884.65	16.46	16.35	0.11	868.19	868.28
MW-49						
01/07/2020	882.75	14.93	14.01	0.92	867.82	868.56
02/13/2020	882.75	14.71	14.49	0.22	868.04	868.22
03/12/2020	882.75	13.89	13.31	0.58	868.86	869.32
06/29/2020	882.75	12.18	10.24	1.94	870.57	872.12
07/24/2020	882.75	14.44	13.75	0.69	868.31	868.86
08/20/2020	882.75	15.05	13.72	1.33	867.70	868.76
09/29/2020	882.75	13.99	13.82	0.17	868.76	868.90
10/21/2020	882.75	15.31	14.59	0.72	867.44	868.02
11/24/2020	882.75	14.60	14.30	0.30	868.15	868.39
12/16/2020	882.75	14.87	—	0.00	867.88	867.88
01/20/2021	882.75	15.04	—	0.00	867.71	867.71
MW-50						
01/07/2020	882.59	16.91	14.33	2.58	865.68	867.74
02/13/2020	882.59	17.10	14.91	2.19	865.49	867.24
03/12/2020	882.59	16.15	14.43	1.72	866.44	867.82
06/29/2020	882.59	19.36	10.96	8.40	863.23	869.95
07/24/2020	882.59	17.50	15.85	1.65	865.09	866.41
08/20/2020	882.59	18.23	14.04	4.19	864.36	867.71
09/29/2020	882.59	18.80	13.91	4.89	863.79	867.70
10/21/2020	882.59	17.50	15.16	2.34	865.09	866.96
11/24/2020	882.59	17.50	14.89	2.61	865.09	867.18
12/16/2020	882.59	16.59	15.39	1.20	866.00	866.96
01/20/2021	882.59	16.51	15.50	1.01	866.08	866.89
MW-51						
01/07/2020	883.73	16.89	—	0.00	866.84	866.84
02/13/2020	883.73	17.30	—	0.00	866.43	866.43
03/12/2020	883.73	16.55	16.54	0.01	867.18	867.19
06/29/2020	883.73	14.01	14.00	0.01	869.72	869.73
07/24/2020	883.73	17.23	15.82	1.41	866.50	867.63
09/29/2020	883.73	17.04	—	0.00	866.69	866.69
MW-53						
01/07/2020	884.06	16.19	—	0.00	867.87	867.87
02/13/2020	884.06	16.58	—	0.00	867.48	867.48
03/12/2020	884.06	15.70	—	0.00	868.36	868.36
06/29/2020	884.06	9.27	—	0.00	874.79	874.79
07/24/2020	884.06	12.86	—	0.00	871.20	871.20
08/20/2020	884.06	16.13	—	0.00	867.93	867.93
09/29/2020	884.06	16.04	—	0.00	868.02	868.02
10/21/2020	884.06	16.90	—	0.00	867.16	867.16

