

# DAILY QUALITY CONTROL REPORT

DATE

1 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 3	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

## DAY-SPECIFIC TASK:

- Completed CB-6 (20+00).
- Thompson Drilling continues to retrofit stabilizer into drill string.

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Tetra Tech – Jim Toth
- Weston – Mark Taylor
- Thompson Drilling

## WORK PERFORMED:

Site Weather – Hot and humid, 88°F, partly cloudy.

0800 – **[Beazer Property]** Ardaman Drilling setting up to begin borings at CB-6 (labelled as 20+00 on Figure 6 of Tetra Tech's Pre-Design Investigation Work Plan: Design Track 2).

0900 – **[Beazer Property]** Ardaman begins to collect samples and SPT results at CB-6 (20+00).

1030 – **[Beazer Property]** At 35' on CB-6 (20+00), clayey sand with phosphorite nodules, no evidence of DNAPL in split spoon samples down to 35'; however, some naphthalene-like odor detected starting at ~15' (PID = 3 ppm at 14').

1100 – **[Beazer Property]** At 50' on CB-6 (20+00), no DNAPL staining, strong naphthalene odor, clayey sand with phosphorite (PID = 0.8 ppm).

1130 – **[Cabot Property]** Thompson Drilling continues to retrofit their stabilizer to include in their drill string to reduce bit wobbling. Weston personnel stated that since crew will need to purchase steel from Tampa and retrofit stabilizer unit drilling will not restart until Monday October 5<sup>th</sup>.

1230 – **[Beazer Property]** Naphthalene odor diminished around 56' at CB-6 (20+00).

1300 - **[Beazer Property]** Top of middle Hawthorn unit encountered at 57' at CB-6 (20+00). Ardaman will grout up borehole but will not start new borehole today. Instead the crew will focus on collecting test pit samples for future design of retention pond at the northwest of property.

## DAILY QUALITY CONTROL REPORT

DATE

1 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 3	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

1400 - **[Beazer Property]** Crew continues to grout borehole and collect test pit samples.

**QUALITY CONTROL ACTIVITIES:**

- J.M. Waller and Tetra Tech oversight personnel onsite.

**HEALTH AND SAFETY LEVELS AND ACTIVITIES:**

- All activities performed in Level D.

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- **[Cabot Property]** Thompson Drilling has stopped drilling / drilling to restart next Monday October 5<sup>th</sup>.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 2, 2015:**

- Ardaman crew will continue cutoff wall borings at CB-9 (26+00).
- Thompson Drilling and Weston will retrofit drill string with stabilizer.

**PREPARED BY: Joshua Hayes** **REVIEWED BY: Tim Turner**

## DAILY QUALITY CONTROL REPORT

DATE

2 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 4
-------	------	------	--------------

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

### TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

### DAY-SPECIFIC TASK:

- Completed CB-9 (26+00).
- Thompson Drilling continues to retrofit stabilizer into drill string.

### PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

### WORK PERFORMED:

Site Weather – Overcast, 80°F, some rain.

0800 – **[Beazer Property]** Ardaman drillers setting up to begin borings at CB-9 (labelled as 26+00 on Figure 6 of Tetra Tech's Pre-Design Investigation Work Plan: Design Track 2).

0930 – **[Beazer Property]** Ardaman at 15' on CB-9 (26+00), no odor, no evidence of DNAPL, sandy soil. However, odor of naphthalene at 20', no evidence of DNAPL staining.

1100 – **[Beazer Property]** At 60' on CB-9 (26+00), clayey sand with phosphorite nodules, no evidence of DNAPL in split spoon samples, some naphthalene-like odor detected starting at ~20' and throughout rest of samples.

1130 – **[Beazer Property]** Has been determined that middle clay starts at 59' at CB-9 (26+00), crew pushed down an additional 5' and collected sample down to 64', all containing dense middle clay layer.

1200 – **[Cabot Property]** Thompson Drilling continues to retrofit their stabilizer to include in their drill string to reduce bit wobbling.

