

US EPA ARCHIVE DOCUMENT

KCBX TERMINALS CO NORTH (NT-NE)	SITE VISIT DATE							
	3/7/2014	3/11/2014	3/17/2014	3/26/2014				
<b>PartisolPlus 2025i Metals/Mass Sampler</b>								
<i>Arrival time:</i>	11:00 AM	10:30 AM	11:00 AM	11:00 AM				
Any status flags on main screen?	N	N	N	N				
Is sampler date/time correct within 60 sec?	Y	N	Y	Y				
Have data from last run been collected?	Y	Y	Y	Y				
Has sampled filter magazine been collected?	Y	Y	Y	Y				
Has COC form for retrieved samples been filled out?	NA	NA	NA	NA				
Have samples been packed for shipping?	N	N	N	N				
Have samples been shipped to lab?	N	N	N	N				
Have sample data been sent to Austin staff?	N	N	N	N				
Is cassette magazine in good condition?	Y	Y	Y	Y				
Are cassettes available in feed magazine for next sample?	Y	Y	Y	Y				
Is sampler inlet and downtube clean?	Y	Y	Y	Y				
Is water collection bottle clean?	Y	Y	Y	Y				
Are O-rings in good condition?	Y	Y	Y	Y				
<b>PartisolPlus 2025i Carbon Sampler</b>								
<i>Arrival time:</i>	11:00 AM	10:30 AM	11:00 AM	11:00 AM				
Any status flags on main screen?	N	N	N	N				
Is sampler date/time correct within 60 sec?	Y	N	Y	Y				
Have data from last run been collected?	Y	Y	Y	Y				
Has sampled filter magazine been collected?	Y	Y	Y	Y				
Has COC form for retrieved samples been filled out?	NA	NA	NA	NA				
Have samples been packed for shipping?	N	N	N	N				
Have samples been shipped to lab?	N	N	N	N				
Have sample data been sent to Austin staff?	N	N	N	N				
Is cassette magazine in good condition?	Y	Y	Y	Y				
Are cassettes available in feed magazine for next sample?	Y	Y	Y	Y				
Is sampler inlet and downtube clean?	Y	Y	Y	Y				
Is water collection bottle clean?	Y	Y	Y	Y				
Are O-rings in good condition?	Y	Y	Y	Y				
<b>Comments section</b>								
3/11, changed the time on NT-metals from 09:55 to 09:57.								
3/11, changed the time on NT-carbon from 09:50 to 09:53.								

3/11, removed 3/3, 3/6, 3/9 cassettes.  
 3/17 removed 3/12 and 3/15 cassettes.  
 3/17, clean PM10 sample heads and tubes.

**MAINTENANCE LIST FOR 2025i**

- Each Visit:* Inspect filter cassettes and magazines; discard damaged cassettes, and lubricate cassette seals as needed
- Weekly:* Perform external leak check
- Monthly:* Perform internal leak check  
Clean PM<sub>10</sub> inlet
- Biannually:* Change the large in-line filter  
Clean the rain hoods and air screens
- Annually:* Check and rebuild pump if needed

