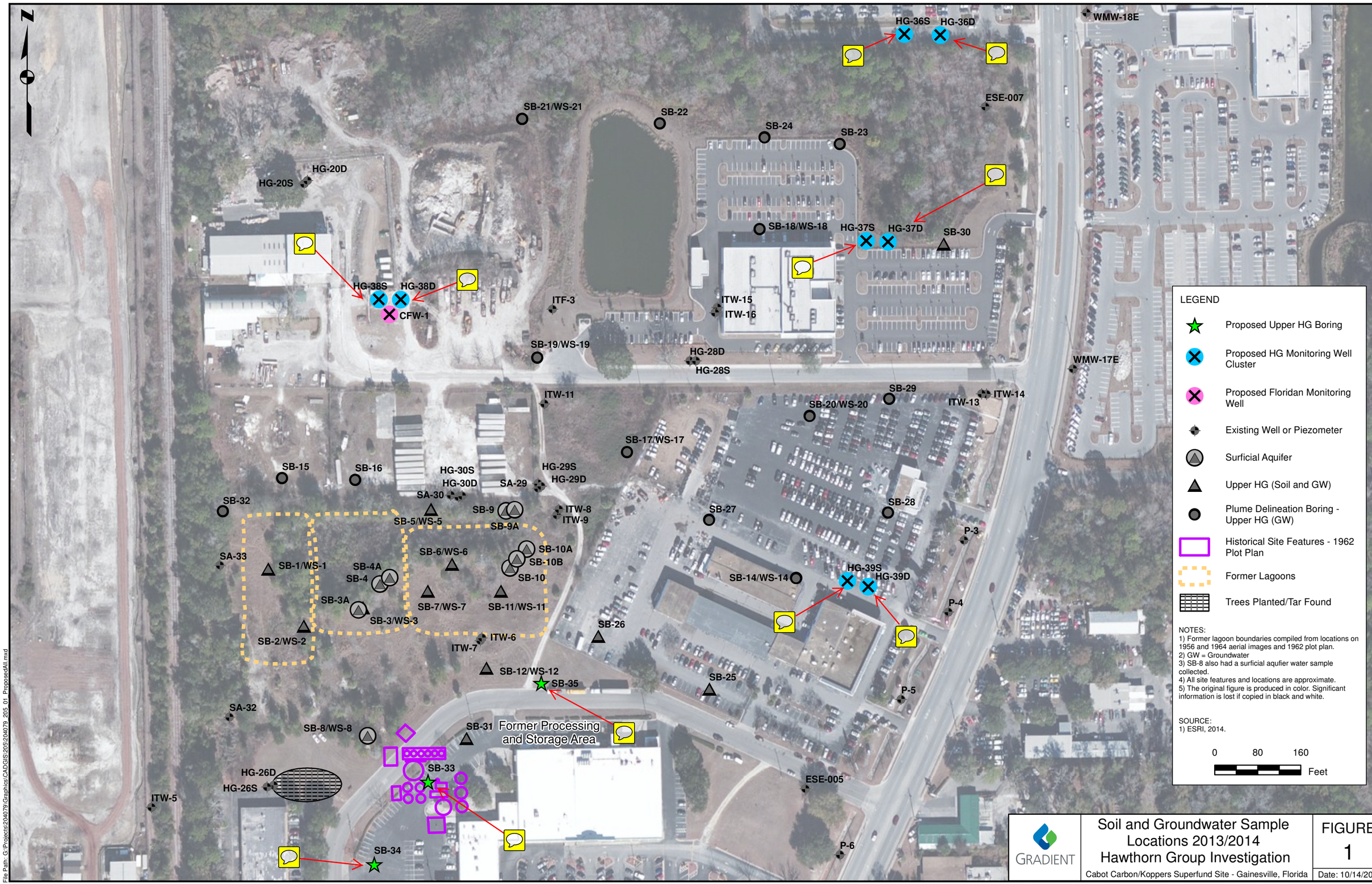


GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

DAILY QUALITY CONTROL REPORT

DATE **4 June 2015**

DAY	S	M	T	W	**TH**	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 27**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:
- Environmental Drilling Services (EDS) crew completed all well pads and begins to demobilize from site.
- Well development completed at HG – 39D.
- Weston personnel onsite; Mark Taylor (Project Manager).

PERSONNEL ON-SITE:
- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Corey

EQUIPMENT ON-SITE:
- 1 DPT rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 90°F, low 70°F.

0830 – Arrived onsite. Well development ongoing at HG – 39D, slight smoky odor in purge water. Drill crew is constructing well pads at HG – 36S/D. Final day onsite for EDS and Weston personnel.
1200 – Well development continues at HG – 39D, well pad construction continues at HG – 36S/D. Drill crew will rake and seed disturbed areas and begin to demobilize equipment.
1500 – Well pad construction complete at HG – 36S/D, crew raking and seeding disturbed areas and demobilizing.
1600 – Well development complete at HG – 39D. Personnel leaving site.

QUALITY CONTROL ACTIVITIES:
Weston project manager (Mark Taylor) and field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:
- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:
- None

SPECIAL NOTES:
- Final day onsite for EDS personnel; Weston personnel will return to site the week of 6/23 for Floridan well installation.

DAILY QUALITY CONTROL REPORT

DATE **4 June 2015**

DAY	S	M	T	W	**TH**	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 27**	
HUMIDITY	Dry	Mod.	**Humid**		

EXPECTATIONS FOR June 23, 2015:

- Weston and drill crew will re-mobilize to site to begin drilling Floridan well.

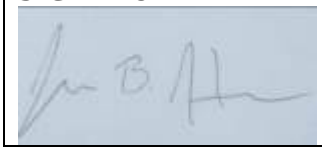
PREPARED BY : Joshua Hayes **REVIEWED BY :** Tim Turner

J.M. Waller Associates, Inc.
Remedial Action Contract II Lite, Region IV, Photo Log

Contract:	EP-S4-08-03	**Site Name:**	Cabot Hawthorn Investigation
Task No.:	035	**Date:**	May 28 – June 4, 2015
RPM:	Scott Miller	**Project Mgt.:**	Tim Turner

PHOTO LOG

ACKNOWLEDGEMENTS

SIGNATURE  **Date:05/05/15**	**PM SIGNATURE** **Date:**

OFFICIAL PHOTOGRAPH NO. 57
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 57	**Time:**	0918
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 5’ – 10’, sandy soil, strong turpentine-like odor. No NAPL free product or staining.		

OFFICIAL PHOTOGRAPH NO. 58
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 58	**Time:**	0925
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 10’ – 15’, sandy soil, smoky odor. No NAPL free product or staining.		

OFFICIAL PHOTOGRAPH NO. 59
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 59	**Time:**	0941
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 15’ – 20’, sandy soil, turpentine-like odor. No NAPL free product or staining.		