1300 – **[Beazer Property]** Ardaman crew grouting up CB-9 (26+00), then crew will leave site since they will need to return drill rig and swap out for larger rig.

### QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

### HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

## DAILY QUALITY CONTROL REPORT

DATE

2 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 4
-------	------	------	--------------

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- **[Cabot Property]** Thompson Drilling has stopped drilling / drilling to restart next Monday October 5<sup>th</sup>.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 5, 2015:**

- Ardaman crew will continue cutoff wall borings at CB-11 (30+00).
- Thompson Drilling and Weston will retrofit drill string with stabilizer.

**PREPARED BY: Joshua Hayes** **REVIEWED BY: Tim Turner**

## DAILY QUALITY CONTROL REPORT

DATE

5 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 5	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

### TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

### DAY-SPECIFIC TASK:

- Began CB-11 (30+00).
- Thompson Drilling continues to retrofit stabilizer into drill string.

### PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

### WORK PERFORMED:

Site Weather – Partly cloudy, 80°F, some rain.

0800 – **[Cabot Property]** Thompson Drilling continues to retrofit reamer/stabilizer onto their drill string, will not restart drilling until tomorrow morning at the earliest.

**[Beazer Property]** Ardaman drillers and geologist will not be onsite until around 12 pm, leaving site until arrival of drill crew.

1200 – **[Beazer Property]** Ardaman drillers onsite, setting up new rig at CB-11 (30+00).

1430 – **[Beazer Property]** At 30' on CB-11 (30+00), clayey sand with phosphorite nodules, no evidence of DNAPL in split spoon samples, no odor detected. Ardaman personnel (geologist) noted creosote-like odors at 18' – 25' but diminished after 25' (above first confining unit, upper clay).

1545 – **[Beazer Property]** Ardaman drillers will need to install temporary casing at CB-11 (30+00) due to borehole collapse at ~52'. Will leave rig on borehole overnight and install casing in the morning.

### QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

### HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

### PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- **[Beazer Property]** Borehole collapse at 52' on CB-11 (30+00) / will install temporary casing.

### SPECIAL NOTES:

- None.

## DAILY QUALITY CONTROL REPORT

DATE

5 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 5	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid		
-----	------	-------	--	--

### EXPECTATIONS FOR October 6, 2015:

- Ardaman crew will continue cutoff wall boring at CB-11 (30+00).
- Thompson Drilling and Weston will continue drilling.

**PREPARED BY: Joshua Hayes** **REVIEWED BY: Tim Turner**

## DAILY QUALITY CONTROL REPORT

DATE

6 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 6	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

### TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

### DAY-SPECIFIC TASK:

- Completed CB-11 (30+00) and CB-13 (34+00).
- Thompson Drilling continued drilling and have completed installation of first isolation casing down to 23'.

### PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

### WORK PERFORMED:

Site Weather – Partly cloudy, 80°F.

0800 – **[Beazer Property]** Ardaman drillers setting back up on CB-11 (30+00) to begin installing temporary casing and finish borings and SPT.

**[Cabot Property]** Thompson Drilling has completed retrofit of stabilizer/reamer bar to drill string. Drillers are circulating drill mud and drilling should begin again soon.

0930 – **[Beazer Property]** Ardaman drillers are down to 61' on CB-11, middle Hawthorn clay layer began at ~58'. Next crew will move to CB-13 (34+00). Encountered refusal at 62' at CB-11, dolomite.

1130 – **[Cabot Property]** Borehole has been advanced down to desired depth of 23'. Drillers are setting up to begin installation of first isolation casing.

1145 – **[Beazer Property]** Ardaman drillers setting up on CB-13 (34+00).

1230 – **[Beazer Property]** Ardaman drillers down to 35' on CB-13 (34+00), no odor or evidence of DNAPL, clayey sand with phosphorite.

1300 – **[Cabot Property]** First isolation casing has been placed into position, Thompson drillers will now begin grouting casing into place.