KCBX TERMINALS CO SOUTH (ST-NE)	SITE VISIT DATE							
	3/7/2012	3/11/2014	3/17/2014	3/26/2014				
<b>PartisolPlus 2025i Metals/Mass Sampler</b>								
<i>Arrival time:</i>	12:00 PM	11:30 AM	12:00 PM	12:00 PM				
Any status flags on main screen?	N	N	N	N				
Is sampler date/time correct within 60 sec?	Y	N	Y	Y				
Have data from last run been collected?	Y	N	Y	Y				
Has sampled filter magazine been collected?	N	Y	Y	N				
Has COC form for retrieved samples been filled out?	NA	NA	NA	NA				
Have samples been packed for shipping?	N	N	N	N				
Have samples been shipped to lab?	N	N	N	N				
Have sample data been sent to Austin staff?	N	N	N	N				
Is cassette magazine in good condition?	Y	Y	Y	Y				
Are cassettes available in feed magazine for next sample?	Y	Y	Y	Y				
Is sampler inlet and downtube clean?	Y	Y	Y	Y				
Is water collection bottle clean?	Y	Y	Y	Y				
Are O-rings in good condition?	Y	Y	Y	Y				
<b>PartisolPlus 2025i Carbon Sampler</b>								
<i>Arrival time:</i>	12:00 PM	11:30 AM	12:00 PM	12:00 PM				
Any status flags on main screen?	N	N	N	N				
Is sampler date/time correct within 60 sec?	Y	N	Y	Y				
Have data from last run been collected?	Y	Y	Y	Y				
Has sampled filter magazine been collected?	N	Y	Y	N				
Has COC form for retrieved samples been filled out?	NA	NA	NA	NA				
Have samples been packed for shipping?	N	N	N	N				
Have samples been shipped to lab?	N	N	N	N				
Have sample data been sent to Austin staff?	N	N	N	N				
Is cassette magazine in good condition?	Y	Y	Y	Y				
Are cassettes available in feed magazine for next sample?	Y	Y	Y	Y				
Is sampler inlet and downtube clean?	Y	Y	Y	Y				
Is water collection bottle clean?	Y	Y	Y	Y				
Are O-rings in good condition?	Y	Y	Y	Y				
<b>Comments section</b>								
2/28, both samples jammed, reran on 3/1.								
3/3, both samples jammed, reran on 3/4.								
3/11, removed 3/4, 3/6, 3/9 cassettes.								
3/17 removed 3/12 and 3/15 cassettes (ST-metals for 3/15 jammed).								
3/17, clean PM10 sample heads and tubes.								
3/26, found ST-metals jammed again. Lost 3/21 and 3/24 samples. Made more adjustments to samplers per Thermo instructions.								

**MAINTENANCE LIST FOR 2025i**

- Each Visit:* Inspect filter cassettes and magazines; discard damaged cassettes, and lubricate cassette seals as needed
- Weekly:* Perform external leak check
- Monthly:* Perform internal leak check  
Clean PM<sub>10</sub> inlet
- Biannually:* Change the large in-line filter  
Clean the rain hoods and air screens
- Annually:* Check and rebuild pump if needed

KCBX TERMINALS CO NORTH	SITE VISIT DATE							
	3/7/2014	3/11/2014	3/17/2014	3/26/2014				
<b>Meteorological Station</b>								
<i>Arrival time:</i>	11:00 AM	10:30 AM	11:00 AM	11:00 AM				
Is the temperature aspirator fan running?	Y	Y	Y	Y				
Are all signal cables secured and intact?	Y	Y	Y	Y				
Are wind vane/ anemometer cups intact and operational?	Y	Y	Y	Y				
Is datalogger date/time correct within 60 sec?	NA	NA	NA	NA				
Are conditions shown on logger consistent with ambient observations?	NA	NA	NA	NA				
<b>BAM-1020 PM<sub>10</sub> Monitors</b>								
<i>Arrival time:</i>	11:00 AM	10:30 AM	11:00 AM	11:00 AM				
Any status error flags showing?	N	N	N	N				
Are all monitor dates/times correct within 60 sec?	Y	Y	Y	Y				
Are all filter transport systems operational?	Y	Y	Y	Y				
Are hourly data being collected?	Y	Y	Y	Y				
Is sampler inlet and downtube clean?	Y	Y	Y	Y				
Is water collection bottle clean?	Y	Y	Y	Y				
Are O-rings in good condition?	Y	Y	Y	Y				
<b>Comments section</b>								
3/17, clean PM10 sample heads and tubes.								