TABLE 1

Groundwater Gauging Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft.)	Water Table Elevation (ft amsl)	Corrected (WTE)
11/24/2020	884.06	16.72	—	0.00	867.34	867.34
MW-54						
01/07/2020	800.70	12.45	—	0.00	788.25	788.25
02/13/2020	800.70	13.52	—	0.00	787.18	787.18
03/12/2020	800.70	13.11	—	0.00	787.59	787.59
06/29/2020	800.70	7.78	—	0.00	792.92	792.92
07/24/2020	800.70	7.53	—	0.00	793.17	793.17
08/20/2020	800.70	8.22	—	0.00	792.48	792.48
09/29/2020	800.70	8.21	—	0.00	792.49	792.49
10/21/2020	800.70	8.45	—	0.00	792.25	792.25
11/24/2020	800.70	7.52	—	0.00	793.18	793.18
01/20/2021	800.70	8.06	—	0.00	792.64	792.64
MW-55						
01/07/2020	880.65	13.98	—	0.00	866.67	866.67
02/13/2020	880.65	14.15	—	0.00	866.50	866.50
03/12/2020	880.65	13.99	—	0.00	866.66	866.66
06/29/2020	880.65	13.17	—	0.00	867.48	867.48
07/24/2020	880.65	14.07	—	0.00	866.58	866.58
08/20/2020	880.65	14.38	—	0.00	866.27	866.27
09/29/2020	880.65	14.48	—	0.00	866.17	866.17
10/21/2020	880.65	14.70	—	0.00	865.95	865.95
11/24/2020	880.65	14.45	—	0.00	866.20	866.20
12/16/2020	880.65	14.02	—	0.00	866.63	866.63
01/20/2021	880.65	14.68	—	0.00	865.97	865.97
MW-56						
01/07/2020	881.83	17.55	13.78	3.77	864.28	867.30
02/13/2020	881.83	17.43	14.16	3.27	864.40	867.02
03/12/2020	881.83	18.01	13.56	4.45	863.82	867.38
06/29/2020	881.83	18.98	11.76	7.22	862.85	868.63
07/24/2020	881.83	18.45	13.49	4.96	863.38	867.35
08/20/2020	881.83	18.44	13.84	4.60	863.39	867.07
09/29/2020	881.83	17.93	13.94	3.99	863.90	867.09
10/21/2020	881.83	18.80	14.88	3.92	863.03	866.17
11/24/2020	881.83	17.72	14.32	3.40	864.11	866.83
12/16/2020	881.83	17.64	14.73	2.91	864.19	866.52
01/20/2021	881.83	16.54	14.69	1.85	865.29	866.77
RW-1						
01/07/2020	882.34	16.19	15.82	0.37	866.15	866.45
02/13/2020	882.34	16.38	16.08	0.30	865.96	866.20
03/12/2020	882.34	16.18	15.83	0.35	866.16	866.44
06/29/2020	882.34	15.16	14.59	0.57	867.18	867.64
07/24/2020	882.34	16.23	15.91	0.32	866.11	866.37
08/20/2020	882.34	16.45	16.18	0.27	865.89	866.11
09/29/2020	882.34	16.55	16.22	0.33	865.79	866.05
10/21/2020	882.34	16.94	16.59	0.35	865.40	865.68
11/24/2020	882.34	16.63	16.28	0.35	865.71	865.99
12/16/2020	882.34	16.80	16.55	0.25	865.54	865.74
01/20/2021	882.34	16.88	16.46	0.42	865.46	865.80

TABLE 2

Linn Creek Recovery System Operational Data
 Union Pacific Railroad
 Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
8/29/1997	55,391	55,391	0.00	2669	92.00
9/29/1997	53,103	108,494	2010.00	4679	64.84
10/31/1997	159,929	268,423	2085.00	6764	65.16
11/30/1997	70,107	338,530	1470.00	8234	49.00
12/29/1997	76,603	415,133	922.00	9156	31.79
1/30/1998	100,406	515,539	1451.00	10607	45.34
2/26/1998	80,304	595,843	1290.00	11897	47.78
3/31/1998	85,000	680,843	1452.00	13349	44.00
4/30/1998	183,230	864,073	974.00	14323	32.47
5/31/1998	196,830	1,060,903	1085.00	15408	35.00
6/29/1998	197,000	1,257,903	970.00	16378	33.45
7/24/1998	155,000	1,412,903	683.00	17061	27.32
9/2/1998	185,000	1,597,903	692.00	17753	17.30
9/24/1998	153,000	1,750,903	810.00	18563	36.82
11/3/1998	183,000	1,933,903	751.00	19314	18.78
11/30/1998	164,000	2,097,903	443.00	19757	16.41
1/1/1999	128,000	2,225,903	301.00	20058	9.41
2/1/1999	61,800	2,287,703	348.00	20406	11.23
3/1/1999	49,860	2,337,563	76.00	20482	2.71
3/31/1999	132,600	2,470,163	667.00	21149	22.23
4/23/1999	115,000	2,585,163	661.00	21810	28.74
6/25/1999	60,000	2,645,163	762.00	22572	12.10
7/15/1999	108,500	2,753,663	954.00	23526	47.70
8/6/1999	130,200	2,883,863	751.00	24277	34.14
9/2/1999	115,090	2,998,953	716.00	24993	26.52
10/11/1999	94,020	3,092,973	728.00	25721	18.67
11/22/1999	149,440	3,242,413	1456.00	27177	34.67
12/30/1999	55,540	3,297,953	NM ²	27177	NM
1/31/2000	215,080	3,513,033	1211.00	28388	37.84
2/29/2000	111,310	3,624,343	987.00	29375	34.03
4/7/2000	99,250	3,723,593	921.00	30296	24.24
5/5/2000	130,750	3,854,343	921.00	31217	32.89
6/8/2000	160,240	4,014,583	921.00	32138	27.09
7/30/2000	175,150	4,189,733	936.00	33074	18.00
8/31/2000	174,920	4,364,653	NM	33074	NM
9/30/2000	121,255	4,485,908	1704.00	34778	56.80
10/31/2000	156,670	4,642,578	NM	34778	NM
11/30/2000	143,650	4,786,228	NM	34778	NM
12/31/2000	91,630	4,877,858	918.00	35696	29.61
1/31/2001	163,250	5,041,108	NM	35696	NM