1500 – **[Beazer Property]** Ardaman drillers have completed CB-13 (34+00), no odor or evidence of DNAPL.

1600 – **[Cabot Property]** Thompson drillers are grouting up first isolation casing at Floridan well, it is expected that approximately 300 gallons of grout will be needed. Thompson drillers and Weston checking density of grout

## DAILY QUALITY CONTROL REPORT

DATE

6 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 6	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

mixture, e.g. second batch density = 13.5 lbs./gal.

1630 – **[Cabot Property]** Thompson drillers finishing p grouting well casing. The grout will require a 24 hour curing time; therefor, no drilling will be attempted tomorrow. Crew will focus on replacing drill mud used in drilling of first borehole depth with new mud to prevent cross-contamination of aquifers.

**QUALITY CONTROL ACTIVITIES:**

- J.M. Waller and Tetra Tech oversight personnel onsite.

**HEALTH AND SAFETY LEVELS AND ACTIVITIES:**

- All activities performed in Level D.

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- None.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 7, 2015:**

- Ardaman crew will continue cutoff wall boring at CB-15 (38+00).
- Thompson Drilling and Weston will prepare to restart drilling on Thursday, October 8<sup>th</sup>.

**PREPARED BY: Joshua Hayes   REVIEWED BY: Tim Turner**



## DAILY QUALITY CONTROL REPORT

DATE

7 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 7	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

### TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

### DAY-SPECIFIC TASK:

- Completed CB-15 (38+00) and SBSW02.

### PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

### WORK PERFORMED:

Site Weather – Partly cloudy, 80°F.

0800 – [Beazer Property] Ardaman drillers setting up on CB-15 (38+00).

0930 – [Beazer Property] Ardaman drillers are down to 20' on CB-15, dark silty sand from ~10' – 20', no odor or evidence of DNAPL. At 25', a clayey-sand with phosphorite begins, light in color, no odor or evidence of DNAPL.

1045 – [Beazer Property] At 50' on CB-15, clayey-sand, no odor or evidence of DNAPL.

1130 – [Beazer Property] Ardaman drillers encountered top of middle Hawthorn clay layer at ~60', crews will begin grouting up point soon.

1230 – [Beazer Property] Ardaman drillers have completed grouting up CB-15, the crew will now move to SBSW02 to complete shallow (15') SPT boring at the north side of property.

1400 – [Beazer Property] Ardaman drillers collecting samples and performing SPT at SBSW02 in top 15' of soil.. No odor or evidence of DNAPL in samples.

1500 – [Beazer Property] Ardaman drillers have completed SBSW02, grouting up borehole.

### QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

### HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

## DAILY QUALITY CONTROL REPORT

DATE

7 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 7	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid		
-----	------	-------	--	--

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- None.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 8, 2015:**

- Ardaman crew will continue cutoff wall boring at CB-18 (44+00).
- Thompson Drilling will continue drilling borehole to next desired depth, 65'.

**PREPARED BY: Joshua Hayes** **REVIEWED BY: Tim Turner**

# DAILY QUALITY CONTROL REPORT

DATE

8 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 8	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

## DAY-SPECIFIC TASK:

- Completed CB-17 (42+00).

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 80°F.

0800 – **[Beazer Property]** Ardaman drillers setting up on CB-17 (42+00).

0930 – **[Beazer Property]** Ardaman drillers are down to 7' on CB-17, silty sand, no odor or evidence of DNAPL. At 15', a silty-sand with a naphthalene odor, no evidence of DNAPL. At 20', stronger naphthalene odor, no DNAPL evidence.

1045 – **[Cabot Property]** Thompson Drilling continues to prepare drilling mud and drill string. Crew will no begin drilling until tomorrow.

1100 – **[Beazer Property]** Odor diminished after 20' at CB-17, clayey-sand with phosphorite nodules after 25'. Crew at 50', clayey-sand with phosphorite nodules, no odor or evidence of DNAPL. At 62' a silty, blue-green clay begins. Solid clay layer from 62' – 64'.