OFFICIAL PHOTOGRAPH NO. 60
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 60	**Time:**	1020
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 20' – 25', sandy soil to 24', clay layer begins at 24', strong smoky/turpentine-like odor. No NAPL free product or staining.		

OFFICIAL PHOTOGRAPH NO. 61
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 61	**Time:**	1042
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 25’ – 30’, sandy soil from 25’ – 27’, clay from 27’ – 30’, strong naphthalene-like odor in sandy soil and clay.		

OFFICIAL PHOTOGRAPH NO. 62
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 62	**Time:**	1204
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 30’ – 35’, clay ends at 30’, clayey sand w/ phosphorite from 31’ – 35’, naphthalene-like odor.		

OFFICIAL PHOTOGRAPH NO. 63
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 63	**Time:**	1231
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 35’ – 40’, clayey sand w/ phosphorite, naphthalene-like odor.		

OFFICIAL PHOTOGRAPH NO. 64
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 64	**Time:**	1248
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 40’ – 45’, clayey sand w/ phosphorite, naphthalene-like odor.		

OFFICIAL PHOTOGRAPH NO. 65
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 65	**Time:**	1307
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 45’ – 50’, clayey sand w/ phosphorite, less naphthalene-like odor.		

OFFICIAL PHOTOGRAPH NO. 66
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 66	**Time:**	1325
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 50’ – 55’, clayey sand w/ phosphorite (more clay), no odor.		

OFFICIAL PHOTOGRAPH NO. 67
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 67	**Time:**	1409
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 55’ – 60’, clayey sand w/ phosphorite, no odor.		

OFFICIAL PHOTOGRAPH NO. 68
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	June 1, 2015
Photo Number:	Photo 68	**Time:**	1430
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of SB – 33 soil boring 60’ – 65’, clayey sand w/ phosphorite down to 64’, dense clay layer begins at 64’, no odor.		

From:	John Herbert
To:	Richard H. Hutton; Stanley Feenstra; Richard Jackson
Cc:	John Mousa
Subject:	Cabot Well Abandonment Plans
Date:	Friday, June 12, 2015 2:32:36 PM

Gentlemen,
Manu called me yesterday to discuss the evolution of Cabot's well abandonment plans for HG-28D.

To make a long story short- Cabot's original plan was to drill out the cement between the 10 inch and the 6 inch casing continuing to the bottom of the 6 inch casing (seated into the top of the MHG clay) and to extract the 6 inch casing. The hole would then be plugged assuring a good seal at the top of, and into, the MHG clay.

The fact that the outer casing is actually smaller than 10 inches has resulted in:

- a possible explanation for leakage at this well (thinner cement-filled annulus outside the 6 inch casing than planned or reported).
- the inability to drill out the cement outside the 6 inch casing as planned by Cabot.

Manu reported to me that Beazer, Cabot, and EPA met this last Tuesday afternoon to discuss the well abandonment issue. He said that Beazer suggested several abandonment options including perforating the casing and squeezing cement. Cabot was willing to abandon the well in the manner they proposed but they are not willing to do so using the alternate methods that have been proposed.

Given that Cabot did not install the well (Beazer installed it), Cabot intends to inform EPA that they decline to abandon the well and that Beazer should have that responsibility.

I reiterated our belief that, until a plan for abandonment had been proposed and approved by EPA and stakeholders, that the well should be retained as a functioning monitoring well. We do not want to partially abandon the well (by filling the 2 inch casing and screen with cement for example) because that will not solve the hypothesized leakage issue and will simply eliminate our ability to observe groundwater quality. Manu agreed.

We should see something from Cabot on this issue shortly.

John Herbert

Update
Supplemental Hawthorn Group Characterization
Week of 6-5-2015

Work Completed This Week

- Collected groundwater samples from SB-33
- Collected groundwater samples from SB-34
- Collected soil samples from SB-33
- Completed concrete well pads for HG-39S, HG-39D, HG-36S, and HG-36D
- Demobilized drilling equipment and materials
- Abandoned borings SB-33 and SB34
- Completed data validation for HG-38S & HG-38D groundwater analytical data
- Restored drilling sites
- Continued development of HG-39D

Work Planned For Next Week

- Continue development of HG-39D
- Maintain staging area
- Kick-off meeting for 5 year review
- Begin preparations for installation of CFW-1

Sample Intervals This Week

- Groundwater borings 33 & 34: (23-25, 37-39, 47-49, 57-59, ft. bgs.)
- Soil Boring 33: (5-10, 38-40, 52-54, 58-60, ft. bgs.)

Key Observations During Field Activities

- No free product or NAPL observed in surficial aquifer or Upper Hawthorn formation at SB-33 or SB34.

Samples Collected This Week

- Collected groundwater samples for VOC and SVOC analyses from SB-33 and SB34.
- Collected soil samples for VOC and SVOC analyses from SB33
- Collected quality control samples (duplicate, equipment blank, and field blank)