TABLE 2

Linn Creek Recovery System Operational Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
2/28/2001	162,410	5,203,518	931.00	36627	33.25
3/31/2001	118,820	5,322,338	NM	36627	NM
4/30/2001	171,390	5,493,728	NM	36627	NM
5/31/2001	163,240	5,656,968	745.00	37372	24.03
6/30/2001	172,160	5,829,128	NM	37372	NM
7/31/2001	226,300	6,055,428	NM	37372	NM
8/30/2001	227,960	6,283,388	903.00	38275	30.10
9/30/2001	208,710	6,492,098	NM	38275	NM
10/31/2001	229,780	6,721,878	936.00	39211	30.19
11/30/2001	178,780	6,900,658	NM	39211	NM
12/31/2001	193,010	7,093,668	NM	39211	NM
1/31/2002	175,700	7,269,368	896.00	40107	28.90
2/28/2002	73,420	7,342,788	NM	40107	NM
3/31/2002	0	7,342,788	NM	40107	NM
4/30/2002	7,080	7,349,868	NM	40107	NM
5/31/2002	171,550	7,521,418	NM	40107	NM
6/30/2002	201,890	7,723,308	NM	40107	NM
7/31/2002	116,100	7,839,408	797.00	40904	25.71
8/31/2002	198,620	8,038,028	NM	40904	NM
9/30/2002	129,110	8,167,138	NM	40904	NM
10/31/2002	228,784	8,395,922	837.00	41741	27.00
11/30/2002	182,690	8,578,612	NM	41741	NM
12/31/2002	225,130	8,803,742	NM	41741	NM
1/31/2003	186,320	8,990,062	NM	41741	NM
2/28/2003	202,890	9,192,952	896.00	42637	32.00
3/31/2003	178,980	9,371,932	NM	42637	NM
4/30/2003	179,300	9,551,232	NM	42637	NM
5/31/2003	205,580	9,756,812	NM	42637	NM
6/30/2003	78,790	9,835,602	911.00	43548	30.37
7/31/2003	104,790	9,940,392	NM	43548	NM
8/31/2003	173,880	10,114,272	NM	43548	NM
9/30/2003	167,434	10,281,706	NM	43548	NM
10/31/2003	212,480	10,494,186	NM	43548	NM
11/30/2003	226,074	10,720,260	NM	43548	NM
12/17/2003	0	10,720,260	800.00	44348	47.06
1/22/2004	24,253	10,744,513	NM	44348	NM
2/23/2004	111,930	10,856,443	NM	44348	NM
3/30/2004	130,280	10,986,723	NM	44348	NM
4/30/2004	105,020	11,091,743	NM	44348	NM
5/30/2004	81,155	11,172,898	NM	44348	NM