1230 – **[Beazer Property]** Ardaman drillers will start grouting up CB-17, no further drilling will be attempted today. Crew will focus on shipping barrels of Investigative Derived Waste (IDW), i.e. soil cuttings and drilling mud.

## QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

## HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

## PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None.

## SPECIAL NOTES:

## DAILY QUALITY CONTROL REPORT

DATE

8 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	------------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 8	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid		
-----	------	-------	--	--

- None.

### EXPECTATIONS FOR October 8, 2015:

- Ardaman crew will continue cutoff wall boring at CB-19.
- Thompson Drilling will continue drilling borehole to next desired depth, 65'.

**PREPARED BY: Joshua Hayes** **REVIEWED BY: Tim Turner**

# DAILY QUALITY CONTROL REPORT

DATE

9 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 9	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

## DAY-SPECIFIC TASK:

- Completed CB-19 (46+00).
- Thompson Drilling began drilling second section of borehole, 23' – 65'.

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 80°F.

0900 – **[Beazer Property]** Ardaman drillers setting up on CB-19 (46+00).

0930 – **[Beazer Property]** At 15' on CB-19, sandy soil with some creosote odor, no evidence of DNAPL. At 25', stronger creosote odor, PID = 2.5 ppm, top of upper clay observed, no evidence of DNAPL. At 40', strong odor of creosote, no evidence of DNAPL, clayey-sand with phosphorite nodules. At 50', clayey-sand with phosphorite, less creosote odor, no evidence of DNAPL.

1045 – **[Cabot Property]** Thompson Drilling continues to prepare drilling mud and drill string. Crew will begin drilling soon.

1230 – **[Beazer Property]** Ardaman drillers have completed CB-19, top of middle clay ~60', grouting up borehole. Crew will not attempt any other points today.

1400 – **[Cabot Property]** Thompson drillers have begun drilling second section of borehole at Floridan well.

1800 – **[Cabot Property]** Thompson drillers have drilled down to 25', slow progress due to grout at bottom of first isolation casing. Crew will continue drilling tomorrow.

## QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

## HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

## DAILY QUALITY CONTROL REPORT

DATE

9 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 9	
-------	------	------	--------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- None.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 10, 2015:**

- Thompson Drilling will continue drilling borehole to next desired depth, 65'.

**PREPARED BY: Joshua Hayes REVIEWED BY: Tim Turner**

# DAILY QUALITY CONTROL REPORT

DATE

12 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 10	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

## DAY-SPECIFIC TASK:

- Completed CB-3 (4+00).
- Thompson Drilling has completed drilling second section of borehole, 23' – 65'.
- Thompson Drilling has installed and grouted second isolation casing for Cabot Floridan well.

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 80°F.

0830 – **[Cabot Property]** Thompson Drilling has reached desired depth at Floridan well, 65'. Removing drill string and will begin installation of second isolation casing soon.

1000 – **[Beazer Property]** Ardaman drillers arrive onsite.

1100 – **[Cabot Property]** Thompson Drilling continues to install second isolation casing at Floridan well.

1200 – **[Beazer Property]** Ardaman drillers have setup at CB-3 (4+00), at 8', hard pack with some clay, possibly from previous road construction on NW 23<sup>rd</sup> Avenue. At 29', clayey-sand with phosphorite, no odor or evidence of DNAPL.

1300 – **[Beazer Property]** Ardaman drillers at 50' on CB-3, clayey-sand with phosphorite, no odor or evidence of DNAPL.

1430 – **[Cabot Property]** Thompson drillers have finished welding together sections of second isolation casing and have placed casing down borehole. However, the casing is resting on silt at the bottom of borehole, ~60'. Attempting to settle casing down to 65' by jetting out silt at bottom of borehole.

1500 – **[Beazer Property]** At 72' on CB-3, top of middle clay starts at 71' at CB-3. Crew will begin to grout up borehole, no further drilling will be attempted today.

1600 – **[Cabot Property]** Casing set at 65', beginning grouting of casing.

