

**FORMER GASTOWN MGP SITE
SITE NO. 915171**

**2013 SITE VISIT CHECKLISTS
FOR THE GROUNDWATER COLLECTION
& TREATMENT SYSTEM**

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<u>(Yes)</u>	No
DNAPL pump pressure (arrival)	<u>20</u>	PSI
DNAPL pump pressure (departure)	<u>16</u>	PSI
Pneumatic settings adjusted?	<u>(Yes)</u>	No
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<u>(Yes)</u>	No
Green warning light operational?	<u>(Yes)</u>	No
DNAPL drum container integrity.	<u>(Good)</u>	Poor
Leaks present?	Yes	<u>(No)</u>
Decant valve integrity.	<u>(Good)</u>	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<u>(Good)</u>	Poor
DNAPL pump cleaned?	Yes	<u>(No)</u>
DNAPL top of pump depth.	<u>23.50</u>	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<u>(Yes)</u>	No
LNAPL pump pressure (arrival)	<u>20</u>	PSI
LNAPL pump pressure (departure)	<u>20</u>	PSI
Bubbler tube operating pressure.	<u>5</u>	PSI
Pneumatic settings adjusted?	Yes	<u>(No)</u>
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<u>(Good)</u>	Poor
LNAPL pump cleaned?	Yes	<u>(No)</u>
LNAPL top of pump depth.	<u>14.40</u>	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<u>(Yes)</u>	No
Red warning light operational?	<u>(Yes)</u>	No
Separator vessel integrity.	<u>(Good)</u>	Poor
Leaks present?	Yes	<u>(No)</u>
Separator cover and seal integrity.	<u>(Good)</u>	Poor
Decant valve integrity.	<u>(Good)</u>	Poor
LNAPL in separator?	Yes	<u>(No)</u>
Separator needs cleaning?	Yes	<u>(No)</u>
Separator cleaned?	Yes	<u>(No)</u>

Technician: T. Palmer
 Date: 1-2-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<u>(Yes)</u>	No
Pump integrity.	<u>(Good)</u>	Poor
Flow meter operational?	<u>(Yes)</u>	No
Transfer pump flow rate.	<u>315</u>	GPM
Totalizer reading (cumulative volume).	<u>32501.3</u>	Gallons
Water filters changed?	Yes	<u>(No)</u>
Filter unit 1 pressure @ Arrival (In/Out)	<u>20</u>	<u>8.5</u>
Filter unit 2 pressure @ Arrival (In /Out)	<u>15</u>	<u>8</u>
Filter unit 1 pressure @ Departure (In/Out)	<u>14</u>	<u>8.5</u>
Filter unit 2 pressure @ Departure	<u>15.5</u>	<u>8</u>
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<u>(Good)</u>	Poor
Primary carbon drum leaks?	Yes	<u>(No)</u>
Primary carbon drum pressure.	<u>6</u>	PSI
Primary drum removed for disposal?	Yes	<u>(No)</u>
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<u>(Good)</u>	Poor
Secondary carbon drum leaks?	Yes	<u>(No)</u>
Secondary carbon drum pressure.	<u>3.5</u>	PSI
Secondary carbon rotated to primary?	Yes	<u>(No)</u>
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<u>(Good)</u>	Poor
Polishing carbon drum leaks?	Yes	<u>(No)</u>
Polishing carbon drum pressure.	<u>1</u>	PSI
Polishing drum rotated to secondary?	Yes	<u>(No)</u>
New carbon polishing drum?	Yes	<u>(No)</u>
<i>Discharge Piping</i>		
Pipe integrity in shed.	<u>(Good)</u>	Poor
Pipe integrity at catch basin.	<u>(Good)</u>	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<u>(Good)</u>	Poor
Pipe at creek clear?	<u>(Yes)</u>	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<u>(Good)</u>	Poor
Shed ventilation acceptable?	<u>(Yes)</u>	No
Repairs/work needed?	Yes	<u>(No)</u>
Spill evidence?	Yes	<u>(No)</u>
<i>Electrical and Heating</i>		
Electric controls operational	<u>(Yes)</u>	No
Heater operational	<u>(Yes)</u>	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<u>(Good)</u>	Poor
Repairs needed to vaults?	Yes	<u>(No)</u>
<i>Air Compressor</i>		
Compressor operational?	<u>(Yes)</u>	No
Compressor hours.	<u>10623.7</u>	Hours
Oil level checked?	<u>(Yes)</u>	No
Oil level changed?	Yes	<u>(No)</u>
Compressor trap operating?	<u>(Yes)</u>	No
Regulator operating?	<u>(Yes)</u>	No
Air lines performing properly?	<u>(Yes)</u>	No

Sampling		
Sampling Performed?	Yes	<u>(No)</u>
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
DNAPL/water to oil/water separator.	<u>35</u>	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	<u>1</u>	Drums
Spent carbon drums	<u>1</u>	Drums
PPE/Solids drums	<u>1</u>	Drums
LNAPL drums	<u>0</u>	Drums
Drums labeled?	<u>(Yes)</u>	No
Drums palletized?	<u>(Yes)</u>	No

Notes: Add Chlorine Tabs @ Vault and OWS

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: T. Palmer
 Date: 1-8-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	311	GPM
Totalizer reading (cumulative volume).	3652.7	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	21	9
Filter unit 2 pressure @ Arrival (In /Out)	15	8.5
Filter unit 1 pressure @ Departure (In/Out)	17	8
Filter unit 2 pressure @ Departure	15	8
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	6	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3.5	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10666.7	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	12	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0.5	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes: - Discarded bubbler and test pump.
 - Lower flow to 286 GPM to maintain 6 PSI @ carbon 1

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Discharge control setting (departure)	↓	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Green warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
DNAPL pump cleaned?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Discharge control setting (departure)	↓	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL pump cleaned?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Red warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Separator vessel integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL in separator?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Separator needs cleaning?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Separator cleaned?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Technician: T. Palmer
 Date: 1-18-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Pump integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Transfer pump flow rate.	2.55	GPM
Totalizer reading (cumulative volume).	50,323	Gallons
Water filters changed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	16	7.5
Filter unit 2 pressure @ Arrival (In /Out)	18	7.5
Filter unit 1 pressure @ Departure (In/Out)	15	5.5
Filter unit 2 pressure @ Departure	7	6
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Primary carbon drum leaks?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Primary carbon drum pressure.	6	PSI
Primary drum removed for disposal?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Secondary carbon drum leaks?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Secondary carbon drum pressure.	3.5	PSI
Secondary carbon rotated to primary?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Polishing carbon drum leaks?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
New carbon polishing drum?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Repairs/work needed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Spill evidence?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Heater operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Repairs needed to vaults?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Compressor hours.	10631.7	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Oil level changed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Regulator operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Air lines performing properly?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	<input type="radio"/> Monthly	<input type="radio"/> Quarterly
Product sampled?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	17	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	0	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Drums palletized?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Notes: Bleach carbon & filters to try to increase flow. Increased to 2.69 gpm. Re-treat with bleach. - Change filters - Leave system pumping @ 2.40 gpm

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Green warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Red warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Separator vessel integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Pahr
 Date: 1-24-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Pump integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Transfer pump flow rate.	3.12	GPM
Totalizer reading (cumulative volume).	54561.9	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	16	8
Filter unit 2 pressure @ Arrival (In/Out)	9	7.5
Filter unit 1 pressure @ Departure (In/Out)	16.5	7.75
Filter unit 2 pressure @ Departure	9	7.25
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5.5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3.5	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	0.5	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at catch basin clear?	Yes	<input type="radio"/> No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at creek clear?	Yes	<input type="radio"/> No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Heater operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Compressor hours.	10625.9	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Regulator operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Air lines performing properly?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Post Carbon Sample Time		1700
Pre-Carbon Sample Time		1710
Sampling event?	<input checked="" type="radio"/> Monthly	<input type="radio"/> Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	23	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Drums palletized?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Notes:

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: T. Palmer
 Date: 2-2-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	2.88	GPM
Totalizer reading (cumulative volume).	66389.6	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	25	7.5
Filter unit 2 pressure @ Arrival (In/Out)	15	7.5
Filter unit 1 pressure @ Departure (In/Out)	26	7.5
Filter unit 2 pressure @ Departure	19	7.5
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	5.75	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3.5	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	0.5	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	Yes	<input checked="" type="checkbox"/> No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10641.7	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	10	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes: Cl tablets added to sump and OWS.