TABLE 2

Linn Creek Recovery System Operational Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
6/22/2004	178,885	11,351,783	620.00	44968	26.96
7/19/2004	141,016	11,492,799	NM	44968	NM
8/17/2004	194,860	11,687,659	280.00	45248	9.66
9/21/2004	264,540	11,952,199	345.00	45593	9.86
10/19/2004	284,276	12,236,475	281.00	45874	10.04
11/23/2004	146,984	12,383,459	137.00	46011	3.91
12/14/2004	252,508	12,635,967	97.00	46108	4.62
1/20/2005	186,932	12,822,899	295.00	46403	7.97
2/22/2005	183,134	13,006,033	256.00	46659	7.76
3/29/2005	175,934	13,181,967	239.00	46898	6.83
4/21/2005	200,686	13,382,653	100.00	46998	4.35
5/25/2005	173,976	13,556,629	148.00	47146	4.35
6/15/2005	190,220	13,746,849	122.00	47268	5.81
7/15/2005	221,939	13,968,788	130.00	47398	4.33
8/22/2005	178,841	14,147,629	137.00	47535	3.61
9/23/2005	203,720	14,351,349	176.00	47711	5.50
10/25/2005	68,870	14,420,219	38.00	47749	1.19
11/17/2005	53,990	14,474,209	0.00	47749	0.00
12/21/2005	25,270	14,499,479	0.00	47749	0.00
1/25/2006	30,345	14,529,824	19.00	47768	0.54
2/22/2006	48,260	14,578,084	39.00	47807	1.39
3/30/2006	146,460	14,724,544	179.00	47986	4.97
4/25/2006	111,178	14,835,722	40.00	48026	1.54
5/23/2006	121,164	14,956,886	40.00	48066	1.43
6/14/2006	22,680	14,979,566	20.00	48086	0.91
7/19/2006	0	14,979,566	0.00	48086	0.00
8/22/2006	0	14,979,566	0.00	48086	0.00
9/14/2006	0	14,979,566	0.00	48086	0.00
10/25/2006	142,176	15,121,742	228.00	48314	5.56
11/17/2006	139,560	15,261,302	46.00	48360	2.00
12/12/2006	88,000	15,349,302	66.00	48426	2.64
1/23/2007	45,410	15,394,712	73.00	48499	1.74
2/26/2007	0	15,394,712	0.00	48499	0.00
3/22/2007	39,430	15,434,142	17.00	48516	0.71
4/25/2007	163,400	15,597,542	104.00	48620	3.06
5/25/2007	185,526	15,783,068	94.00	48714	3.13
6/18/2007	167,644	15,950,712	147.00	48861	6.13
7/18/2007	136,452	16,087,164	79.00	48940	2.63
8/15/2007	129,912	16,217,076	120.00	49060	4.29
9/12/2007	104,150	16,321,226	78.00	49138	2.79