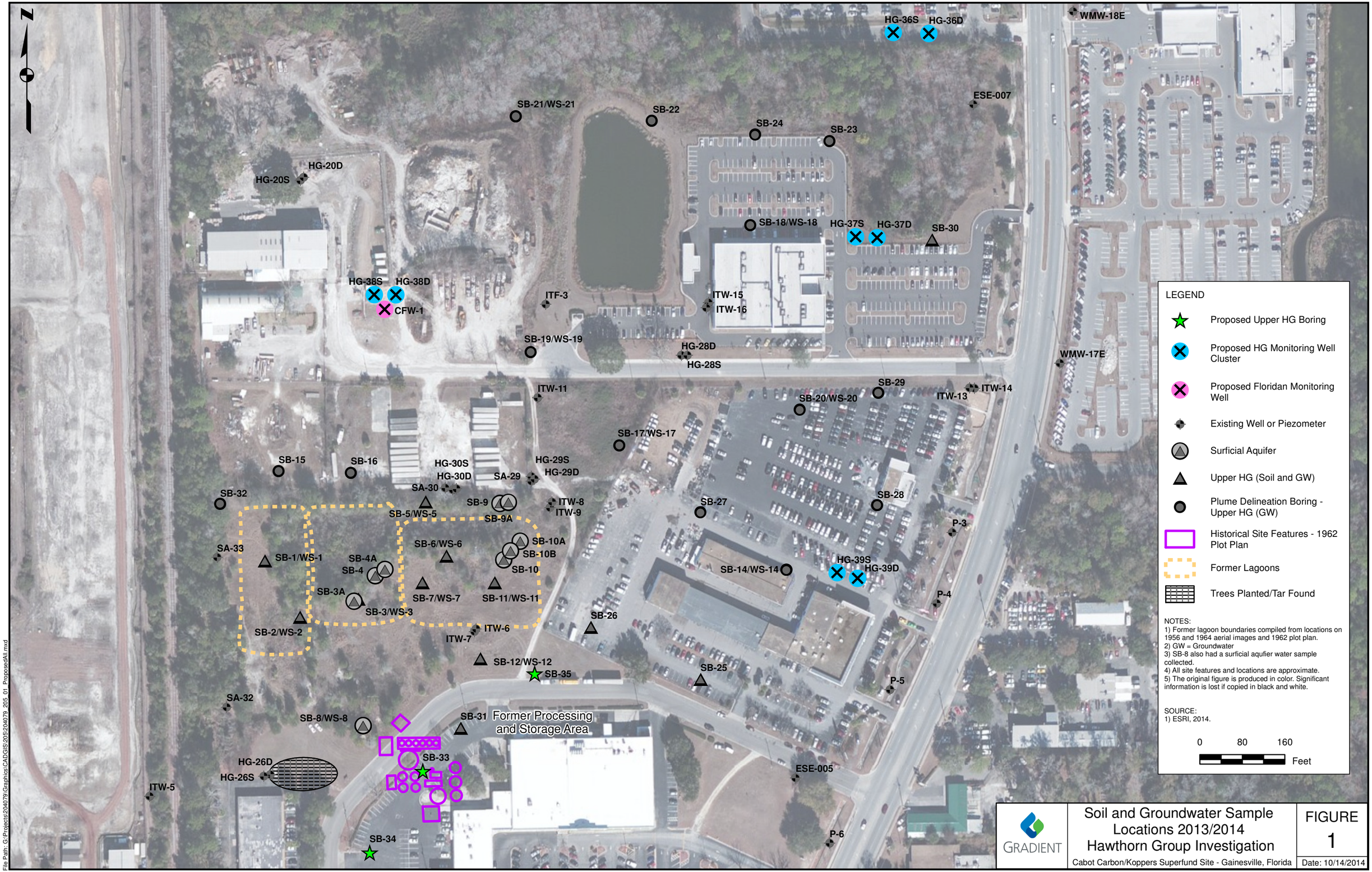
Issues This Week

Continued evaluation of well abandonment alternatives for HG-29D

Update
Supplemental Hawthorn Group Characterization
Week of 6-5-2015

Stakeholder Visitors for The Week

- John Herbert (Daily)
- Josh Hayes (Daily)



GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

DAILY QUALITY CONTROL REPORT

DATE **2 June 2015**

DAY

S	M	**T**	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 25**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:
- Environmental Drilling Services (EDS) crew completed soil borings at SB – 33.
- Weston personnel onsite; Mark Taylor (Project Manager/Field Geologist) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:
- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay
  - Corey

EQUIPMENT ON-SITE:
- 1 sonic rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 93°F, low 70°F.

0830 – Arrived onsite. Drill crew preparing to begin soil borings and groundwater sampling at SB – 34.
1000 – Soil borings advanced down to 15', cores have far less odor than either SB – 33 or SB – 35. Groundwater samples being collected at 23' – 25' interval, strong bio/naphthalene-like odor in purge water.
1200 – Soil boring collected at 25' – 30':
- Dense blue clay with several sand lenses, bio/naphthalene-like odor.

1300 – Drill crew has collected groundwater samples at 37' – 39' and at 47' – 49'. A final groundwater sample will be collected at 57' – 59'.
1500 – Groundwater sample collected at 57' -59', no obvious odor, however, FID = 115 ppm.
1700 – Grouting completed at SB – 34.

QUALITY CONTROL ACTIVITIES:
Weston field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:
- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:
- None.

DAILY QUALITY CONTROL REPORT

DATE **2 June 2015**

DAY	S	M	**T**	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 25**	
HUMIDITY	Dry	Mod.	**Humid**		

SPECIAL NOTES:

- None.

EXPECTATIONS FOR June 3, 2015:

- EDS crew will complete final borings and groundwater sampling at SB – 33.

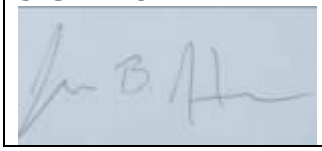
PREPARED BY : Joshua Hayes **REVIEWED BY :** Tim Turner

J.M. Waller Associates, Inc.
Remedial Action Contract II Lite, Region IV, Photo Log

Contract:	EP-S4-08-03	**Site Name:**	Cabot Hawthorn Investigation
Task No.:	035	**Date:**	May 23 – May 28, 2015
RPM:	Scott Miller	**Project Mgt.:**	Tim Turner

PHOTO LOG

ACKNOWLEDGEMENTS

SIGNATURE  **Date:06/02/15**	**PM SIGNATURE** **Date:**

OFFICIAL PHOTOGRAPH NO. 45
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 26, 2015
Photo Number:	Photo 45	**Time:**	1120
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Borings continue at HG – 39D (70’ – 75’), clay from 70’ – 74’, gravel 74’ – 75’, no odor.		

OFFICIAL PHOTOGRAPH NO. 46
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 26, 2015
Photo Number:	Photo 46	**Time:**	1305
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Borings continue at HG – 39D (75’ – 80’), first 3’ lost, clayey sand w/ phosphorite, no odor.		

OFFICIAL PHOTOGRAPH NO. 47
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 26, 2015
Photo Number:	Photo 47	**Time:**	1316
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Borings continue at HG – 39D (80’ – 85’), clayey sand w/ phosphorite, sand lenses with smoky odor, FID = 115 ppm.		

OFFICIAL PHOTOGRAPH NO. 48
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 26, 2015
Photo Number:	Photo 48	**Time:**	1449
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Borings continue at HG – 39D (85’ – 90’), most of sample lost due to sample falling out of barrel, gravel and clayey sand, no detectable odor, but FID = 204 ppm.		

OFFICIAL PHOTOGRAPH NO. 49
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 26, 2015
Photo Number:	Photo 49	**Time:**	1454
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Borings continue at HG – 39D (90’ – 95’), most of sample lost due to sample falling out of barrel, gravel and clayey sand, no detectable odor.		

OFFICIAL PHOTOGRAPH NO. 50
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 28, 2015
Photo Number:	Photo 50	**Time:**	1304
Orientation:	Looking southwest.		
Photographer:	Joshua Hayes		
Subject:	Boring location for SB – 35, soil from pilot hole had very strong turpentine-like odor.		

OFFICIAL PHOTOGRAPH NO. 51
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 28, 2015
Photo Number:	Photo 51	**Time:**	1305
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Tar patches at ground surface approximately 20’ west of SB – 35 location, very strong smoky odor.		

OFFICIAL PHOTOGRAPH NO. 52
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 28, 2015
Photo Number:	Photo 52	**Time:**	1328
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Soil boring at SB – 35 (5’ – 10’), last 3’ of sample lost, very strong turpentine-like odor, PID = 981 ppm, FID = 925 ppm.		

OFFICIAL PHOTOGRAPH NO. 53
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 28, 2015
Photo Number:	Photo 53	**Time:**	1339
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Soil boring at SB – 35 (10’ – 15’), very strong turpentine-like odor, FID = 525 ppm at 10’; however, less odor at 15’, FID = 15 ppm at 15’. Soil borings will be lost from 15’ to 25’ due to groundwater sampler disturbing soil.		