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.5	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.4	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: M. Reisd
 Date: 2/8/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	~10	GPM
Totalizer reading (cumulative volume).	72267.8	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	28	6
Filter unit 2 pressure @ Arrival (In/Out)	27	6.5
Filter unit 1 pressure @ Departure (In/Out)	25	6
Filter unit 2 pressure @ Departure	27	6.5
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	1	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10645.3	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	8	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	13.5	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	2.0	PSI
LNAPL pump pressure (departure)	2.0	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	7	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.0	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	7.1	GPM
Totalizer reading (cumulative volume).	24625	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	35	1
Filter unit 2 pressure @ Arrival (In/Out)	37	1
Filter unit 1 pressure @ Departure (In/Out)	16	7
Filter unit 2 pressure @ Departure	8	7
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	6	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	4	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	0	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	12648	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	<input checked="" type="checkbox"/> Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	100	Gallons
DNAPL/water to oil/water separator.	10	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes:

Technician: M. Kasper
 Date: 2/14/13

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	Yes	No
Green warning light operational?	Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	No
DNAPL top of pump depth.	23.5	Feet

LNAPL/Groundwater System		
Operational upon arrival?	Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	No
LNAPL top of pump depth.	14.4	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	No
Separator needs cleaning?	Yes	No
Separator cleaned?	Yes	No

Technician: M. Kern
 Date: 2/22/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	2.76	GPM
Totalizer reading (cumulative volume).	1474	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	15	7
Filter unit 2 pressure @ Arrival (In /Out)	12	7
Filter unit 1 pressure @ Departure (In/Out)	15	8
Filter unit 2 pressure @ Departure	11.8	8
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	No
Primary carbon drum pressure.	6	PSI
Primary drum removed for disposal?	Yes	No
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	No
Secondary carbon drum pressure.	4	PSI
Secondary carbon rotated to primary?	Yes	No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	No
New carbon polishing drum?	Yes	No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	No
Spill evidence?	Yes	No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	No
<i>Air Compressor</i>		
Compressor operational?	Yes	No
Compressor hours.	10653	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	40	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
DNAPL pump pressure (arrival)	10	PSI
DNAPL pump pressure (departure)	10	PSI
Pneumatic settings adjusted?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Leaks present?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
DNAPL pump cleaned?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.5	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
LNAPL pump cleaned?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	19.4	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Leaks present?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
LNAPL in separator?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Technician: M. Y. Lewis
 Date: 3/1/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Pump integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Transfer pump flow rate.	302	GPM
Totalizer reading (cumulative volume).	952.53	Gallons
Water filters changed?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	17	9
Filter unit 2 pressure @ Arrival (In /Out)	17	9
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Primary carbon drum leaks?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	6	PSI
Primary drum removed for disposal?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Secondary carbon drum leaks?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	4	PSI
Secondary carbon rotated to primary?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Polishing carbon drum leaks?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Repairs/work needed?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Spill evidence?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Heater operational	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Repairs needed to vaults?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Compressor hours.	10657.0	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Oil level changed?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Regulator operating?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Sampling		
Sampling Performed?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Quarterly
Product sampled?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	15	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	0	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Drums palletized?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Notes:

DNAPL System		
Operational upon arrival?	<u>Yes</u>	No
DNAPL pump pressure (arrival)	<u>16</u>	PSI
DNAPL pump pressure (departure)	<u>16</u>	PSI
Pneumatic settings adjusted?	Yes	<u>No</u>
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<u>Yes</u>	No
Green warning light operational?	<u>Yes</u>	No
DNAPL drum container integrity.	<u>Good</u>	Poor
Leaks present?	Yes	<u>No</u>
Decant valve integrity.	<u>Good</u>	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<u>Good</u>	Poor
DNAPL pump cleaned?	Yes	<u>No</u>
DNAPL top of pump depth.	<u>23.50</u>	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<u>Yes</u>	No
LNAPL pump pressure (arrival)	<u>20</u>	PSI
LNAPL pump pressure (departure)	<u>20</u>	PSI
Bubbler tube operating pressure.	<u>5</u>	PSI
Pneumatic settings adjusted?	Yes	<u>No</u>
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<u>Good</u>	Poor
LNAPL pump cleaned?	Yes	<u>No</u>
LNAPL top of pump depth.	<u>144</u>	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<u>Yes</u>	No
Red warning light operational?	<u>Yes</u>	No
Separator vessel integrity.	<u>Good</u>	Poor
Leaks present?	Yes	<u>No</u>
Separator cover and seal integrity.	<u>Good</u>	Poor
Decant valve integrity.	<u>Good</u>	Poor
LNAPL in separator?	Yes	<u>No</u>
Separator needs cleaning?	Yes	<u>No</u>
Separator cleaned?	Yes	<u>No</u>

Technician: C. Kersick
 Date: 3/6/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<u>Yes</u>	No
Pump integrity.	<u>Good</u>	Poor
Flow meter operational?	<u>Yes</u>	No
Transfer pump flow rate.	<u>306</u>	GPM
Totalizer reading (cumulative volume).	<u>101712</u>	Gallons
Water filters changed?	<u>Yes</u>	No
Filter unit 1 pressure @ Arrival (In/Out)	<u>20</u>	<u>7</u>
Filter unit 2 pressure @ Arrival (In/Out)	<u>20</u>	<u>7</u>
Filter unit 1 pressure @ Departure (In/Out)	<u>17</u>	<u>7.11</u>
Filter unit 2 pressure @ Departure	<u>12</u>	<u>10</u>
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<u>Good</u>	Poor
Primary carbon drum leaks?	Yes	<u>No</u>
Primary carbon drum pressure.	<u>6</u>	PSI
Primary drum removed for disposal?	Yes	<u>No</u>
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<u>Good</u>	Poor
Secondary carbon drum leaks?	Yes	<u>No</u>
Secondary carbon drum pressure.	<u>4</u>	PSI
Secondary carbon rotated to primary?	Yes	<u>No</u>
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<u>Good</u>	Poor
Polishing carbon drum leaks?	Yes	<u>No</u>
Polishing carbon drum pressure.	<u>1</u>	PSI
Polishing drum rotated to secondary?	Yes	<u>No</u>
New carbon polishing drum?	Yes	<u>No</u>
<i>Discharge Piping</i>		
Pipe integrity in shed.	<u>Good</u>	Poor
Pipe integrity at catch basin.	<u>Good</u>	Poor
Pipe at catch basin clear?	<u>Yes</u>	No
Pipe integrity at creek.	<u>Good</u>	Poor
Pipe at creek clear?	<u>Yes</u>	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<u>Good</u>	Poor
Shed ventilation acceptable?	<u>Yes</u>	No
Repairs/work needed?	Yes	<u>No</u>
Spill evidence?	Yes	<u>No</u>
<i>Electrical and Heating</i>		
Electric controls operational	<u>Yes</u>	No
Heater operational	<u>Yes</u>	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<u>Good</u>	Poor
Repairs needed to vaults?	Yes	<u>No</u>
<i>Air Compressor</i>		
Compressor operational?	<u>Yes</u>	No
Compressor hours.	<u>10660.5</u>	Hours
Oil level checked?	<u>Yes</u>	No
Oil level changed?	Yes	<u>No</u>
Compressor trap operating?	<u>Yes</u>	No
Regulator operating?	<u>Yes</u>	No
Air lines performing properly?	<u>Yes</u>	No

Sampling		
Sampling Performed?	<u>Yes</u>	No
Post Carbon Sample Time	<u>1315</u>	
Pre-Carbon Sample Time	<u>1325</u>	
Sampling event?	Monthly	<u>Quarterly</u>
Product sampled?	Yes	<u>No</u>

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
DNAPL/water to oil/water separator.	<u>25</u>	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	<u>1</u>	Drums
Spent carbon drums	<u>1</u>	Drums
PPE/Solids drums	<u>1</u>	Drums
LNAPL drums	<u>0</u>	Drums
Drums labeled?	<u>Yes</u>	No
Drums palletized?	<u>Yes</u>	No

Notes: System red light on arrival
changed filters ok good

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: T. Palmer
Date: 3-13-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	224	GPM
Totalizer reading (cumulative volume).	110338	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	14	6.5
Filter unit 2 pressure @ Arrival (In /Out)	9	6
Filter unit 1 pressure @ Departure (In/Out)	15	6.5
Filter unit 2 pressure @ Departure	10	6.5
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	0	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3.5	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	0.5	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10664.3	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	8	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	0	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes:

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Green warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	2350	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	→	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Red warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Separator vessel integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Alan
 Date: 3-21-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Pump integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Transfer pump flow rate.	2.1	GPM
Totalizer reading (cumulative volume).	118808	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	15	6.75
Filter unit 2 pressure @ Arrival (In /Out)	29	6.5
Filter unit 1 pressure @ Departure (In/Out)	16	17.5
Filter unit 2 pressure @ Departure	135	7
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5.5	PSI
Primary drum removed for dispos.?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3.5	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	0.5	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at catch basin clear?	Yes	<input type="radio"/> No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at creek clear?	Yes	<input type="radio"/> No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Heater operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Compressor hours.	10669.2	Hours
Oil level checked?	Yes	<input type="radio"/> No
Oil level changed?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Regulator operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Air lines performing properly?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	6	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	—	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Drums palletized?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Notes: add bleach to try to clean out carbon 1 for better flow.