**Site ID List:**

- NT-NW = Northwest BAM site (Meteorological monitors)
- NT-NE = Northeast BAM site (Partisol samplers)
- NT-SE = Southeast BAM site
- NT-SW = Southwest BAM site

**MAINTENANCE LIST FOR METEOROLOGICAL STATION**

- Each Visit:* Inspect sensors and cables for signs of deterioration or damage and replace as needed
- Monthly:* Inspect temperature aspirator and remove dust accumulation  
Inspect tower for plumb, and verify that all fasteners are intact and tight
- Biannually:* Perform calibration check on sensors  
Check wind sensor bearings
- Annually:* Replace wind sensor bearings

**MAINTENANCE LIST FOR BAM-1020**

- Each Visit:* Inspect filter tape and replace when needed (~2 months/roll; run SELF-TEST function in the TAPE menu).  
Inspect filter tape for pinholes and irregular PM deposits
- Monthly:* Perform flow rate and leak check  
Clean BAM nozzle and vane  
Clean inlet hardware, capstan shaft and pinch roller
- Quarterly:* Verify BAM settings file  
Flow system Calibration  
Disassemble and clean inlet
- Biannually:* Check pump muffler and tubing and replace as needed  
Test filter RH and Temperature sensors  
Test smart heater function
- Annually:* Perform zero background test  
Clean internal debris filter  
Remove and check membrane span foil  
Beta detector count rate and dark count test  
Rebuild vacuum pump  
Replace nozzle o-ring



Rev 1 (1/2014)

KCBX TERMINALS CO SOUTH	SITE VISIT DATE							
	3/7/2014	3/11/2014	3/17/2014	3/26/2014				
<b>Meteorological Station</b>								
<i>Arrival time:</i>	12:00 PM	11:30 AM	12:00 PM	12:00 PM				
Is the temperature aspirator fan running?	Y	Y	Y	Y				
Are all signal cables secured and intact?	Y	Y	Y	Y				
Are wind vane/ anemometer cups intact and operational?	Y	Y	Y	Y				
Is datalogger date/time correct within 60 sec?	NA	NA	NA	NA				
Are conditions shown on logger consistent with ambient observations?	NA	NA	NA	NA				
<b>BAM-1020 PM<sub>10</sub> Monitors</b>								
<i>Arrival time:</i>	12:00 PM	11:30 AM	12:00 PM	12:00 PM				
Any status error flags showing?	N	N	N	N				
Are all monitor dates/times correct within 60 sec?	Y	N	Y	Y				
Are all filter transport systems operational?	Y	Y	Y	Y				
Are hourly data being collected?	Y	Y	Y	Y				
Is sampler inlet and downtube clean?	Y	Y	Y	Y				
Is water collection bottle clean?	Y	Y	Y	Y				
Are O-rings in good condition?	Y	Y	Y	Y				
<b>Comments section</b>								
3/7, could not inspect ST-SW BAM due to an active train blocking the way.								
3/11, found BAM NT-SE with no power. Notified M. Estadt.								
3/17, clean PM10 sample heads and tubes.								

**Site ID List:**

- ST-NW = Northwest BAM site
- ST-N = North BAM site
- ST-NE = Northeast BAM site (Partisol samplers)
- ST-M = Meteorological Monitoring Site
- ST-CE = Center East BAM site
- ST-SW = Southwest BAM site

**MAINTENANCE LIST FOR METEOROLOGICAL STATION**

- Each Visit:* Inspect sensors and cables for signs of deterioration or damage and replace as needed
- Monthly:* Inspect temperature aspirator and remove dust accumulation  
Inspect tower for plumb, and verify that all fasteners are intact and tight
- Biannually:* Perform calibration check on sensors  
Check wind sensor bearings
- Annually:* Replace wind sensor bearings

**MAINTENANCE LIST FOR BAM-1020**

- Each Visit:* Inspect filter tape and replace when needed (~2 months/roll; run SELF-TEST function in the TAPE menu).  
Inspect filter tape for pinholes and irregular PM deposits
- Monthly:* Perform flow rate and leak check  
Clean BAM nozzle and vane  
Clean inlet hardware, capstan shaft and pinch roller
- Quarterly:* Verify BAM settings file  
Flow system calibration  
Disassemble and clean inlet
- Biannually:* Check pump muffler and tubing and replace as needed  
Test filter RH and Temperature sensors  
Test smart heater function
- Annually:* Perform zero background test  
Clean internal debris filter  
Remove and check membrane span foil  
Beta detector count rate and dark count test  
Rebuild vacuum pump  
Replace nozzle o-ring



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