TABLE 2

Linn Creek Recovery System Operational Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
10/23/2007	129,948	16,451,174	105.00	49243	2.56
11/19/2007	UM	16,451,174	81.00	49324	3.00
12/19/2007	0	16,451,174	0.00	49324	0.00
1/8/2008	162,838	16,614,012	33.00	49357	1.65
2/14/2008	51,425	16,665,437	196.00	49553	5.30
3/11/2008	193,402	16,858,839	126.00	49679	4.85
4/29/2008	217,330*	17,076,169	167.00	49846	3.41
5/20/2008	115,370*	17,191,539	18.00	49864	0.86
6/11/2008	135,890*	17,327,429	57.00	49921	2.59
7/16/2008	169,450*	17,496,879	157.00	50078	4.49
8/14/2008	95,760*	17,592,639	89.00	50167	3.07
9/18/2008	100,640*	17,693,279	30.00	50197	0.86
10/28/2008	137,364	17,830,643	309.00	50506	7.73
11/13/2008	220,856	18,051,499	52.00	50558	3.25
12/11/2008	71,290	18,122,789	28.00	50586	1.00
1/21/2009	20,585	18,143,374	52.00	50638	1.27
2/24/2009	29,390	18,172,764	51.00	50689	1.50
3/25/2009	73,460	18,246,224	26.00	50715	0.90
4/8/2009	131,850	18,378,074	18.00	50733	1.29
5/14/2009	146,230	18,524,304	27.00	50760	0.75
6/9/2009	138,870	18,663,174	37.00	50797	1.42
7/9/2009	80,550	18,743,724	75.00	50872	2.50
8/11/2009	66,415	18,810,139	256.00	51128	7.76
9/16/2009	93,960	18,904,099	136.00	51264	3.78
10/13/2009	157,460	19,061,559	9.00	51273	0.33
11/11/2009	80,726	19,142,285	0.00	51273	0.00
12/30/2009	60,927	19,203,212	156.00	51429	3.18
1/22/2010	39,945	19,243,157	145.00	51574	6.30
2/17/2010	9,416	19,252,573	0.00	51574	0.00
3/17/2010	98,186	19,350,759	86.00	51660	3.07
4/8/2010	140,222	19,490,981	124.00	51784	5.64
5/10/2010	89,418	19,580,399	38.00	51822	1.19
6/10/2010	165,348	19,745,747	117.00	51939	3.77
7/14/2010	255,252	20,000,999	159.00	52098	4.68
8/19/2010	84,503	20,085,502	134.00	52232	3.72
9/17/2010	111,824	20,197,326	100.00	52332	3.45
10/6/2010	54,596	20,251,922	45.00	52377	2.37
11/11/2010	65,444	20,317,366	104.00	52481	2.89
12/9/2010	28,718	20,346,084	152.00	52633	5.43
1/20/2011	52,412	20,398,496	81.00	52714	1.93

TABLE 2

Linn Creek Recovery System Operational Data
 Union Pacific Railroad
 Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
2/17/2011	45,362	20,443,858	24.00	52738	0.86
3/15/2011	60,317	20,504,175	7.50	52746	0.29
4/12/2011	55,239	20,559,414	35.00	52781	1.25
5/18/2011	94,190	20,653,604	12.00	52793	0.33
6/7/2011	38,837	20,692,441	7.00	52800	0.35
7/21/2011	12,555	20,704,996	22.00	52822	0.50
8/17/2011	34,649	20,739,645	10.00	52832	0.37
9/14/2011	28,450	20,768,095	10.00	52842	0.36
10/13/2011	3,670	20,771,765	10.00	52852	0.34
11/15/2011	50,006	20,821,771	39.00	52891	1.18
12/8/2011	0	20,821,771	0.00	52891	0.00
1/25/2012	0	20,821,771	0.00	52891	0.00
2/16/2012	0	20,821,771	0.00	52891	0.00
3/19/2012	0	20,821,771	0.00	52891	0.00
4/18/2012	0	20,821,771	3.00	52894	0.10
5/15/2012	0	20,821,771	3.00	52897	0.11
6/1/2012	0	20,821,771	68.00	52965	4.00
7/17/2012	0	20,821,771	213.00	53178	4.63
8/22/2012	0	20,821,771	0.00	53178	0.00
9/20/2012	0	20,821,771	0.00	53178	0.00
10/11/2012	0	20,821,771	8.00	53186	0.38
11/20/2012	0	20,821,771	0.00	53186	0.00
12/26/2012	13,187	20,834,958	11.00	53197	0.31
1/17/2013	22,910	20,857,868	9.00	53206	0.41
2/20/2013	78,466	20,936,334	189.00	53395	5.56
3/26/2013	31,232	20,967,566	24.00	53419	0.71
4/23/2013	23,205*	20,990,771	0.00	53419	0.00
5/21/2013	23,205*	21,013,976	23.00	53442	0.82
6/13/2013	4,176	21,018,152	70.00	53512	3.04
7/23/2013	55,523	21,073,675	106.00	53618	2.65
8/29/2013	68,117	21,141,792	230.00	53848	6.22
9/17/2013	86,614	21,228,406	79.00	53927	4.16
10/16/2013	120,943	21,349,349	115.00	54042	3.97
11/7/2013	96,765	21,446,114	224.00	54266	10.18
12/12/2013	85,295	21,531,409	156.00	54422	4.46
1/15/2014	76,113	21,607,522	149.00	54571	4.38
2/18/2014	121,503	21,729,025	198.00	54769	5.82
3/24/2014	173,467	21,902,492	78.00	54847	2.29
4/25/2014	84,901	21,987,393	52.00	54899	1.63
5/28/2014	97,011	22,084,404	9.00	54908	0.27