OFFICIAL PHOTOGRAPH NO. 54
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 28, 2015
Photo Number:	Photo 54	**Time:**	1506
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Well pad removed from HG – 29D, Weston personnel illustrate that the outer most casing is less than the normally specified 10”. Due to this smaller outer casing the driller will not be able to fit drill bit between outer most casing and intermediate casing (6” dia.) for overdrilling since only ~1” of tolerance exist between the two casings.		

OFFICIAL PHOTOGRAPH NO. 55
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 28, 2015
Photo Number:	Photo 55	**Time:**	1507
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Well pad removed from HG – 29D, Weston personnel illustrate that the intermediate casing is the proper dimensions (I.D. 6”).		

OFFICIAL PHOTOGRAPH NO. 56
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 28, 2015
Photo Number:	Photo 56	**Time:**	1605
Orientation:	Looking down.		
Photographer:	Joshua Hayes		
Subject:	Soil boring at SB – 35 (25’ – 29’), sand down to 27’ then dense clay down to 29’ (Upper Hawthorn), turpentine-like odor in sand, smoky/naphthalene-like odor in clay layer. GW samples collected at 23’ – 25’, 37’ – 39’, 47’ – 49’, and 57’ – 59’.		

DAILY QUALITY CONTROL REPORT

DATE **28 May 2015**

DAY	S	M	T	W	**TH**	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 22**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew completed final grouting at HG – 39D (98') and began soil borings and groundwater sampling at SB – 35.
- Weston personnel onsite; Mark Taylor (Project Manager/Field Geologist) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay
  - Corey

EQUIPMENT ON-SITE:

- 1 sonic rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 93°F, low 70°F.

0800 – Arrived onsite. Drill crew completing final grouting at HG – 39D.
0900 – Well screen install ongoing. Well development to begin at HG – 39S soon.
1100 – Grouting completed at HG – 39D, crew is focusing on decontaminating equipment and moving it to the former process area to begin borings at SB – 35.
1400 – Crew still decontaminating and moving equipment, visible tar patches at ground surface 20' west of SB – 35 location, see photo log.
1430 – Borings begin at SB – 35:

- 5' – 10':
  - Very potent turpentine-like odor in soil removed for pilot hole (0' – 4') as well as 5' – 10' section, last 3' of 5' – 10' section lost, loose sandy soil, brown/rust color to soil but no staining or NAPL present, FID = 925 ppm, PID = 981 ppm.
- 10' – 15':
  - Sandy soil, strong turpentine-like odor, FID = 525 ppm at 10' but drops to 15 ppm at 15' (saturated zone).

1530 – Soil boring from 15' – 25' lost due to use of groundwater sampling probe. Groundwater sample collected from 23' – 25', smoky/sulfur-like odor in purge water.

DAILY QUALITY CONTROL REPORT

DATE **28 May 2015**

DAY	S	M	T	W	**TH**	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 22**	
HUMIDITY	Dry	Mod.	**Humid**		

1600 – Soil borings continue at SB – 35:

- 25' – 29':
  - Sandy soil down to 27' then dense clay begins (upper Hawthorn Group), turpentine-like odor in sandy soil (25' – 27'), smoky/sulfur odor in clay (27' -29').

1700 – Weston personnel removed the well pad from HG-29 and discovered that the distance between the outer-most casing and the intermediate casing was too small (~1") to allow over drilling between the two casings. It seems that when the well was installed the drillers used a smaller outer casing than normally specified. Mark Taylor said he will recommend removing the inner-most (2") casing then grouting up from the bottom of the well to the top of the intermediate 6" casing (ground surface). He feels that this will properly seal the well and complete the abandonment and communicated his recommendations to Cabot today. Crew will continue borings at SB – 35 tomorrow morning.

QUALITY CONTROL ACTIVITIES:

Weston field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- Weston personnel removed the well pad from HG-29 and discovered that the distance between the outer-most casing and the intermediate casing was too small (~1") to allow over drilling between the two casings. It seems that when the well was installed the drillers used a smaller outer casing than normally specified. Mark Taylor said he will recommend removing the inner-most (2") casing then grouting up from the bottom of the well to the top of the intermediate 6" casing (ground surface). He feels that this will properly seal the well and complete the abandonment and communicated his recommendations to Cabot today.

SPECIAL NOTES:

- None.

EXPECTATIONS FOR May 29, 2015:

- EDS crew will complete borings SB – 35.

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

HG-36S
HG-36D
WMW-18E
SB-21/WS-21
SB-22
HG-20D
HG-20S
HG-38S
HG-38D
CFW-1
SB-18/WS-18
HG-37S
HG-37D
SB-30
ITW-15
ITW-16
SB-19/WS-19
HG-28D
HG-28S
WMW-17E
ITW-11
SB-29
ITW-14
ITW-13
SB-20/WS-20
SB-17/WS-17
SB-15
SB-16
HG-30S
HG-30D
SA-29
HG-29S
HG-29D
SA-30
SB-32
SB-9
ITW-8
ITW-9
SB-5/WS-5
SB-9A
SB-27
SB-28
P-3
SA-33
SB-1/WS-1
SB-6/WS-6
SB-10A
SB-10B
SB-4A
SB-4
SB-10
SB-14/WS-14
HG-39S
HG-39D
SB-3A
SB-7/WS-7
SB-11/WS-11
SB-3/WS-3
SB-26
SB-2/WS-2
ITW-6
ITW-7
SB-12/WS-12
SB-35
SA-32
SB-8/WS-8
SB-31
Former Processing and Storage Area
SB-33
HG-26D
HG-26S
ESE-005
ITW-5
SB-34
P-6

HG-38S
Well Development completed
Total Depth = 49'
Distinct naphthalene odor in purge water

HG-38D:
Total Depth = 110'
Well development completed
No distinct odors in purge water

HG-36S:
Well screen installed at 54'
Some smoky odors above 25', no odor below upper clay (~25'). Well development complete.

HG-36D:
Well screen installed at 103'
Some smoky odors above 25', no odors below upper clay (~25'). Well development complete.

HG-37D:
Second isolation casing
Total depth = 108'
Smokey odor at 35' diminishing to no odor at 75'.
Well development complete, no odor in purge water.

HG-37S:
Total Depth = 33'
Well development complete
Some smoky odors in purge water.

HG-39S:
Well installed at 60'
Some smoky odors.
Well development ongoing.

HG-39D:
Well complete installed at 98'
Some smoky odors down to 83'.
Well development to begin next week.