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	41.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: M. Kersul
 Date: 3/29/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	2.27	GPM
Totalizer reading (cumulative volume).	123582	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	13	4.5
Filter unit 2 pressure @ Arrival (In /Out)	13	4.5
Filter unit 1 pressure @ Departure (In/Out)	15	8
Filter unit 2 pressure @ Departure	15	7
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	45	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	24	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10673.3	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	<input checked="" type="radio"/> Yes	No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	No
Post Carbon Sample Time	07:30	
Pre-Carbon Sample Time	09:45	
Sampling event?	<input checked="" type="radio"/> Monthly	Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	3	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes:

DNAPL System		
Operational upon arrival?	Yes	<input checked="" type="radio"/> No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: M. Keisch
 Date: 4/3/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	28?	GPM
Totalizer reading (cumulative volume).	123756	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	15	7.5
Filter unit 2 pressure @ Arrival (In/Out)	15	8
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10676.8	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	3	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: Trans. pump "ON" switch did not work upon arrival cleaned thoroughly should be better

DNAPL System		
Operational upon arrival?	Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	Yes	No
Green warning light operational?	Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	No
DNAPL top of pump depth.	23	Feet

LNAPL/Groundwater System		
Operational upon arrival?	Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	No
LNAPL top of pump depth.	19 1/2	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	No
Separator needs cleaning?	Yes	No
Separator cleaned?	Yes	No

Technician: M. V. [Signature]
 Date: 4/9/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	2.53	GPM
Totalizer reading (cumulative volume).	1200.00	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	1.5	6
Filter unit 2 pressure @ Arrival (In /Out)	1.5	6
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	No
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	No
New carbon polishing drum?	Yes	No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	No
Spill evidence?	Yes	No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	No
<i>Air Compressor</i>		
Compressor operational?	Yes	No
Compressor hours.	10680.1	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	2	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: mk
 Date: 4/10/13 4/17/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	290	GPM
Totalizer reading (cumulative volume).	143226	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	20	4
Filter unit 2 pressure @ Arrival (In /Out)	20	4
Filter unit 1 pressure @ Departure (In/Out)	16	8
Filter unit 2 pressure @ Departure	9	8
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	5.4	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	4	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	Yes	No
Compressor hours.	106544	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time	/	
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	2	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	→	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Palmer / M. Kessen
 Date: 4-25-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.		GPM
Totalizer reading (cumulative volume).	1556.34	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	10	3
Filter unit 2 pressure @ Arrival (In/Out)	30	3
Filter unit 1 pressure @ Departure (In/Out)	10	3
Filter unit 2 pressure @ Departure	29	3
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.		PSI
Primary drum removed for disposal?	<input checked="" type="radio"/> Yes	No
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.		PSI
Secondary carbon rotated to primary?	<input checked="" type="radio"/> Yes	No
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.		PSI
Polishing drum rotated to secondary?	<input checked="" type="radio"/> Yes	No
New carbon polishing drum?	<input checked="" type="radio"/> Yes	No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

hydrated, put online tomorrow

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10658.4	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	7	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	2	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: *Hydrated New Polishing drum, decanter and remove drum 2*

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	2.1	PSI
LNAPL pump pressure (departure)	2.0	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: Mr. [Signature]
 Date: 5/1/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	0.331	GPM
Totalizer reading (cumulative volume).	161750	Gallons
Water filters changed?	<input checked="" type="radio"/> Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	25	2
Filter unit 2 pressure @ Arrival (In/Out)	25	2
Filter unit 1 pressure @ Departure (In/Out)	14	6
Filter unit 2 pressure @ Departure	7	6
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10,913	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	No
Post Carbon Sample Time	1000	
Pre-Carbon Sample Time	1010	
Sampling event?	<input checked="" type="radio"/> Monthly	Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	5	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	6	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	2	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.10	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: M. V. Kesh
 Date: 5/10/13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	3.33	GPM
Totalizer reading (cumulative volume).	170731	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	15	G
Filter unit 2 pressure @ Arrival (In/Out)	17	G
Filter unit 1 pressure @ Departure (In/Out)	-	-
Filter unit 2 pressure @ Departure	-	-
Carbon Treatment Drums		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	2.5	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
Discharge Piping		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
Electrical and Heating		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
Air Compressor		
Compressor operational?	Yes	No
Compressor hours.	10295.4	Hours
Oil level checked?	Yes	<input checked="" type="radio"/> No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	<input checked="" type="radio"/> No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time	/	
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	20	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	2	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Palmer
 Date: 5-16-13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	3.41	GPM
Totalizer reading (cumulative volume).	176384	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	20	6.5
Filter unit 2 pressure @ Arrival (In/Out)	23	6.5
Filter unit 1 pressure @ Departure (In/Out)	19	7.5
Filter unit 2 pressure @ Departure	19	7.5
Carbon Treatment Drums		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary Carbon Drums		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing Carbon Drums		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
Discharge Piping		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
Electrical and Heating		
Electric controls operational	Yes	No
Heater operational	off	Yes

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
Air Compressor		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10698.4	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling - VOC Sampling from Inland # 3		
Sampling Performed?	Yes	No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	4	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	2	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: - weekly O&M
 - Volatile sampling from inland and after each drum.
 - Heat turned off

DNAPL System		
Operational upon arrival?	Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	Yes	No
Green warning light operational?	Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	No
Decant valve integrity.	Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	No
LNAPL top of pump depth.	14.40	Feet
Oil/Water Separator		
Water high level shut-off operational?	Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	No
Separator needs cleaning?	Yes	No
Separator cleaned?	Yes	No

Technician: M. K. [Signature]
 Date: 5/22/13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	340	GPM
Totalizer reading (cumulative volume).	179476	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	25	7
Filter unit 2 pressure @ Arrival (In/Out)	22	6
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
Carbon Treatment Drums		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposal?	Yes	No
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	No
New carbon polishing drum?	Yes	No
Discharge Piping		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	No
Spill evidence?	Yes	No
Electrical and Heating		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	No
Air Compressor		
Compressor operational?	Yes	No
Compressor hours.	1070.1	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	2 gal	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	2	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	16	PSI
DNAPL pump pressure (departure)	16	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Palm
 Date: 5-30-13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	3.21	GPM
Totalizer reading (cumulative volume).	186747	Gallons
Water filters changed?	<input checked="" type="radio"/> Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	41	2
Filter unit 2 pressure @ Arrival (In/Out)	33	1.5
Filter unit 1 pressure @ Departure (In/Out)	15	7
Filter unit 2 pressure @ Departure	8	6
Carbon Treatment Drums		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	<input checked="" type="radio"/> Yes	No
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon drum rotated to primary?	<input checked="" type="radio"/> Yes	No
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	<input checked="" type="radio"/> Yes	No
New carbon polishing drum?	<input checked="" type="radio"/> Yes	No
Discharge Piping		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
Electrical and Heating		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
Air Compressor		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10704.8	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	—	Gallons
DNAPL/water to disposal drum.	—	Gallons
DNAPL/water to oil/water separator.	6	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	—	Gallons
DNAPL/water to disposal drum.	—	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	4	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	0	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: - Double carbon change, remove 1+2, move 3 to position 1.
 Hydrate new drums to put on-line tomorrow

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	15	PSI
DNAPL pump pressure (departure)	15	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	7.0	PSI
LNAPL pump pressure (departure)	2.0	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: M. R. G. S.
 Date: 6/6/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	2.86	GPM
Totalizer reading (cumulative volume).	203000	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	30	41.5
Filter unit 2 pressure @ Arrival (In /Out)	20	4
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	3	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	2	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10707.8	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="checkbox"/> Yes	No
Post Carbon Sample Time	1415	
Pre-Carbon Sample Time	1425	
Sampling event?	<input checked="" type="checkbox"/> Monthly	Quarterly
Product sampled?	Yes	<input checked="" type="checkbox"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.		Gallons
DNAPL/water to disposal drum.		Gallons
DNAPL/water to oil/water separator.		Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.		Gallons
DNAPL/water to disposal drum.		Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)		Drums
Spent carbon drums		Drums
PPE/Solids drums		Drums
LNAPL drums		Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	√	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	2.5	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	√	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.4	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	<input checked="" type="checkbox"/> Yes	No

Technician: W. Kersch
 Date: 6/14/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	3.5 / 1.01	GPM
Totalizer reading (cumulative volume).	21092	Gallons
Water filters changed?	<input checked="" type="checkbox"/> Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	25	2
Filter unit 2 pressure @ Arrival (In /Out)	15	7
Filter unit 1 pressure @ Departure (In/Out)	27	1
Filter unit 2 pressure @ Departure	7	6.5
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	0711.2	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	3	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	2 P. 11	Drums
Spent carbon drums	4	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	15	PSI
DNAPL pump pressure (departure)	15	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: Mr. Ken St
 Date: 6/19/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	3.74	GPM
Totalizer reading (cumulative volume).	222060	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In./Out)	16	C
Filter unit 2 pressure @ Arrival (In./Out)	12	C
Filter unit 1 pressure @ Departure (In./Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.		Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	3	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	20	PSI
DNAPL pump pressure (departure)	20	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	15	PSI
LNAPL pump pressure (departure)	15	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	55	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: V. K. Ross
 Date: 6/26/13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	3.54	GPM
Totalizer reading (cumulative volume).	226768	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	17	PSI
Filter unit 2 pressure @ Arrival (In /Out)	11	PSI
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
Carbon Treatment Drums		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	2	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
Discharge Piping		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No
Miscellaneous		
Building and Site		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
Electrical and Heating		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
Air Compressor		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10716.2	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	No
Post Carbon Sample Time		1430
Pre-Carbon Sample Time		1445
Sampling event?	Monthly	<input checked="" type="radio"/> Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	7	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: One "MT" drum onsite for DNAPL when req'd