## DAILY QUALITY CONTROL REPORT

DATE

12 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 10	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

1630 – [Cabot Property] Thompson Drilling has grouted second isolation casing at Floridan well, crews will begin demobilizing tomorrow.

**QUALITY CONTROL ACTIVITIES:**

- J.M. Waller and Tetra Tech oversight personnel onsite.

**HEALTH AND SAFETY LEVELS AND ACTIVITIES:**

- All activities performed in Level D.

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- None.

**SPECIAL NOTES:**

- Second isolation casing installed and grouted at Cabot Floridan well.
- No clear date of when Cascade Drilling will mobilize to site to complete Floridan well.

**EXPECTATIONS FOR October 13, 2015:**

- Thompson Drilling will continue demobilizing.
- Ardaman drillers will move to CB-5 (14+00).

**PREPARED BY: Joshua Hayes REVIEWED BY: Tim Turner**



# DAILY QUALITY CONTROL REPORT

DATE

13 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 11	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

## DAY-SPECIFIC TASK:

- Completed CB-5 (14+00).
- Thompson Drilling continues to demobilize from site.

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling
- Weston – Mark Taylor
- Thompson Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 83°F.

0900 – [Beazer Property] Ardaman drillers setting up on CB-5 (14+00).

1000 – [Beazer Property] At 20' on CB-5, sandy soil, some odor of creosote, no evidence of DNAPL. At 25', upper clay encountered, solid blue-grey clay, strong odor of creosote, no evidence of DNAPL. At 30' no CB-5, clayey-sand with phosphorite, strong creosote odor, no evidence of DNAPL.

1030 – [Beazer Property] At 40' on CB-5, clayey-sand with phosphorite, creosote odor but no evidence of DNAPL.

1100 – [Beazer Property] At 50' on CB-5, clayey-sand with phosphorite, creosote odor but no evidence of DNAPL.

1130 – [Cabot Property] Thompson Drilling continues to demobilize and weld on temporary cap to Floridan well casings.

1400 – [Beazer Property] Ardaman drillers encountered top of middle Hawthorn clay at 61' at CB-5, crew has finished grouting borehole, no further points will be attempted today.

## QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

## HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

## PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

## DAILY QUALITY CONTROL REPORT

DATE

13 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 11	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

- None.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 14, 2015:**

- Thompson Drilling will continue demobilizing.
- Ardaman drillers will move to CB-7 (22+00).

**PREPARED BY:** Joshua Hayes **REVIEWED BY:** Tim Turner

# DAILY QUALITY CONTROL REPORT

DATE

14 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 12	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

## DAY-SPECIFIC TASK:

- Completed CB-7 (22+00) and started CB-8 (24+00).

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 83°F.

0800 – [Beazer Property] Ardaman drillers setting up on CB-7 (22+00).

0900 – [Beazer Property] At 36' on CB-7, clayey-sand with phosphorite, strong odor of creosote, no DNAPL evidence. At 45' on CB-7, clayey-sand with phosphorite, strong creosote odor, no DNAPL. Clay stringers begin at 49', strong creosote odor, no DNAPL.

1000 – [Beazer Property] At 52' on CB-7, clayey-sand with phosphorite and clay stringers, creosote odor but no evidence of DNAPL. At 58' on CB-7, some reddish clayey-sand (likely iron oxide), no DNAPL, strong creosote odor. At 60' on CB-7, silty clay with clayey-sand and phosphorite lenses. At 62' on CB-7, top of middle Hawthorn clay encountered, solid blue-grey clay, no odor.

1100 – [Beazer Property] Crew grouting CB-7 borehole, next will move to CB-8.

1230 – [Beazer Property] Ardaman drillers have finished grouting at CB-7, setting up on CB-8 (24+00).

1330 – [Beazer Property] Ardaman drillers have begun borings at CB-8:

- At 7' on CB-8, dark sandy soil, no odor or DNAPL present.
- At 20', encountered top of upper Hawthorn clay, bright blue, solid clay, no odor.
- At 25', clayey-sand with phosphorite, no odor, no DNAPL.
- At 35', clayey-sand with phosphorite, creosote odor, no DNAPL.
- At 50', clayey-sand with phosphorite and clay stringers, creosote odor, no DNAPL.