TABLE 2

Linn Creek Recovery System Operational Data
 Union Pacific Railroad
 Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
6/24/2014	72,086	22,156,490	5.00	54913	0.19
7/24/2014	10,679	22,167,169	2.00	54915	0.07
8/28/2014	0**	22,355,549	2.00	54917	0.06
9/24/2014	0**	22,355,549	2.00	54919	0.07
10/22/2014	0**	22,355,549	2.00	54921	0.07
11/19/2014	0**	22,355,549	2.00	54923	0.07
12/11/2014	23,062	22,378,611	33.00	54956	1.50
1/28/2015	11,210	22,389,821	63.00	55019	1.31
2/25/2015	3,927	22,393,748	68.00	55087	2.43
3/20/2015	3,047	22,396,795	31.00	55118	1.35
4/13/2015	5,177	22,401,972	4.00	55122	0.17
5/21/2015	239,466	22,641,438	27.00	55149	0.71
6/10/2015	75,043	22,716,481	7.00	55156	0.35
7/16/2015	56,288	22,772,769	7.00	55163	0.19
8/11/2015	97	22,772,866	0.00	55163	0.00
9/10/2015	5,028	22,777,894	20.00	55183	0.67
10/14/2015	68,912	22,846,806	45.00	55228	1.32
11/23/2015	23,549	22,870,355	20.00	55248	0.50
12/17/2015	5,747	22,876,102	40.00	55288	1.67
1/20/2016	14,027	22,890,129	5.62	55293	0.17
2/23/2016	92,438	22,982,567	7.90	55301	0.23
3/16/2016	22,281	23,004,848	8.10	55309	0.37
4/13/2016	98,161	23,103,009	31.42	55341	1.12
5/26/2016	91,729	23,194,738	67.80	55408	1.58
6/27/2016	16,096	23,210,834	33.66	55442	1.05
7/27/2016	7,990	23,218,824	50.56	55493	1.69
8/25/2016	752	23,219,576	3.00	55496	0.10
9/27/2016	61,631	23,281,207	56.00	55552	1.70
10/20/2016	14,867	23,296,074	35.22	55587	1.53
11/17/2016	10,721	23,306,795	65.90	55653	2.35
12/20/2016	11,614	23,318,409	3.60	55656	0.11
1/19/2017	47,750	23,366,159	15.68	55672	0.52
2/22/2017	148,250	23,514,409	35.62	55708	1.05
3/22/2017	112,040	23,626,449	10.00	55718	0.36
4/27/2017	147,730	23,774,179	12.00	55730	0.33
5/25/2017	13,180	23,787,359	10.00	55740	0.36
6/15/2017	110	23,787,469	18.00	55758	0.86
7/12/2017	45,590	23,833,059	5.50	55763	0.20
8/9/2017	60,070	23,893,129	24.45	55788	0.87
9/13/2017	64,950	23,958,079	0.00	55788	0.00