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	20	PSI
DNAPL pump pressure (departure)	20	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	15	PSI
LNAPL pump pressure (departure)	15	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	1440	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: A. Kleisler
 Date: 2/3/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	230	GPM
Totalizer reading (cumulative volume).	27903	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	25	4
Filter unit 2 pressure @ Arrival (In/Out)	22	4
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	2	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	2	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	Yes	<input checked="" type="checkbox"/> No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10719.0	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	2	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes:

1-4MT
on site

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	20	PSI
DNAPL pump pressure (departure)	20	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.5'	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	15	PSI
LNAPL pump pressure (departure)	15	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.4'	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: W. J. [Signature]
 Date: 7/10/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	9.21	GPM
Totalizer reading (cumulative volume).	243524	Gallons
Water filters changed?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	23	3
Filter unit 2 pressure @ Arrival (In /Out)		
Filter unit 1 pressure @ Departure (In/Out)	25	3.5
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	3	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	2	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	Yes	<input checked="" type="checkbox"/> No <u>5/11/13</u>

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10721.7	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	5	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes: 1- unit inside ready for dnapl

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: M. Kessid
 Date: 7/17/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	2.75	GPM
Totalizer reading (cumulative volume).	246393	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	30	4.5
Filter unit 2 pressure @ Arrival (In/Out)	23	4.0
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	3	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	2	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10724.0	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	<input checked="" type="checkbox"/> Yes	No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	5	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes: One "int" on site for DNAPL

N/A

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	2350	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	→	Arrow
Refill control setting (departure)	↘	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Palmer
Date: 7-24-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	3.87	GPM
Totalizer reading (cumulative volume).	251624	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	20	6.5
Filter unit 2 pressure @ Arrival (In/Out)	14	6
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	16721	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	8	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: - 1 empty drum on site
- Blank OWS

off

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: M. Kevins
 Date: 7/31/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Pump integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Transfer pump flow rate.	4.20	GPM
Totalizer reading (cumulative volume).	2566.84	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In./Out)	20	6
Filter unit 2 pressure @ Arrival (In./Out)	15	5.5
Filter unit 1 pressure @ Departure (In./Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Heater operational	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Compressor hours.	10730.2	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Oil level changed?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Regulator operating?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Sampling		
Sampling Performed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Post Carbon Sample Time	1500	
Pre-Carbon Sample Time	1510	
Sampling event?	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Quarterly
Product sampled?	Yes	<input checked="" type="checkbox"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	32	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Drums palletized?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Notes: 1 DMT drum outside

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	71	Arrow
Refill control setting (departure)	✓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: M. [Signature]
 Date: 8/14/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	3.71	GPM
Totalizer reading (cumulative volume).	266947	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In./Out)	30	7
Filter unit 2 pressure @ Arrival (In./Out)	25	6
Filter unit 1 pressure @ Departure (In./Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10736.2	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	20	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product Carbon Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes: Extra MT drum onsite for DNAPL

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<u>Yes</u>	No
DNAPL pump pressure (arrival)	<u>14</u>	PSI
DNAPL pump pressure (departure)	<u>14</u>	PSI
Pneumatic settings adjusted?	Yes	<u>No</u>
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<u>Yes</u>	No
Green warning light operational?	<u>Yes</u>	No
DNAPL drum container integrity.	<u>Good</u>	Poor
Leaks present?	Yes	<u>No</u>
Decant valve integrity.	<u>Good</u>	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<u>Good</u>	Poor
DNAPL pump cleaned?	Yes	<u>No</u>
DNAPL top of pump depth.	<u>23.50</u>	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<u>Yes</u>	No
LNAPL pump pressure (arrival)	<u>20</u>	PSI
LNAPL pump pressure (departure)	<u>20</u>	PSI
Bubbler tube operating pressure.	<u>5</u>	PSI
Pneumatic settings adjusted?	Yes	<u>No</u>
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<u>Good</u>	Poor
LNAPL pump cleaned?	Yes	<u>No</u>
LNAPL top of pump depth.	<u>19.40</u>	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<u>Yes</u>	No
Red warning light operational?	<u>Yes</u>	No
Separator vessel integrity.	<u>Good</u>	Poor
Leaks present?	Yes	<u>No</u>
Separator cover and seal integrity.	<u>Good</u>	Poor
Decant valve integrity.	<u>Good</u>	Poor
LNAPL in separator?	Yes	<u>No</u>
Separator needs cleaning?	Yes	<u>No</u>
Separator cleaned?	Yes	<u>No</u>

Technician: M. Koish
 Date: 8/21/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<u>Yes</u>	No
Pump integrity.	<u>Good</u>	Poor
Flow meter operational?	<u>Yes</u>	No
Transfer pump flow rate.	<u>4.75</u>	GPM
Totalizer reading (cumulative volume).	<u>169074</u>	Gallons
Water filters changed?	Yes	<u>No</u>
Filter unit 1 pressure @ Arrival (In/Out)	<u>22</u>	<u>8</u>
Filter unit 2 pressure @ Arrival (In /Out)	<u>15</u>	<u>8</u>
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<u>Good</u>	Poor
Primary carbon drum leaks?	Yes	<u>No</u>
Primary carbon drum pressure.	<u>5</u>	PSI
Primary drum removed for disposal?	Yes	<u>No</u>
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<u>Good</u>	Poor
Secondary carbon drum leaks?	Yes	<u>No</u>
Secondary carbon drum pressure.	<u>3.5</u>	PSI
Secondary carbon rotated to primary?	Yes	<u>No</u>
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<u>Good</u>	Poor
Polishing carbon drum leaks?	Yes	<u>No</u>
Polishing carbon drum pressure.	<u>1</u>	PSI
Polishing drum rotated to secondary?	Yes	<u>No</u>
New carbon polishing drum?	Yes	<u>No</u>
<i>Discharge Piping</i>		
Pipe integrity in shed.	<u>Good</u>	Poor
Pipe integrity at catch basin.	<u>Good</u>	Poor
Pipe at catch basin clear?	<u>Yes</u>	No
Pipe integrity at creek.	<u>Good</u>	Poor
Pipe at creek clear?	Yes	<u>No</u>

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<u>Good</u>	Poor
Shed ventilation acceptable?	<u>Yes</u>	No
Repairs/work needed?	Yes	<u>No</u>
Spill evidence?	Yes	<u>No</u>
<i>Electrical and Heating</i>		
Electric controls operational	<u>Yes</u>	No
Heater operational	<u>Yes</u>	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<u>Good</u>	Poor
Repairs needed to vaults?	Yes	<u>No</u>
<i>Air Compressor</i>		
Compressor operational?	<u>Yes</u>	No
Compressor hours.	<u>10739.3</u>	Hours
Oil level checked?	<u>Yes</u>	No
Oil level changed?	Yes	<u>No</u>
Compressor trap operating?	<u>Yes</u>	No
Regulator operating?	<u>Yes</u>	No
Air lines performing properly?	<u>Yes</u>	No

Sampling		
Sampling Performed?	Yes	<u>No</u>
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
DNAPL/water to oil/water separator.	<u>15</u>	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	<u>5</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
<i>Product Carbon Waste Storage</i>		
DNAPL drums on-site (full and fractional)	<u>0</u> *	Drums
Spent carbon drums	<u>0</u>	Drums
PPE/Solids drums	<u>1</u>	Drums
LNAPL drums	<u>0</u>	Drums
Drums labeled?	<u>Yes</u>	No
Drums palletized?	<u>Yes</u>	No

Notes:

* Xtra drum onsite

X off for summer

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Green warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
DNAPL pump cleaned?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL pump cleaned?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Red warning light operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Separator vessel integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Leaks present?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
LNAPL in separator?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Separator cleaned?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No

Technician: Mr. Kuntz
 Date: 8/28/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Pump integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Transfer pump flow rate.	4.40	GPM
Totalizer reading (cumulative volume).	271989	Gallons
Water filters changed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	25	7
Filter unit 2 pressure @ Arrival (In/Out)	18	7
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Primary carbon drum leaks?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Secondary carbon drum leaks?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Polishing carbon drum leaks?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Repairs/work needed?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Spill evidence?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Heater operational	<input checked="" type="radio"/> Yes	<input type="radio"/> No

off for work

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	<input type="radio"/> Poor
Repairs needed to vaults?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Compressor hours.	10742.2	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Oil level changed?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Regulator operating?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Air lines performing properly?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Post Carbon Sample Time		1230
Pre-Carbon Sample Time		1245
Sampling event?	Monthly	<input checked="" type="radio"/> Quarterly
Product sampled?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	10	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	-	Gallons
DNAPL/water to disposal drum.	-	Gallons
<i>Product Carbon Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Drums palletized?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Notes:

Area with DNAPL drum
 on site

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	13	PSI
DNAPL pump pressure (departure)	13	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50 14.40	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.90	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Palmer
 Date: 9-6-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	4.35	GPM
Totalizer reading (cumulative volume).	214537	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In./Out)	20	7.5
Filter unit 2 pressure @ Arrival (In./Out)	20	7
Filter unit 1 pressure @ Departure (In./Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	0	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10746.1	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time	Monthly Quarterly	
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	9	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: Empty drum onsite for DNAPL

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
DNAPL pump pressure (arrival)	15	PSI
DNAPL pump pressure (departure)	15	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↗	Arrow
Refill control setting (departure)	↘	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.5	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	f	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.4	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Pump integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Transfer pump flow rate.	4.18	GPM
Totalizer reading (cumulative volume).	275878	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	27	2.5
Filter unit 2 pressure @ Arrival (In/Out)	20	3
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
Carbon Treatment Drums		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	5	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	6	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
Discharge Piping		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Miscellaneous		
Building and Site		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
Electrical and Heating		
Electric controls operational	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Heater operational	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
Air Compressor		
Compressor operational?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Compressor hours.	10748.2	Hours
Oil level checked?	Yes	<input type="checkbox"/> No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Regulator operating?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	10	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Drums palletized?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Notes: extra drum onsite

Technician: MLR
Date: 9/11/13

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	15	PSI
DNAPL pump pressure (departure)	15	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	7	Arrow
Refill control setting (departure)	2	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	7	Arrow
Refill control setting (departure)	2	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	17.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	3.78	GPM
Totalizer reading (cumulative volume).	27885	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In/Out)	27	7
Filter unit 2 pressure @ Arrival (In /Out)	21	6
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposa ?	Yes	<input checked="" type="checkbox"/> No
<i>Secondary carbon drum</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="checkbox"/> No
<i>Polishing carbon drum</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="checkbox"/> No
New carbon polishing drum?	Yes	<input checked="" type="checkbox"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10752.0	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	20	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes: Xtra drum onsite - empty

Technician: A. Reynolds
Date: 9/20/13

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	→	Arrow
Refill control setting (departure)	→	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Palmy
 Date: 9.25-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	4.07	GPM
Totalizer reading (cumulative volume).	287954	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In./Out)	32	PSI
Filter unit 2 pressure @ Arrival (In./Out)	24	PSI
Filter unit 1 pressure @ Departure (In./Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10754.2	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	No
Post Carbon Sample Time	10:25	
Pre-Carbon Sample Time	10:35	
Sampling event?	<input checked="" type="radio"/> Monthly	Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	8	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: Extra VOC samples collected from each Carbon drum
 - spare empty drum onsite

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	7	Arrow
Refill control setting (departure)	2	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: M. Plumb
 Date: 10/2/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	4.03	GPM
Totalizer reading (cumulative volume).	29,1544	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	33	8
Filter unit 2 pressure @ Arrival (In /Out)	25	7
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10757.1	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	15	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes: Xtra MT drum onsite

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	(Yes)	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	(Yes)	(No)
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	(Yes)	No
Green warning light operational?	(Yes)	No
DNAPL drum container integrity.	(Good)	Poor
Leaks present?	Yes	(No)
Decant valve integrity.	(Good)	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	(Good)	Poor
DNAPL pump cleaned?	Yes	(No)
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	(Yes)	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	(No)
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	(Good)	(Poor)
LNAPL pump cleaned?	Yes	(No)
LNAPL top of pump depth.	14.40	Feet
Oil/Water Separator		
Water high level shut-off operational?	(Yes)	No
Red warning light operational?	(Yes)	No
Separator vessel integrity.	(Good)	Poor
Leaks present?	Yes	(No)
Separator cover and seal integrity.	(Good)	Poor
Decant valve integrity.	(Good)	Poor
LNAPL in separator?	(Yes)	No
Separator needs cleaning?	Yes	(No)
Separator cleaned?	Yes	(No)

Technician: M. Roisich
 Date: 10/7/13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	(Yes)	No
Pump integrity.	(Good)	Poor
Flow meter operational?	(Yes)	No
Transfer pump flow rate.	2.34	GPM
Totalizer reading (cumulative volume).	303.50	Gallons
Water filters changed?	Yes	(No)
Filter unit 1 pressure @ Arrival (In/Out)	25	8
Filter unit 2 pressure @ Arrival (In/Out)	30	9
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
Carbon Treatment Drums		
Primary carbon drum integrity.	(Good)	Poor
Primary carbon drum leaks?	Yes	(No)
Primary carbon drum pressure.	7	PSI
Primary drum removed for disposal?	Yes	(No)
Secondary carbon drum integrity.	(Good)	Poor
Secondary carbon drum leaks?	Yes	(No)
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	(No)
Polishing carbon drum integrity.	(Good)	Poor
Polishing carbon drum leaks?	Yes	(No)
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	(No)
New carbon polishing drum?	Yes	(No)
Discharge Piping		
Pipe integrity in shed.	(Good)	Poor
Pipe integrity at catch basin.	(Good)	Poor
Pipe at catch basin clear?	(Yes)	No
Pipe integrity at creek.	(Good)	Poor
Pipe at creek clear?	(Yes)	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	(Good)	Poor
Shed ventilation acceptable?	(Yes)	No
Repairs/work needed?	Yes	(No)
Spill evidence?	Yes	(No)
Electrical and Heating		
Electric controls operational	(Yes)	No
Heater operational	(Yes)	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	(Good)	Poor
Repairs needed to vaults?	Yes	(No)
Air Compressor		
Compressor operational?	(Yes)	No
Compressor hours.	10757.2	Hours
Oil level checked?	(Yes)	No
Oil level changed?	Yes	(No)
Compressor trap operating?	(Yes)	No
Regulator operating?	(Yes)	No
Air lines performing properly?	(Yes)	No

Sampling		
Sampling Performed?	Yes	(No)
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	0	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	5	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	(Yes)	No
Drums palletized?	(Yes)	No

Notes: Xtra RTI suits
bleached filters

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	70	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: M. R.
 Date: 10/16/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	403	GPM
Totalizer reading (cumulative volume).	317772	Gallons
Water filters changed?	Yes	<input checked="" type="checkbox"/> No
Filter unit 1 pressure @ Arrival (In./Out)	35	7
Filter unit 2 pressure @ Arrival (In./Out)	27	6.5
Filter unit 1 pressure @ Departure (In./Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	<input checked="" type="checkbox"/> Yes	No
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	<input checked="" type="checkbox"/> Yes	No
New carbon polishing drum?	<input checked="" type="checkbox"/> Yes	No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="checkbox"/> Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="checkbox"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	<input checked="" type="checkbox"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10763.0	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	10	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.10	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: M. Ross
 Date: 10/25

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	3.20	GPM
Totalizer reading (cumulative volume).	353508	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	25	6
Filter unit 2 pressure @ Arrival (In /Out)	27	5.5
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	4	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	2	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10766.7	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	No
Post Carbon Sample Time	1030	
Pre-Carbon Sample Time	1050	
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	45	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	(Yes)	No
DNAPL pump pressure (arrival)	127	PSI
DNAPL pump pressure (departure)	141	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	4 ↑	Arrow
Refill control setting (departure)	4 ↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	Yes	No
Green warning light operational?	Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	4	Arrow
Refill control setting (departure)	2	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	No
LNAPL top of pump depth.	14.10	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	No
Separator needs cleaning?	Yes	No
Separator cleaned?	Yes	No