1500 – [Beazer Property] Ardaman drillers will stop drilling at 50' for the day on CB-8. Rig will be left at CB-8 with tooling down borehole. Leaving site

## DAILY QUALITY CONTROL REPORT

DATE

14 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 12	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

**QUALITY CONTROL ACTIVITIES:**

- J.M. Waller and Tetra Tech oversight personnel onsite.

**HEALTH AND SAFETY LEVELS AND ACTIVITIES:**

- All activities performed in Level D.

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- None.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 15, 2015:**

- Ardaman drillers will continue drilling at CB-8 (24+00).

**PREPARED BY:** Joshua Hayes **REVIEWED BY:** Tim Turner

# DAILY QUALITY CONTROL REPORT

DATE

15 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 13	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

## DAY-SPECIFIC TASK:

- Completed CB-8 (24+00) and CB-10 (28+00).

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 83°F.

0900 – [Beazer Property] Ardaman drillers continuing borings at CB-8 (24+00).

0930 – [Beazer Property] Borings continue at CB-8:

- At 56', on CB-8, clayey-sand with phosphorite, slight odor of creosote, no DNAPL.
- At 58', silty clay with sand lenses, slight odor of creosote, no DNAPL.
- At 62', silty clay with sand lenses, slight odor of creosote, no DNAPL.
- At 64', solid blue-grey clay, slight creosote odor, top of middle Hawthorn clay, no DNAPL.

1000 – [Beazer Property] Crew grouting borehole at CB-8, moving to CB-10 (28+00) next.

1130 – [Beazer Property] Crew starting borings at CB-10:

- At 8' on CB-10, sandy soil, no odor, no DNAPL.
- At 15', loose sandy soil, dark in color, no odor, no DNAPL.
- At 30', clayey-sand with phosphorite, strong odor of creosote, no DNAPL.
- At 35', clayey-sand with phosphorite, slight odor of creosote, no DNAPL.
- At 40', clayey-sand with phosphorite, slight odor of creosote, no DNAPL.
- At 50', clayey-sand with phosphorite, slight odor of creosote, no DNAPL.
- At 56', clayey-sand with phosphorite, slight odor of creosote, no DNAPL.
- At 62', clayey-sand transitioning to a silty clay.
- At 64', silty clay from ~62' to 63' transitioning into top of middle Hawthorn clay, blue-grey solid clay.

1500 – [Beazer Property] Ardaman drillers are grouting CB-10 borehole. No further borings today.

## DAILY QUALITY CONTROL REPORT

DATE

15 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 13	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

**QUALITY CONTROL ACTIVITIES:**

- J.M. Waller and Ardaman/Tetra Tech oversight personnel onsite.

**HEALTH AND SAFETY LEVELS AND ACTIVITIES:**

- All activities performed in Level D.

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- None.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 16, 2015:**

- Ardaman drillers will start borings at CB-2 (2+00).

**PREPARED BY:** Joshua Hayes **REVIEWED BY:** Tim Turner

## DAILY QUALITY CONTROL REPORT

DATE

16 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 14	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

**TASK:**

EPA oversight of Cabot-Koppers Cutoff Wall Borings and Floridan Well Installation

**DAY-SPECIFIC TASK:**

- Completed CB-2 (2+00).

**PERSONNEL ON-SITE:**

- J.M. Waller – Joshua Hayes
- Ardaman Drilling

**WORK PERFORMED:**

Site Weather – Partly cloudy, 83°F.

0830 – [Beazer Property] Ardaman drillers setting up on CB-2 (2+00).