TABLE 2

Linn Creek Recovery System Operational Data
 Union Pacific Railroad
 Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
10/11/2017	45,940	24,004,019	2.96	55790	0.11
11/20/2017	600	24,004,619	15.35	55806	0.38
12/20/2017	210	24,004,829	23.98	55830	0.80
1/25/2018	1,300	24,006,129	0.00	55830	0.00
2/15/2018	33,560	24,039,689	2.48	55832	0.12
3/21/2018	389	24,040,078	22.70	55855	0.67
4/11/2018	41,277	24,081,355	4.55	55860	0.22
5/16/2018	23,047	24,104,402	13.74	55873	0.39
5/25/2018	50,654	24,155,056	22.89	55896	2.54
6/27/2018	250,644	24,405,700	131.91	56028	4.00
7/24/2018	115,117	24,520,817	55.07	56083	2.04
8/23/2018	227,954	24,748,771	92.95	56176	3.10
9/20/2018	0	24,748,771	15.28	56191	0.55
10/26/2018	0	24,748,771	5.50	56197	0.15
11/28/2018	0	24,748,771	3.00	56200	0.09
12/19/2018	0	24,748,771	3.25	56203	0.15
2/14/2019	0	24,748,771	2.50	56206	0.04
3/28/2019	3,004	24,751,775	31.97	56238	0.76
4/17/2019	79.3	24,751,854	16.48	56254	0.82
5/7/2019	1,274.0	24,753,128	20.48	56275	1.02
5/29/2019	8,730.0	24,761,858	8.61	56283	0.21
6/25/2019	86,895.7	24,848,754	27.26	56310	1.01
7/11/2019	22,205.0	24,870,959	1.17	56312	0.07
7/26/2019	0.0	24,870,959	10.48	56322	0.34
8/26/2019	0.0	24,870,959	3.00	56325	0.10
9/26/2019	20,140.8	24,891,100	8.36	56333	0.27
10/23/2019	0.0	24,891,100	20.00	56353	0.74
11/19/2019	0.0	24,891,100	4.20	56358	0.16
12/10/2019	0.0	24,891,100	3.60	56361	0.08
1/7/2020	114,360.0	25,005,460	11.59	56373	0.15
2/13/2020	24,396.0	25,029,856	9.94	56383	0.27
3/12/2020	62,084.0	25,091,940	6.11	56389	0.22
4/30/2020	153,828.0	25,245,768	23.67	56413	0.48
5/28/2020	32,202.0	25,277,970	0.00	56413	0.00
6/29/2020	200,044.0	25,478,014	5.00	56418	0.16
7/27/2020	41,711.5	25,519,725	7.80	56425	0.28
8/20/2020	1,277.8	25,521,003	2.30	56428	0.10
9/29/2020	86,214.0	25,607,217	13.97	56442	0.35
10/21/2020	198,245.0	25,805,462	2.50	56444	0.11
11/24/2020	10.0	25,805,472	2.50	56447	0.07

TABLE 2

Linn Creek Recovery System Operational Data
Union Pacific Railroad
Marshalltown, IA - Fueling Facility

Date	Flowmeter Batch (gal)***	Cumulative Total Fluids (gal.)	Recovered Product (gal.)	Cumulative Product Recovered (gal.)	Daily Average Recovery Rate (Gal/Day)
12/16/2020	111.6	25,805,584	2.25	56449	0.10
1/21/2021	187.3	25,805,771	2.00	56451	0.06

Red = LCRS down upon inspection

Note: Total product recovered from the site by hand bailing, and operation of the LCRS is 56,451 gallons

- 1) When flowmeter batch is zero, all recovered product is collected from hand bailing wells.
- 2) NM - Not measured
- 3) UM - Un-Measurable volume collected between 10/30/07 and 11/6/07
- 4) * volume of fluid estimated
- 5) ** Liquid Ring Pump Rebuild