Technician:
 Date: 10/30/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	3.51	GPM
Totalizer reading (cumulative volume).	339747	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In./Out)	3.5	7
Filter unit 2 pressure @ Arrival (In./Out)	2.8	6.5
Filter unit 1 pressure @ Departure (In./Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	No
New carbon polishing drum?	Yes	No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	No
Spill evidence?	Yes	No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	No
<i>Air Compressor</i>		
Compressor operational?	Yes	No
Compressor hours.	107692	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	45	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	0	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	0	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<u>Yes</u>	No
DNAPL pump pressure (arrival)	<u>14</u>	PSI
DNAPL pump pressure (departure)	<u>14</u>	PSI
Pneumatic settings adjusted?	Yes	<u>No</u>
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
DNAPL Drum		
High level shut off operational?	<u>Yes</u>	No
Green warning light operational?	<u>Yes</u>	No
DNAPL drum container integrity.	<u>Good</u>	Poor
Leaks present?	Yes	<u>No</u>
Decant valve integrity.	<u>Good</u>	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<u>Good</u>	Poor
DNAPL pump cleaned?	Yes	<u>No</u>
DNAPL top of pump depth.	<u>23.50</u>	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<u>Yes</u>	No
LNAPL pump pressure (arrival)	<u>20</u>	PSI
LNAPL pump pressure (departure)	<u>20</u>	PSI
Bubbler tube operating pressure.	<u>5</u>	PSI
Pneumatic settings adjusted?	Yes	<u>No</u>
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<u>Good</u>	Poor
LNAPL pump cleaned?	Yes	<u>No</u>
LNAPL top of pump depth.	<u>14.40</u>	Feet
Oil/Water Separator		
Water high level shut-off operational?	<u>Yes</u>	No
Red warning light operational?	<u>Yes</u>	No
Separator vessel integrity.	<u>Good</u>	Poor
Leaks present?	Yes	<u>No</u>
Separator cover and seal integrity.	<u>Good</u>	Poor
Decant valve integrity.	<u>Good</u>	Poor
LNAPL in separator?	Yes	<u>No</u>
Separator needs cleaning?	Yes	<u>No</u>
Separator cleaned?	Yes	<u>No</u>

Technician: M. L...
 Date: 11/7/13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	<u>Yes</u>	No
Pump integrity.	<u>Good</u>	Poor
Flow meter operational?	<u>Yes</u>	No
Transfer pump flow rate.	<u>4.61</u>	GPM
Totalizer reading (cumulative volume).	<u>356624</u>	Gallons
Water filters changed?	Yes	<u>No</u>
Filter unit 1 pressure @ Arrival (In/Out)	<u>35</u>	<u>11</u>
Filter unit 2 pressure @ Arrival (In/Out)	<u>27</u>	<u>10</u>
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
Carbon Treatment Drums		
Primary carbon drum integrity.	<u>Good</u>	Poor
Primary carbon drum leaks?	Yes	<u>No</u>
Primary carbon drum pressure.	<u>6</u>	PSI
Primary drum removed for disposal?	Yes	<u>No</u>
Secondary carbon drum integrity.	<u>Good</u>	Poor
Secondary carbon drum leaks?	Yes	<u>No</u>
Secondary carbon drum pressure.	<u>4</u>	PSI
Secondary carbon rotated to primary?	Yes	<u>No</u>
Polishing carbon drum integrity.	<u>Good</u>	Poor
Polishing carbon drum leaks?	Yes	<u>No</u>
Polishing carbon drum pressure.	<u>1</u>	PSI
Polishing drum rotated to secondary?	Yes	<u>No</u>
New carbon polishing drum?	Yes	<u>No</u>
Discharge Piping		
Pipe integrity in shed.	<u>Good</u>	Poor
Pipe integrity at catch basin.	<u>Good</u>	Poor
Pipe at catch basin clear?	<u>Yes</u>	No
Pipe integrity at creek.	<u>Good</u>	Poor
Pipe at creek clear?	<u>Yes</u>	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	<u>Good</u>	Poor
Shed ventilation acceptable?	Yes	<u>No</u>
Repairs/work needed?	Yes	<u>No</u>
Spill evidence?	Yes	<u>No</u>
Electrical and Heating		
Electric controls operational	<u>Yes</u>	No
Heater operational	<u>Yes</u>	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	<u>Good</u>	Poor
Repairs needed to vaults?	Yes	<u>No</u>
Air Compressor		
Compressor operational?	<u>Yes</u>	No
Compressor hours.	<u>107726</u>	Hours
Oil level checked?	<u>Yes</u>	No
Oil level changed?	Yes	<u>No</u>
Compressor trap operating?	<u>Yes</u>	No
Regulator operating?	<u>Yes</u>	No
Air lines performing properly?	<u>Yes</u>	No

Sampling		
Sampling Performed?	Yes	<u>No</u>
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
DNAPL/water to oil/water separator.	<u>5</u>	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	<u>0</u>	Drums
Spent carbon drums	<u>1</u>	Drums
PPE/Solids drums	<u>1</u>	Drums
LNAPL drums	<u>0</u>	Drums
Drums labeled?	<u>Yes</u>	No
Drums palletized?	<u>Yes</u>	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
DNAPL Drum		
High level shut off operational?	Yes	No
Green warning light operational?	Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	No
Decant valve integrity.	Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	No
DNAPL top of pump depth.	2350	Feet

LNAPL/Groundwater System		
Operational upon arrival?	Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	No
LNAPL top of pump depth.	1440	Feet
Oil/Water Separator		
Water high level shut-off operational?	Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	* Yes	No
Separator needs cleaning?	Yes	No
Separator cleaned?	Yes	No

Technician: Mr. R...
 Date: 11/13/13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	4.05	GPM
Totalizer reading (cumulative volume).	365833	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	35 10	
Filter unit 2 pressure @ Arrival (In/Out)	25 9	
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
Carbon Treatment Drums		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	No
Primary carbon drum pressure.	7	PSI
Primary drum removed for disposal?	Yes	No
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	No
Secondary carbon drum pressure.	35	PSI
Secondary carbon rotated to primary?	Yes	No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	No
New carbon polishing drum?	Yes	No
Discharge Piping		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	No
Spill evidence?	Yes	No
Electrical and Heating		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	No
Air Compressor		
Compressor operational?	Yes	No
Compressor hours.	10725.1	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	-	Gallons
DNAPL/water to disposal drum.	-	Gallons
DNAPL/water to oil/water separator.	1 gal	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	1-MT	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No

Notes: * Pad used to remove a small amount of LNAPL in OWS

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	14	PSI
DNAPL pump pressure (departure)	14	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	✓	Arrow
DNAPL Drum		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL Pump and Piping		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
LNAPL Pump and Piping		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
Oil/Water Separator		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: M. V. R. R.
 Date: 11/20/13

LNAPL/Groundwater System - (Continued)		
Transfer Pump and Piping		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	3.85	GPM
Totalizer reading (cumulative volume).	374192	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	35	9
Filter unit 2 pressure @ Arrival (In/Out)	27	8
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
Carbon Treatment Drums		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	6	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
Secondary Carbon Drums		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
Polishing Carbon Drums		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
Discharge Piping		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
Building and Site		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
Electrical and Heating		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
Access Vaults		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
Air Compressor		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10278.1	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	No
Post Carbon Sample Time	11:15	
Pre-Carbon Sample Time	11:30	
Sampling event?	Monthly	<input checked="" type="radio"/> Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
Recovery from DNAPL Drum		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	0	Gallons
Recovery from Oil/Water Separator		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
Product, Carbon, Waste Storage		
DNAPL drums on-site (full and fractional)	1-MT	Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	2	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes:

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	17	PSI
DNAPL pump pressure (departure)	20	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↗	Arrow
Refill control setting (departure)	↘	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	2350	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↗	Arrow
Refill control setting (departure)	↘	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	1740	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Separator cleaned?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No

Technician: T. Palmer
Date: 11-27-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	3.59	GPM
Totalizer reading (cumulative volume).	381509	Gallons
Water filters changed?	<input checked="" type="radio"/> Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	32	10
Filter unit 2 pressure @ Arrival (In/Out)	25	9
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	6	PSI
Primary drum removed for disposal?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	25	PSI
Secondary carbon rotated to primary?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	0.5	PSI
Polishing drum rotated to secondary?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Spill evidence?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10781.4	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	<input checked="" type="radio"/> Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
DNAPL/water to oil/water separator.	8	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)		Drums
Spent carbon drums	1	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No

Notes:

DNAPL System		
Operational upon arrival?	<u>Yes</u>	No
DNAPL pump pressure (arrival)	<u>20</u>	PSI
DNAPL pump pressure (departure)	<u>20</u>	PSI
Pneumatic settings adjusted?	<u>Yes</u>	No
Discharge control setting (departure)	<u>↑</u>	Arrow
Refill control setting (departure)	<u>→</u>	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<u>Yes</u>	No
Green warning light operational?	<u>Yes</u>	No
DNAPL drum container integrity.	<u>Good</u>	Poor
Leaks present?	<u>Yes</u>	<u>No</u>
Decant valve integrity.	<u>Good</u>	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<u>Good</u>	Poor
DNAPL pump cleaned?	<u>Yes</u>	<u>No</u>
DNAPL top of pump depth.	<u>23.50</u>	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<u>Yes</u>	No
LNAPL pump pressure (arrival)	<u>20</u>	PSI
LNAPL pump pressure (departure)	<u>20</u>	PSI
Bubbler tube operating pressure.	<u>5</u>	PSI
Pneumatic settings adjusted?	<u>Yes</u>	<u>No</u>
Discharge control setting (departure)	<u>7</u>	Arrow
Refill control setting (departure)	<u>↓</u>	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<u>Good</u>	Poor
LNAPL pump cleaned?	<u>Yes</u>	<u>No</u>
LNAPL top of pump depth.	<u>1440</u>	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<u>Yes</u>	No
Red warning light operational?	<u>Yes</u>	No
Separator vessel integrity.	<u>Good</u>	Poor
Leaks present?	<u>Yes</u>	<u>No</u>
Separator cover and seal integrity.	<u>Good</u>	Poor
Decant valve integrity.	<u>Good</u>	Poor
LNAPL in separator?	<u>Yes</u>	<u>No</u>
Separator needs cleaning?	<u>Yes</u>	<u>No</u>
Separator cleaned?	<u>Yes</u>	<u>No</u>