SB-35:
Soil borings down to 25':
Soil color different from well locations but no NAPL present. Very STRONG turpentine-like odor.
GW samples:
23'-25': smoky/sulfur odor
37'-39': smoky/napthalene
47'-49': smoky/napthalene
57'-59': smoky/napthalene

LEGEND

- Proposed Upper HG Boring
- Proposed HG Monitoring Well Cluster
- Proposed Floridan Monitoring Well
- Existing Well or Piezometer
- Surficial Aquifer
- Upper HG (Soil and GW)
- Plume Delineation Boring - Upper HG (GW)
- Historical Site Features - 1962 Plot Plan
- Former Lagoons
- Trees Planted/Tar Found

NOTES:
1) Former lagoon boundaries compiled from locations on 1956 and 1964 aerial images and 1962 plot plan.
2) GW = Groundwater
3) SB-8 also had a surficial aquifer water sample collected.
4) All site features and locations are approximate.
5) The original figure is produced in color. Significant information is lost if copied in black and white.

SOURCE:
1) ESRI, 2014.

0 80 160
Feet

GRADIENT

Soil and Groundwater Sample Locations 2013/2014
Hawthorn Group Investigation
Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1
Date: 10/14/2014

File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

From: John Herbert
To: Richard H. Hutton; Stanley Feenstra; Richard Jackson; John Mousa
Subject: Cabot Field Work
Date: Friday, May 29, 2015 4:05:58 PM

I visited the Cabot site this afternoon. I have two issues to report on:
1) Regarding the proposed abandonment of well HG-29D, the drillers removed the well pad and discovered that the distance between the outer-most casing (indicated as being 10 inch ID on the well construction logs) and the intermediate casing (reportedly 6 inch ID on boring logs) is insufficient to allow over drilling the 6 inch casing. The outer casing is actually 8 5/8" OD. There is about 1" between the inside of the outer casing and the intermediate casing.

I just spoke to Mark Taylor. He understands that the inch intermediate casing extends approximately 5 ft into the MHG clay. Mark recommends using as large a bit as is practicable inside the intermediate 6" casing to over drill the 2 inch PVC monitor well casing and, after extracting the 2 inch casing, grouting the hole. That, in Mark's view, would provide a new grout seal through the bottom of the MHG clay and, while not an ideal solution, is the best they can do.

Mark has discussed this issue with Gradient and Cabot and is sure EPA is being involved in the discussion. I suggested to Mark that Weston convene a conference call so EPA, Cabot and their contractors, and other parties could come to agreement on the solution. Overdrilling the entire well would be impractical and could easily do more harm than good.

2) Cabot's drillers have completed drilling and installation of all monitoring wells. They have started drilling soil borings at the Cabot former "process area". Soil in the surgical aquifer exhibited strong turpentine-like odor (per ed and Josh Hays). Soil in the UHG and groundwater throughout the well exhibited the "smoky" odor that is typical of HG sediments (per Ed Mackey) ; however, the sediment in the drums had not changed color with I looked (several hours after placement in the drums) and the groundwater did not change color - according to Ed Mackey (Weston). Groundwater samples were collected from the following intervals: 23'-27', 37'-39', 47'-49', and 57'-59'.

3) Mark Taylor stated that groundwater data for HG-37S and HG-37D has been delivered to the Cabot team and that Gradient will be distributing it next week. Maximum COC concentrations were in the low hundreds of ppb. Mark understands that these data are compatible with installing a Floridan well at the originally proposed location (HG-38 area); however, Mark is not making that decision.

DAILY QUALITY CONTROL REPORT

DATE **27 May 2015**

DAY

S	M	T	**W**	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 21**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew completed install of well screen at HG – 39D (98') and began well development at HG – 39S.
- Weston personnel onsite; Mark Taylor (Project Manager/Field Geologist) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay
  - Corey

EQUIPMENT ON-SITE:

- 1 sonic rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 93°F, low 70°F.

0800 – Arrived onsite. Drill crew completed borehole at HG – 39D to 98'. Well screen install will begin soon.
0900 – Well screen install ongoing. Well development to begin at HG – 39S soon.
1100 – Well screen and bentonite seal installed at HG – 39D. Crew has begun to decontaminate and move equipment.
1300 – Crew still decontaminating and moving equipment, will begin well pad install at HG – 37 cluster soon.
1430 – Well development begins at HG – 39S, slight smoky odor in purge water.
1530 – Well pad construction ongoing at HG – 37 cluster.
1700 – Well pad construction complete at HG – 37 clusters. Crew will grout HG – 39D in the morning then move to former process area to begin borings.

QUALITY CONTROL ACTIVITIES:
Weston field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

DAILY QUALITY CONTROL REPORT

DATE **27 May 2015**

DAY	S	M	T	**W**	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 21**	
HUMIDITY	Dry	Mod.	**Humid**		

- None.

SPECIAL NOTES:

- None.

EXPECTATIONS FOR May 28, 2015:

- EDS crew will begin borings in former process area.
- Well development to continue at HG – 39 cluster.

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

DAILY QUALITY CONTROL REPORT

DATE **26 May 2015**

DAY

S	M	**T**	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 20**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew continued install of borehole at HG – 39D and completed grouting at HG – 39S.
- Weston personnel onsite; Mark Taylor (Project Manager/Field Geologist) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay
  - Corey

EQUIPMENT ON-SITE:

- 1 sonic rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 93°F, low 70°F.

0830 – Arrived onsite. Drill crew completing final grout seal at HG – 39S. Borehole advancement to continue at HG – 39D after grouting completed at HG – 39S.
0930 – Grouting complete at HG – 39S.
1030 – Drilling begins at HG – 39D:

- 70' – 75':
  - Middle clay ends at 74', gravel w/ clayey sand from 74' – 75', no odor.

1215 – Drillers break for lunch.
1315 – Drilling continues at HG – 39D:

- 75' – 80':
  - First 3' of sample lost due to loose sand and gravel becoming slush from drilling water, 78' – 80' clayey sand w/ phosphorite, no odor.
- 80' – 85':
  - Clayey sand with several sand lenses and large rocks, phosphorite present as well, some slight smoky odor in sand lenses (FID = 115 ppm), no odor elsewhere.
- 85' – 90':
  - Most of sample lost, sample fell out of core upon retrieval, large rocks and clayey sand, no

DAILY QUALITY CONTROL REPORT

DATE **26 May 2015**

DAY	S	M	**T**	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 20**	
HUMIDITY	Dry	Mod.	**Humid**		

detectable odor; however, FID recorded 204 ppm.

- 90' – 95':
  - First 3' of sample lost, more clayey sand and limestone fragments, no odor (FID = 77 ppm).
- 95' – 100':
  - Sample will remain down borehole until tomorrow morning due to inclement weather approaching rapidly.

1700 – Crew leaving site.

QUALITY CONTROL ACTIVITIES:

Weston field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None.

SPECIAL NOTES:

- None.

EXPECTATIONS FOR May 27, 2015:

- EDS crew will complete constructing well at HG – 39D.
- Time permitting boring in process area to begin.