4/11/2018 - New Flowmeter

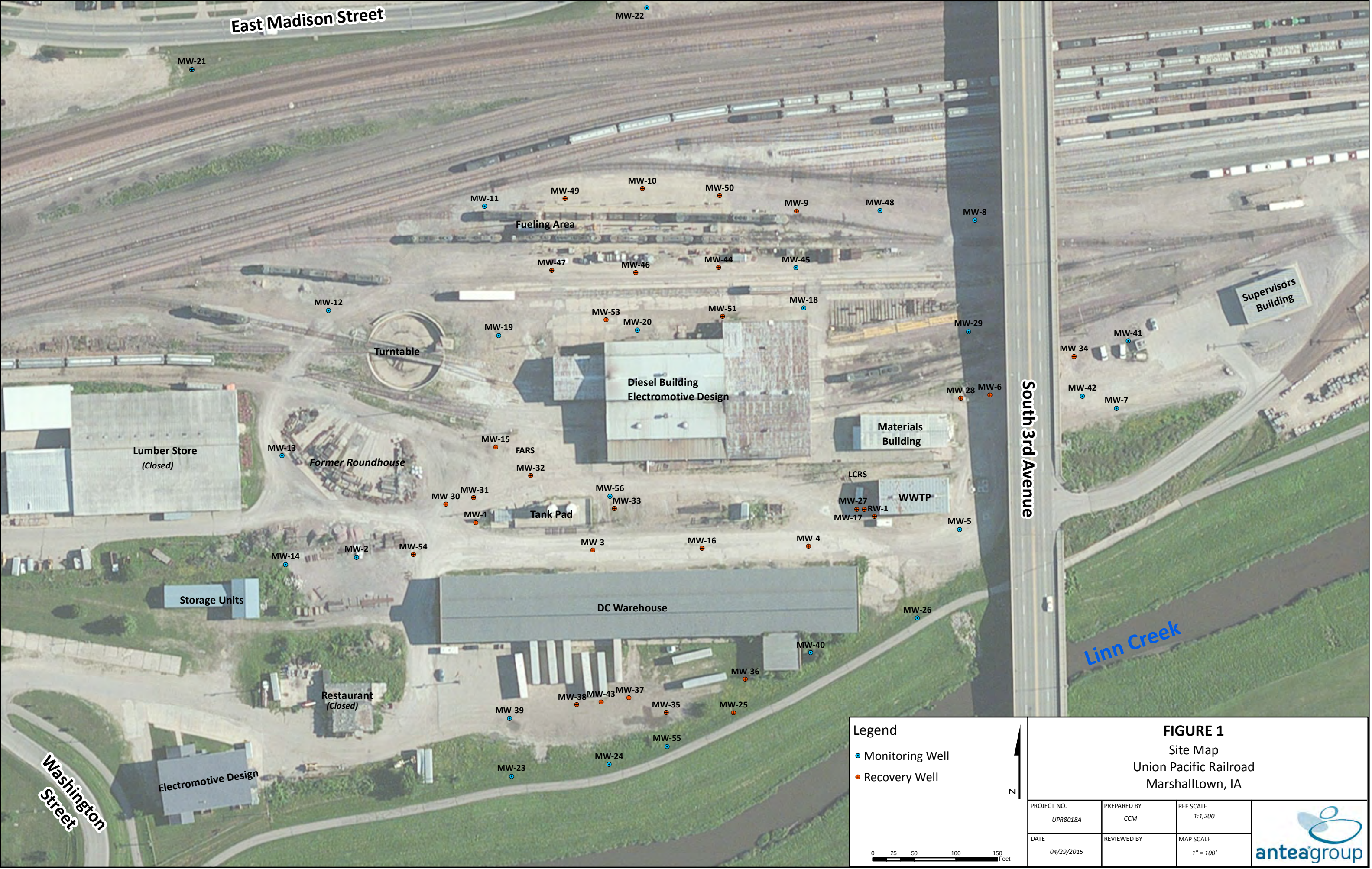


FIGURE 1
Site Map
Union Pacific Railroad
Marshalltown, IA

PROJECT NO. UPR8018A	PREPARED BY CCM	REF SCALE 1:1,200	
DATE 04/29/2015	REVIEWED BY	MAP SCALE 1" = 100'	