Technician: [Signature]
 Date: 12/3/13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<u>Yes</u>	No
Pump integrity.	<u>Good</u>	Poor
Flow meter operational?	<u>Yes</u>	No
Transfer pump flow rate.	<u>3.25</u>	GPM
Totalizer reading (cumulative volume).	<u>20</u>	Gallons
Water filters changed?	<u>Yes</u>	No
Filter unit 1 pressure @ Arrival (In/Out)	<u>32</u>	<u>8</u>
Filter unit 2 pressure @ Arrival (In/Out)	<u>24</u>	<u>7</u>
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<u>Good</u>	Poor
Primary carbon drum leaks?	<u>Yes</u>	<u>No</u>
Primary carbon drum pressure.	<u>5</u>	PSI
Primary drum removed for disposal?	<u>Yes</u>	<u>No</u>
Secondary carbon drum integrity.	<u>Good</u>	Poor
Secondary carbon drum leaks?	<u>Yes</u>	<u>No</u>
Secondary carbon drum pressure.	<u>3</u>	PSI
Secondary carbon rotated to primary?	<u>Yes</u>	<u>No</u>
Polishing carbon drum integrity.	<u>Good</u>	Poor
Polishing carbon drum leaks?	<u>Yes</u>	<u>No</u>
Polishing carbon drum pressure.	<u>1</u>	PSI
Polishing drum rotated to secondary?	<u>Yes</u>	<u>No</u>
New carbon polishing drum?	<u>Yes</u>	<u>No</u>
<i>Discharge Piping</i>		
Pipe integrity in shed.	<u>Good</u>	Poor
Pipe integrity at catch basin.	<u>Good</u>	Poor
Pipe at catch basin clear?	<u>Yes</u>	No
Pipe integrity at creek.	<u>Good</u>	Poor
Pipe at creek clear?	<u>Yes</u>	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<u>Good</u>	Poor
Shed ventilation acceptable?	<u>Yes</u>	No
Repairs/work needed?	<u>Yes</u>	<u>No</u>
Spill evidence?	<u>Yes</u>	<u>No</u>
<i>Electrical and Heating</i>		
Electric controls operational	<u>Yes</u>	No
Heater operational	<u>Yes</u>	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<u>Good</u>	Poor
Repairs needed to vaults?	<u>Yes</u>	<u>No</u>
<i>Air Compressor</i>		
Compressor operational?	<u>Yes</u>	No
Compressor hours.	<u>10784.7</u>	Hours
Oil level checked?	<u>Yes</u>	No
Oil level changed?	<u>Yes</u>	<u>No</u>
Compressor trap operating?	<u>Yes</u>	No
Regulator operating?	<u>Yes</u>	<u>No</u>
Air lines performing properly?	<u>Yes</u>	No

Sampling		
Sampling Performed?	<u>Yes</u>	<u>No</u>
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	<u>Monthly</u>	<u>Quarterly</u>
Product sampled?	<u>Yes</u>	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
DNAPL/water to oil/water separator.	<u>0</u>	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	<u>0</u>	Gallons
DNAPL/water to disposal drum.	<u>0</u>	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	<u>1-MT</u>	Drums
Spent carbon drums	<u>1</u>	Drums
PPE/Solids drums	<u>1</u>	Drums
LNAPL drums	<u>0</u>	Drums
Drums labeled?	<u>Yes</u>	No
Drums palletized?	<u>Yes</u>	No
<i>Club Vent System</i>		
Fan Running?	<u>Yes</u>	No
Vac at sump enclosure? (Check Monthly)	<u>Yes</u>	No

Notes: * replaced flowmeter batteries

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
DNAPL pump pressure (arrival)	20	PSI
DNAPL pump pressure (departure)	20	PSI
Pneumatic settings adjusted?	<input checked="" type="checkbox"/> Yes	No
Discharge control setting (departure)	→	Arrow
Refill control setting (departure)	→	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="checkbox"/> Yes	No
Green warning light operational?	<input checked="" type="checkbox"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
DNAPL top of pump depth.	2350	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="checkbox"/> Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="checkbox"/> No
Discharge control setting (departure)	→	Arrow
Refill control setting (departure)	→	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="checkbox"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="checkbox"/> Yes	No
Red warning light operational?	<input checked="" type="checkbox"/> Yes	No
Separator vessel integrity.	<input checked="" type="checkbox"/> Good	Poor
Leaks present?	Yes	<input checked="" type="checkbox"/> No
Separator cover and seal integrity.	<input checked="" type="checkbox"/> Good	Poor
Decant valve integrity.	<input checked="" type="checkbox"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="checkbox"/> No
Separator needs cleaning?	Yes	<input checked="" type="checkbox"/> No
Separator cleaned?	Yes	<input checked="" type="checkbox"/> No

Technician: T. Patw
Date: 12-6-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="checkbox"/> Yes	No
Pump integrity.	<input checked="" type="checkbox"/> Good	Poor
Flow meter operational?	<input checked="" type="checkbox"/> Yes	No
Transfer pump flow rate.	278	GPM
Totalizer reading (cumulative volume).	3513	Gallons
Water filters changed?	<input checked="" type="checkbox"/> Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	38	55
Filter unit 2 pressure @ Arrival (In /Out)	21	5
Filter unit 1 pressure @ Departure (In/Out)	16	8
Filter unit 2 pressure @ Departure	9	7
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Primary carbon drum pressure.		PSI
Primary drum removed for disposal?	<input checked="" type="checkbox"/> Yes	No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Secondary carbon drum pressure.		PSI
Secondary carbon rotated to primary?	<input checked="" type="checkbox"/> Yes	No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="checkbox"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="checkbox"/> No
Polishing carbon drum pressure.		PSI
Polishing drum rotated to secondary?	<input checked="" type="checkbox"/> Yes	No
New carbon polishing drum?	<input checked="" type="checkbox"/> Yes	No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="checkbox"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="checkbox"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="checkbox"/> Good	Poor
Pipe at creek clear?	<input checked="" type="checkbox"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="checkbox"/> Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="checkbox"/> No
Spill evidence?	Yes	<input checked="" type="checkbox"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="checkbox"/> Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="checkbox"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="checkbox"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="checkbox"/> Yes	No
Compressor hours.	10786.7	Hours
Oil level checked?	<input checked="" type="checkbox"/> Yes	No
Oil level changed?	Yes	<input checked="" type="checkbox"/> No
Compressor trap operating?	<input checked="" type="checkbox"/> Yes	No
Regulator operating?	<input checked="" type="checkbox"/> Yes	No
Air lines performing properly?	<input checked="" type="checkbox"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="checkbox"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	00	Gallons
DNAPL/water to oil/water separator.	65	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	2	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="checkbox"/> Yes	No
Drums palletized?	<input checked="" type="checkbox"/> Yes	No

Club Vent System		
Fan Running?	<input checked="" type="checkbox"/> Yes	No
Vac at sump enclosure? (Check Monthly)	Yes	No

Notes: Flow @ 3.91 after filter changes

DNAPL System		
Operational upon arrival?	Yes	No
DNAPL pump pressure (arrival)	20	PSI
DNAPL pump pressure (departure)	20	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	7	Arrow
Refill control setting (departure)	7	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	Yes	No
Green warning light operational?	Yes	No
DNAPL drum container integrity.	Good	Poor
Leaks present?	Yes	No
Decant valve integrity.	Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	Good	Poor
DNAPL pump cleaned?	Yes	No
DNAPL top of pump depth.	23.5	Feet

LNAPL/Groundwater System		
Operational upon arrival?	Yes	No
LNAPL pump pressure (arrival)	20	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	No
Discharge control setting (departure)	7	Arrow
Refill control setting (departure)	2	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	Good	Poor
LNAPL pump cleaned?	Yes	No
LNAPL top of pump depth.	14.5	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	Yes	No
Red warning light operational?	Yes	No
Separator vessel integrity.	Good	Poor
Leaks present?	Yes	No
Separator cover and seal integrity.	Good	Poor
Decant valve integrity.	Good	Poor
LNAPL in separator?	Yes	No
Separator needs cleaning?	Yes	No
Separator cleaned?	Yes	No