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

DAILY QUALITY CONTROL REPORT

DATE **22 May 2015**

DAY	S	M	T	W	TH	**F**	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 19**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew completed install of well screen at HG – 39S (60') and install of second isolation casing at HG – 39D (63').
- Well development continues at HG – 36S.
- Weston personnel onsite; Mark Taylor (Project Manager/Field Geologist) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay
  - Corey

EQUIPMENT ON-SITE:

- 1 sonic rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 93°F, low 70°F.

0800 – Arrived onsite. Drill crew installing second isolation casing at HG – 39D (63'). Well development continues at HG – 36S.
1100 – Isolation casing installation continues at HG – 39D, well development continues at HG – 36S.
1300 – Isolation casing installation complete at HG – 39D, well development continues at HG – 36S. Drilling crew to complete borehole and well install at HG – 39S after grouting complete at HG – 39D.
1400 – Grouting complete at HG – 39D.
1430 – Drilling ongoing at HG – 39S.
1500 – Borehole completed at HG – 39S (60'), well screen install ongoing.
1600 – Well screen install complete, work shutting down for remainder of day.

QUALITY CONTROL ACTIVITIES:
Weston field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

DAILY QUALITY CONTROL REPORT

DATE **22 May 2015**

DAY	S	M	T	W	TH	**F**	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 19**	
HUMIDITY	Dry	Mod.	**Humid**		

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:
- None.

SPECIAL NOTES:
- None.

EXPECTATIONS FOR May 26, 2015:
- EDS crew will complete borehole at HG – 39D.

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

HG-36S
HG-36D
WMW-18E
SB-21/WS-21
SB-22
HG-20D
HG-20S
SB-18/WS-18
HG-37S
HG-37D
SB-30
HG-38S
HG-38D
CFW-1
ITW-15
ITW-16
SB-19/WS-19
HG-28D
HG-28S
WMW-17E
ITW-11
SB-29
ITW-14
ITW-13
SB-20/WS-20
SB-17/WS-17
SB-15
SB-16
HG-30S
HG-30D
SA-29
HG-29S
HG-29D
SA-30
SB-32
SB-9
ITW-8
ITW-9
SB-5/WS-5
SB-9A
SB-27
SB-28
P-3
SA-33
SB-1/WS-1
SB-4A
SB-4
SB-6/WS-6
SB-10A
SB-10B
SB-10
SB-14/WS-14
HG-39S
HG-39D
SB-3A
SB-7/WS-7
SB-11/WS-11
SB-3/WS-3
SB-2/WS-2
SB-26
ITW-6
ITW-7
SB-12/WS-12
SB-35
SB-25
P-5
SA-32
SB-8/WS-8
SB-31
Former Processing and Storage Area
SB-33
HG-26D
HG-26S
ESE-005
ITW-5
SB-34
P-6

HG-36D:
Well screen installed at 103'
Some smoky odors above 25', no odors below upper clay (~25'). Well development to begin next week.

HG-36S:
Well screen installed at 54'
Some smoky odors above 25', no odor below upper clay (~25'). Well development ongoing

HG-37D:
Second isolation casing
Total depth = 108'
Smokey odor at 35' diminishing to no odor at 75'.
Well development complete, no odor in purge water.

HG-38S
Well Development completed
Total Depth = 49'
Distinct naphthalene odor in purge water

HG-38D:
Total Depth = 110'
Well development completed
No distinct odors in purge water

HG-37S:
Total Depth = 33'
Well development complete
Some smoky odors in purge water.

HG-39S:
First isolation casing installed at 30'
Some smoky odors

HG-39D:
Second isolation casing installed at 63'
Some smoky odors down to 50'.

LEGEND

- Proposed Upper HG Boring
- Proposed HG Monitoring Well Cluster
- Proposed Floridan Monitoring Well
- Existing Well or Piezometer
- Surficial Aquifer
- Upper HG (Soil and GW)
- Plume Delineation Boring - Upper HG (GW)
- Historical Site Features - 1962 Plot Plan
- Former Lagoons
- Trees Planted/Tar Found

NOTES:
1) Former lagoon boundaries compiled from locations on 1956 and 1964 aerial images and 1962 plot plan.
2) GW = Groundwater
3) SB-8 also had a surficial aquifer water sample collected.
4) All site features and locations are approximate.
5) The original figure is produced in color. Significant information is lost if copied in black and white.

SOURCE:
1) ESRI, 2014.

0 80 160
Feet

GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

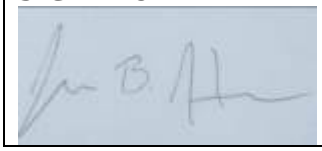
File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

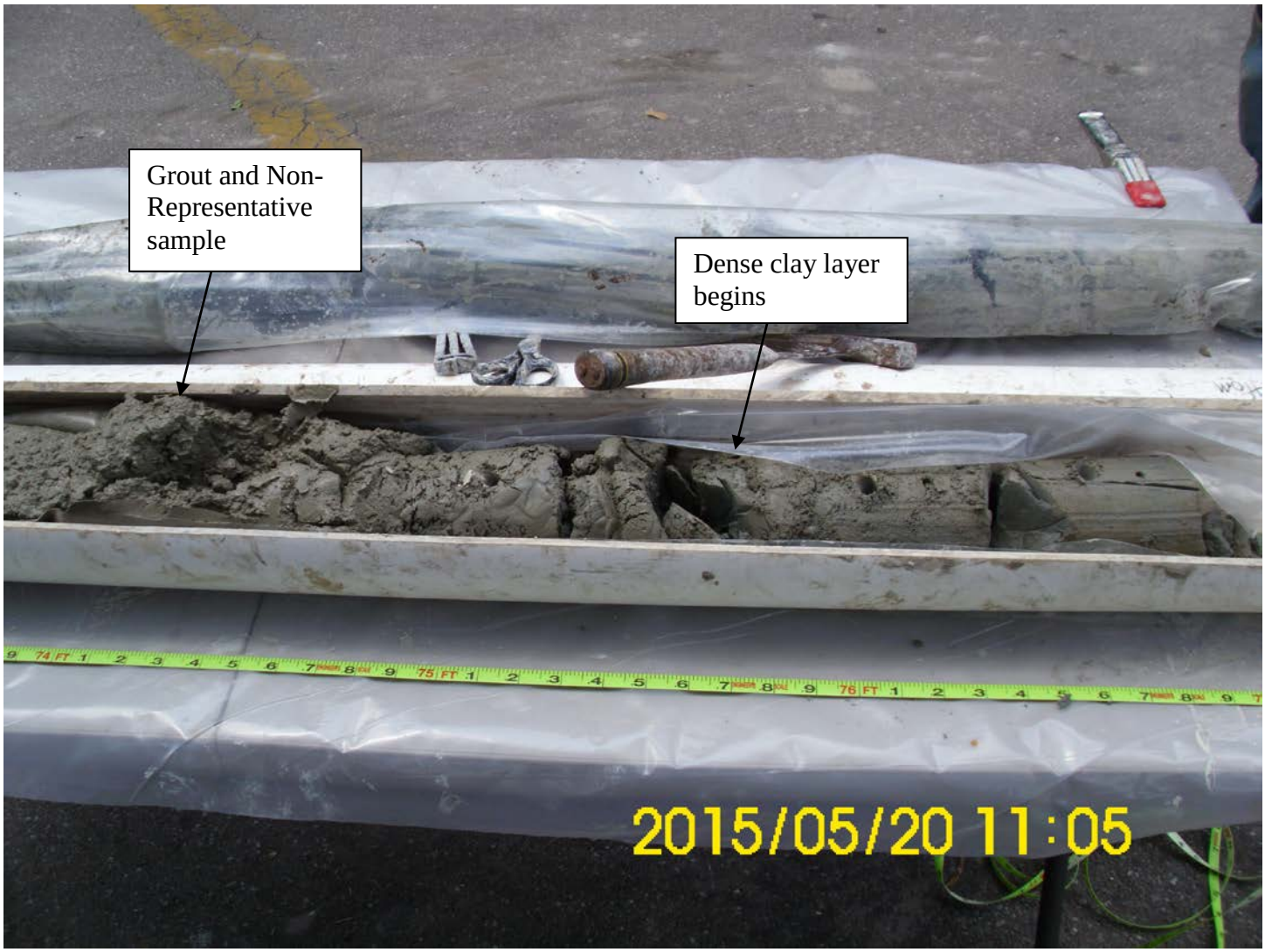
J.M. Waller Associates, Inc.
Remedial Action Contract II Lite, Region IV, Photo Log