0930 – [Beazer Property] Borings ongoing at CB-2:

- At 32' on CB-2, clayey-sand with phosphorite, no odor, no DNAPL.
- At 40', clayey-sand with phosphorite, no odor, no DNAPL.
- At 50', clayey-sand with phosphorite, no odor, no DNAPL.
- At 52', clayey-sand with phosphorite, no odor, no DNAPL.
- At 66', clayey-sand transitioning to a silty clay, no odor.
- At 72', top of middle clay encountered, solid 2' of blue-grey clay, no odor.

1200 – [Beazer Property] Crew grouting borehole at CB-2, no further borings today. Crew leaving site soon.

**QUALITY CONTROL ACTIVITIES:**

- J.M. Waller and Ardaman/Tetra Tech oversight personnel onsite.

**HEALTH AND SAFETY LEVELS AND ACTIVITIES:**

- All activities performed in Level D.

**PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:**

- None.

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 19, 2015:**

- Ardaman drillers will start borings at CB-14 (36+00).

**PREPARED BY:** Joshua Hayes **REVIEWED BY:** Tim Turner

# DAILY QUALITY CONTROL REPORT

DATE

19 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 15	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings

## DAY-SPECIFIC TASK:

- Completed CB-14 (36+00).

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 73°F.

0900 – [Beazer Property] Ardaman drillers have not yet arrived onsite.

1030 – [Beazer Property] Ardaman drillers onsite, setting up on CB-14 (36+00).

1130 – [Beazer Property] Borings begin on CB-14:

- At 6' on CB-14, loose sandy soil, no odor.
- At 15', dark sandy soil, no odor, no DNAPL.
- At 25', clayey-sand with phosphorite, no odor, no DNAPL.
- At 30', clayey-sand with phosphorite, no odor, no DNAPL.
- At 40', clayey-sand with phosphorite, no odor, no DNAPL.
- At 50', clayey-sand with phosphorite, no odor, no DNAPL.
- At 58', clayey-sand transitioning to a silty clay, no odor, no DNAPL.
- At 60', clay or silty clay, no odor, no DNAPL, top of middle Hawthorn clay at 60' at CB-14.

1400 – [Beazer Property] Ardaman drillers grouting borehole at CB-14 (36+00), no further borings to be attempted today.

## QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Ardaman/Tetra Tech oversight personnel onsite.

## HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

## PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None.

## SPECIAL NOTES:

- None.



## DAILY QUALITY CONTROL REPORT

**DATE**

**19 October 2015**

**DAY**

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

**USEPA COR:** Scott Miller

**WEATHER**

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

**PROJECT:** Cabot-Koppers Task Order 35

**TEMPERATURE**

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

**WIND**

Still	Mod.	High	Report No. 15	
-------	------	------	---------------	--

**CONTRACT:** EP-S4-08-03

**HUMIDITY**

Dry	Mod.	Humid
-----	------	-------

**EXPECTATIONS FOR October 20, 2015:**

- Ardaman drillers will continue borings.

**PREPARED BY:** Joshua Hayes **REVIEWED BY:** Tim Turner

## DAILY QUALITY CONTROL REPORT

DATE

20 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 16	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

### TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings

### DAY-SPECIFIC TASK:

- Completed CB-4 (6+00).

### PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling

### WORK PERFORMED:

Site Weather – Partly cloudy, 80°F, no chance of rain.

0830 – [Beazer Property] Ardaman drillers have begun borings at CB-4 (6+00):

- At 9'; sandy soil, no odor, no DNAPL.
- At 15'; sandy soil, no odor, no DNAPL.
- At 20'; sandy soil, no odor, no DNAPL.
- At 25'; silty clay, top of upper Hawthorn clay, no odor, no DNAPL.
- At 35'; clayey-sand with phosphorite, strong creosote odor, no DNAPL.
- At 40'; clayey-sand with phosphorite, slight odor of creosote, no DNAPL.
- At 50'; clayey-sand with phosphorite, no odor, no DNAPL.

1130 – [Beazer Property] Borings continue at CB-4:

- At 68'; clayey-sand with phosphorite, no odor, no DNAPL.
- At 72'; clayey-sand with clay stringers, no odor, no DNAPL.
- At 74'; clayey-sand transitioning to a silty clay, top of middle Hawthorn clay at ~74'.