Technician: M. Rees
 Date: 12/18/73

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	Yes	No
Pump integrity.	Good	Poor
Flow meter operational?	Yes	No
Transfer pump flow rate.	397	GPM
Totalizer reading (cumulative volume).	9176	Gallons
Water filters changed?	Yes	No
Filter unit 1 pressure @ Arrival (In/Out)	15	7.5
Filter unit 2 pressure @ Arrival (In /Out)	8	7
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	Good	Poor
Primary carbon drum leaks?	Yes	No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	No
Secondary carbon drum integrity.	Good	Poor
Secondary carbon drum leaks?	Yes	No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	No
Polishing carbon drum integrity.	Good	Poor
Polishing carbon drum leaks?	Yes	No
Polishing carbon drum pressure.	1	PSI
Polishing drum rotated to secondary?	Yes	No
New carbon polishing drum?	Yes	No
<i>Discharge Piping</i>		
Pipe integrity in shed.	Good	Poor
Pipe integrity at catch basin.	Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	No
Spill evidence?	Yes	No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	Good	Poor
Repairs needed to vaults?	Yes	No
<i>Air Compressor</i>		
Compressor operational?	Yes	No
Compressor hours.	10790.9	Hours
Oil level checked?	Yes	No
Oil level changed?	Yes	No
Compressor trap operating?	Yes	No
Regulator operating?	Yes	No
Air lines performing properly?	Yes	No

Sampling		
Sampling Performed?	Yes	No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	-	Gallons
DNAPL/water to disposal drum.	1.5	Gallons
DNAPL/water to oil/water separator.	6.5	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	-	Gallons
DNAPL/water to disposal drum.	-	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1 New	Drums
Spent carbon drums	2 X	Drums
PPE/Solids drums	1	Drums
LNAPL drums	-	Drums
Drums labeled?	Yes	No
Drums palletized?	Yes	No
<i>Club Vent System</i>		
Fan Running?	Yes	No
Vac at sump enclosure? (Check Monthly)	Yes	No

Notes: X Drum p/u today

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	20	PSI
DNAPL pump pressure (departure)	18	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	2350	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	80	PSI
LNAPL pump pressure (departure)	80	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	→	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Paly
 Date: 12-19-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	4.02	GPM
Totalizer reading (cumulative volume).	1248.5	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	15	7.5
Filter unit 2 pressure @ Arrival (In/Out)	9	7
Filter unit 1 pressure @ Departure (In/Out)		
Filter unit 2 pressure @ Departure		
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	0.5	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	<input checked="" type="radio"/> Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	<input checked="" type="radio"/> Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10795.0	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	<input checked="" type="radio"/> Yes	No
Post Carbon Sample Time	(6:30)	1010
Pre-Carbon Sample Time		1025
Sampling event?	<input checked="" type="radio"/> Monthly	Quarterly
Product sampled?	Yes	<input checked="" type="radio"/> No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0.5	Gallons
DNAPL/water to oil/water separator.	60	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	0	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No
<i>Club Vent System</i>		
Fan Running?	<input checked="" type="radio"/> Yes	No
Vac at sump enclosure? (Check Monthly)	Yes	No

Notes: Collect vOAs from all points

Former Gastown Manufactured Gas Plant Site

Table 4-1

Site Visit Checklist/Data Sheet

DNAPL System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
DNAPL pump pressure (arrival)	19	PSI
DNAPL pump pressure (departure)	17	PSI
Pneumatic settings adjusted?	<input checked="" type="radio"/> Yes	No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>DNAPL Drum</i>		
High level shut off operational?	<input checked="" type="radio"/> Yes	No
Green warning light operational?	<input checked="" type="radio"/> Yes	No
DNAPL drum container integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
<i>DNAPL Pump and Piping</i>		
DNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
DNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
DNAPL top of pump depth.	23.50	Feet

LNAPL/Groundwater System		
Operational upon arrival?	<input checked="" type="radio"/> Yes	No
LNAPL pump pressure (arrival)	30	PSI
LNAPL pump pressure (departure)	20	PSI
Bubbler tube operating pressure.	5	PSI
Pneumatic settings adjusted?	Yes	<input checked="" type="radio"/> No
Discharge control setting (departure)	↑	Arrow
Refill control setting (departure)	↓	Arrow
<i>LNAPL Pump and Piping</i>		
LNAPL piping integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL pump cleaned?	Yes	<input checked="" type="radio"/> No
LNAPL top of pump depth.	14.40	Feet
<i>Oil/Water Separator</i>		
Water high level shut-off operational?	<input checked="" type="radio"/> Yes	No
Red warning light operational?	<input checked="" type="radio"/> Yes	No
Separator vessel integrity.	<input checked="" type="radio"/> Good	Poor
Leaks present?	Yes	<input checked="" type="radio"/> No
Separator cover and seal integrity.	<input checked="" type="radio"/> Good	Poor
Decant valve integrity.	<input checked="" type="radio"/> Good	Poor
LNAPL in separator?	Yes	<input checked="" type="radio"/> No
Separator needs cleaning?	Yes	<input checked="" type="radio"/> No
Separator cleaned?	Yes	<input checked="" type="radio"/> No

Technician: T. Palmer
 Date: 12-27-13

LNAPL/Groundwater System - (Continued)		
<i>Transfer Pump and Piping</i>		
Pump operational?	<input checked="" type="radio"/> Yes	No
Pump integrity.	<input checked="" type="radio"/> Good	Poor
Flow meter operational?	<input checked="" type="radio"/> Yes	No
Transfer pump flow rate.	3.88	GPM
Totalizer reading (cumulative volume).	35790	Gallons
Water filters changed?	Yes	<input checked="" type="radio"/> No
Filter unit 1 pressure @ Arrival (In/Out)	35	5
Filter unit 2 pressure @ Arrival (In /Out)	87	45
Filter unit 1 pressure @ Departure (In/Out)	31	8
Filter unit 2 pressure @ Departure	23	9
<i>Carbon Treatment Drums</i>		
Primary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Primary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Primary carbon drum pressure.	5	PSI
Primary drum removed for disposal?	Yes	<input checked="" type="radio"/> No
<i>Secondary Carbon Drums</i>		
Secondary carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Secondary carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Secondary carbon drum pressure.	3	PSI
Secondary carbon rotated to primary?	Yes	<input checked="" type="radio"/> No
<i>Polishing Carbon Drums</i>		
Polishing carbon drum integrity.	<input checked="" type="radio"/> Good	Poor
Polishing carbon drum leaks?	Yes	<input checked="" type="radio"/> No
Polishing carbon drum pressure.	5	PSI
Polishing drum rotated to secondary?	Yes	<input checked="" type="radio"/> No
New carbon polishing drum?	Yes	<input checked="" type="radio"/> No
<i>Discharge Piping</i>		
Pipe integrity in shed.	<input checked="" type="radio"/> Good	Poor
Pipe integrity at catch basin.	<input checked="" type="radio"/> Good	Poor
Pipe at catch basin clear?	<input checked="" type="radio"/> Yes	No
Pipe integrity at creek.	<input checked="" type="radio"/> Good	Poor
Pipe at creek clear?	<input checked="" type="radio"/> Yes	No

Miscellaneous		
<i>Building and Site</i>		
Remediation shed integrity.	<input checked="" type="radio"/> Good	Poor
Shed ventilation acceptable?	Yes	No
Repairs/work needed?	Yes	<input checked="" type="radio"/> No
Spill evidence?	Yes	<input checked="" type="radio"/> No
<i>Electrical and Heating</i>		
Electric controls operational	Yes	No
Heater operational	<input checked="" type="radio"/> Yes	No

Miscellaneous - (Continued)		
<i>Access Vaults</i>		
Overall vault integrity.	<input checked="" type="radio"/> Good	Poor
Repairs needed to vaults?	Yes	<input checked="" type="radio"/> No
<i>Air Compressor</i>		
Compressor operational?	<input checked="" type="radio"/> Yes	No
Compressor hours.	10800.3	Hours
Oil level checked?	<input checked="" type="radio"/> Yes	No
Oil level changed?	Yes	<input checked="" type="radio"/> No
Compressor trap operating?	<input checked="" type="radio"/> Yes	No
Regulator operating?	<input checked="" type="radio"/> Yes	No
Air lines performing properly?	<input checked="" type="radio"/> Yes	No

Sampling		
Sampling Performed?	Yes	<input checked="" type="radio"/> No
Post Carbon Sample Time		
Pre-Carbon Sample Time		
Sampling event?	Monthly	Quarterly
Product sampled?	Yes	No

Recovery and Disposal		
<i>Recovery from DNAPL Drum</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0.5	Gallons
DNAPL/water to oil/water separator.	10	Gallons
<i>Recovery from Oil/Water Separator</i>		
Pure DNAPL to disposal drum.	0	Gallons
DNAPL/water to disposal drum.	0	Gallons
<i>Product, Carbon, Waste Storage</i>		
DNAPL drums on-site (full and fractional)	1	Drums
Spent carbon drums	0	Drums
PPE/Solids drums	1	Drums
LNAPL drums	1	Drums
Drums labeled?	<input checked="" type="radio"/> Yes	No
Drums palletized?	<input checked="" type="radio"/> Yes	No
<i>Club Vent System</i>		
Fan Running?	<input checked="" type="radio"/> Yes	No
Vac at sump enclosure? (Check Monthly)	Yes	No

Notes: Bleach system + add Chlorine Pucks to Sump and OWS