Contract:	EP-S4-08-03	**Site Name:**	Cabot Hawthorn Investigation
Task No.:	035	**Date:**	May 20 – May 22, 2015
RPM:	Scott Miller	**Project Mgt.:**	Tim Turner

PHOTO LOG

ACKNOWLEDGEMENTS

SIGNATURE  **Date:05/22/15**	**PM SIGNATURE** **Date:**



OFFICIAL PHOTOGRAPH NO. 32
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 20, 2015
Photo Number:	Photo 32	**Time:**	1105
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 75’ – 80’, first 3’ grout and non-representative soil sample, final 2’ dense clay, no odor, FID = 0, PID = 0.5 ppm.		

OFFICIAL PHOTOGRAPH NO. 33
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 20, 2015
Photo Number:	Photo 33	**Time:**	1110
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 80’ – 85’, dense blue clay w/ marine fossils (last 1’), no odor.		

OFFICIAL PHOTOGRAPH NO. 34
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 20, 2015
Photo Number:	Photo 34	**Time:**	1255
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 85' – 90', dense blue clay w/ limestone nodules, no odor.		

OFFICIAL PHOTOGRAPH NO. 35
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 20, 2015
Photo Number:	Photo 35	**Time:**	1308
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 90' – 95', dense blue clay w/ limestone nodules, no odor. Note that the measuring tape had not been adjusted to proper depth when photo was taken.		

OFFICIAL PHOTOGRAPH NO. 36
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 20, 2015
Photo Number:	Photo 36	**Time:**	1405
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 95’ – 100’, last 3’ of sample lost, clayey sand, no odor.		

OFFICIAL PHOTOGRAPH NO. 37
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 20, 2015
Photo Number:	Photo 37	**Time:**	1414
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 100' – 105', sandy or clayey sand down to 103' then tight, dry, blue clay, no odor. Total well depth will be set at 103' at HG – 36D.		

OFFICIAL PHOTOGRAPH NO. 38
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 21, 2015
Photo Number:	Photo 38	**Time:**	1434
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 39D well boring 35' – 40', clay layer ends at 37', clayey sand down to 40', smoky odor.		

OFFICIAL PHOTOGRAPH NO. 39
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 21, 2015
Photo Number:	Photo 39	**Time:**	1450
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 39D well boring 40’ – 45’, clayey sand w/ phosphorite nodules, fossilized bone at 42’, smoky odor.		

OFFICIAL PHOTOGRAPH NO. 40
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 21, 2015
Photo Number:	Photo 40	**Time:**	1458
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 39D well boring 45’ – 50’, clayey sand w/ phosphorite nodules, slight smoky odor.		

OFFICIAL PHOTOGRAPH NO. 41
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 21, 2015
Photo Number:	Photo 41	**Time:**	1553
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 39D well boring 50’ – 55’, clayey sand, no odor.		

OFFICIAL PHOTOGRAPH NO. 42
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 21, 2015
Photo Number:	Photo 42	**Time:**	1600
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 39D well boring 55’ – 60’, clayey sand, no odor.		

OFFICIAL PHOTOGRAPH NO. 43
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 21, 2015
Photo Number:	Photo 43	**Time:**	1645
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 39D well boring 60' – 65', clayey sand to 63' then a dense clay layer begins, no odor.		

OFFICIAL PHOTOGRAPH NO. 44
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 21, 2015
Photo Number:	Photo 44	**Time:**	1655
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 39D well boring 65’ – 70’, dense clay, no odor. Second isolation casing will be installed at a depth of 63’ at HG – 39D.		

Update
Supplemental Hawthorn Group Characterization
Week of 5-22-2015

Work Completed This Week To Date

- Installed well casing, well screen and bentonite seal in HG-36S
- Installed well casing, well screen and bentonite seal in HG-36D
- Completed development of monitoring well HG-37D
- Initiated development of monitoring well HG-36S
- Installed well casing, well screen and bentonite seal on HG-39S
- Installed second isolation casing for HG-39D
- Initiated development of HG-36D

Work Planned For Next Week

- Complete installation of HG-39S
- Continue installation of HG-39D
- Complete development of HG-36D

Screened Intervals for Completed Wells

- HG-36S (45-55 ft. bgs)
- HG-36D (93-103 ft. bgs)
- HG-39S (45-55 ft. bgs)

Key Observations During Field Activities

Lower Hawthorn Formation does not appear to be significantly impacted at HG-36D location.