1200 – [Beazer Property] Crew will begin grouting borehole at CB-4; no further borings will be attempted today.

### QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

### HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

### PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None.

## DAILY QUALITY CONTROL REPORT

**DATE**

**20 October 2015**

**DAY**

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

**USEPA COR:** Scott Miller

**WEATHER**

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

**PROJECT:** Cabot-Koppers Task Order 35

**TEMPERATURE**

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

**WIND**

Still	Mod.	High	Report No. 16	
-------	------	------	---------------	--

**CONTRACT:** EP-S4-08-03

**HUMIDITY**

Dry	Mod.	Humid
-----	------	-------

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 21, 2015:**

- Ardaman drillers will move to CB-20 (48+00).

**PREPARED BY:** Joshua Hayes **REVIEWED BY:** Tim Turner

# DAILY QUALITY CONTROL REPORT

DATE

21 October 2015

DAY

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

USEPA COR: Scott Miller

WEATHER

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

PROJECT: Cabot-Koppers Task Order 35

TEMPERATURE

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

WIND

Still	Mod.	High	Report No. 17	
-------	------	------	---------------	--

CONTRACT: EP-S4-08-03

HUMIDITY

Dry	Mod.	Humid
-----	------	-------

## TASK:

EPA oversight of Cabot-Koppers Cutoff Wall Borings

## DAY-SPECIFIC TASK:

- Completed CB-20 (48+00).

## PERSONNEL ON-SITE:

- J.M. Waller – Joshua Hayes
- Ardaman Drilling

## WORK PERFORMED:

Site Weather – Partly cloudy, 80°F, no chance of rain.

0900 – [Beazer Property] Ardaman drillers have begun borings at CB-20 (48+00):

- At 24'; clayey-sand with phosphorite and limestone nodules, no odor, no DNAPL.
- At 30'; clayey-sand with phosphorite, no odor, no DNAPL.
- At 40'; clayey-sand with phosphorite, no odor, no DNAPL.
- At 50'; clayey-sand with phosphorite, no odor, no DNAPL.

1100 – [Beazer Property] Borings continue at CB-20:

- At 57'; clayey-sand with phosphorite, no odor, no DNAPL.
- At 61'; clayey-sand with clay stringers, no odor, no DNAPL.
- At 66'; clayey-sand with phosphorite, no odor, no DNAPL.
- At 68'; clayey-sand transitioning to a silty clay, no odor, no DNAPL.
- At 70'; solid blue grey clay, top of middle Hawthorn clay, no odor, no DNAPL.

1200 – [Beazer Property] Crew will begin grouting borehole at CB-20; no further borings will be attempted today. Crew will focus on inspecting recovery wells at Beazer property for remainder of day.

## QUALITY CONTROL ACTIVITIES:

- J.M. Waller and Tetra Tech oversight personnel onsite.

## HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in Level D.

## PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None.

## DAILY QUALITY CONTROL REPORT

**DATE**

**21 October 2015**

**DAY**

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

**USEPA COR:** Scott Miller

**WEATHER**

Clear	Partly Cloudy	Overcast	Rain	Fog/Haze
-------	---------------	----------	------	----------

**PROJECT:** Cabot-Koppers Task Order 35

**TEMPERATURE**

to 32	32-50	50-70	70-85	85-up
-------	-------	-------	-------	-------

Cutoff Wall Borings and Well Installation

**WIND**

Still	Mod.	High	Report No. 17	
-------	------	------	---------------	--

**CONTRACT:** EP-S4-08-03

**HUMIDITY**

Dry	Mod.	Humid
-----	------	-------

**SPECIAL NOTES:**

- None.

**EXPECTATIONS FOR October 22, 2015:**

- Ardaman drillers will focus on completing collection of Shelby tubes at CWB-9.

**PREPARED BY:** Joshua Hayes **REVIEWED BY:** Tim Turner