Samples Collected This Week

- Groundwater sample from HG-37D (bromide analysis associated with well development)
- Groundwater sample from HG-36D (bromide analysis associated with well development)

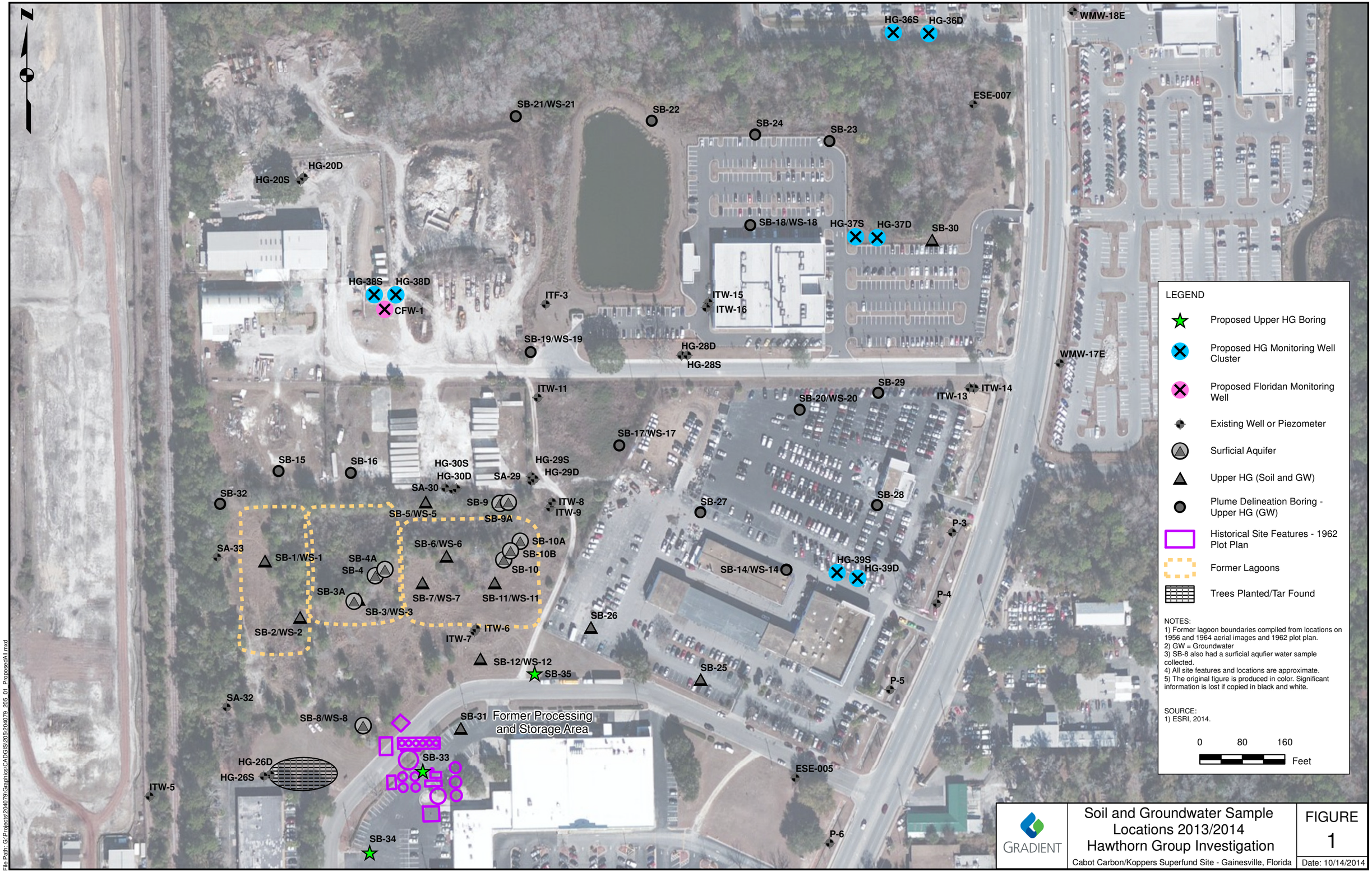
Issues This Week

None

Update
Supplemental Hawthorn Group Characterization
Week of 5-22-2015

Stakeholder Visitors for The Week

- John Herbert (5/18/2015)
- Josh Hayes, (Daily)
- Scott Miller & Rusty Kestle (5/19-20, 2015)
- EPA Contracts Staff & Oversight Contractors (5/19/2015)



GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

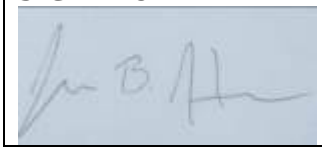
File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

J.M. Waller Associates, Inc.
Remedial Action Contract II Lite, Region IV, Photo Log

Contract:	EP-S4-08-03	**Site Name:**	Cabot Hawthorn Investigation
Task No.:	035	**Date:**	May 12 – May 19, 2015
RPM:	Scott Miller	**Project Mgt.:**	Tim Turner

PHOTO LOG

ACKNOWLEDGEMENTS

SIGNATURE  **Date:05/19/15**	**PM SIGNATURE** **Date:**

OFFICIAL PHOTOGRAPH NO. 18
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 13, 2015
Photo Number:	Photo 18	**Time:**	1357
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 37D well boring 80’ – 85’, clay, no odor.		

OFFICIAL PHOTOGRAPH NO. 19
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 13, 2015
Photo Number:	Photo 19	**Time:**	1449
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 37D well boring 85’ – 90’, clay w/ gravel, no odor.		

OFFICIAL PHOTOGRAPH NO. 20
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 13, 2015
Photo Number:	Photo 20	**Time:**	1458
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 37D well boring 90’ – 95’, clay w/ gravel, some smoky odor at ~93’.		

OFFICIAL PHOTOGRAPH NO. 21
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 14, 2015
Photo Number:	Photo 21	**Time:**	0925
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 37D well boring 100’ – 105’, clay w/ gravel, no odor.		

OFFICIAL PHOTOGRAPH NO. 22
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 14, 2015
Photo Number:	Photo 22	**Time:**	0938
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 37D well boring 105' – 110', sand w/ gravel, slight smoky odor possible/ sulfur odor. Total well depth at HG – 37D will be 108' with screen from 98' – 108'.		

OFFICIAL PHOTOGRAPH NO. 23
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 15, 2015
Photo Number:	Photo 23	**Time:**	1244
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	Well pads complete at HG – 38S and HG – 38D.		

OFFICIAL PHOTOGRAPH NO. 24
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 15, 2015
Photo Number:	Photo 24	**Time:**	1447
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 25’ – 30’, clay, no odor.		

OFFICIAL PHOTOGRAPH NO. 25
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 15, 2015
Photo Number:	Photo 25	**Time:**	1458
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 30’ – 35’, sand w/ some clay, no odor.		

OFFICIAL PHOTOGRAPH NO. 26
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 18, 2015
Photo Number:	Photo 26	**Time:**	0923
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 45’ – 50’, clay w/ sand, no odor.		

OFFICIAL PHOTOGRAPH NO. 27
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 18, 2015
Photo Number:	Photo 27	**Time:**	0931
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 50’ – 55’, sandy soil, no odor.		

OFFICIAL PHOTOGRAPH NO. 28
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 18, 2015
Photo Number:	Photo 28	**Time:**	1004
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 55’ – 60’, clayey sand, no odor.		

OFFICIAL PHOTOGRAPH NO. 29
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 18, 2015
Photo Number:	Photo 29	**Time:**	1011
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 60’ – 65’, clayey sand, no odor.		

OFFICIAL PHOTOGRAPH NO. 30
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 18, 2015
Photo Number:	Photo 30	**Time:**	1204
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 65’ – 70’, clayey sand, no odor. First 3’ of sample lost.		

OFFICIAL PHOTOGRAPH NO. 31
U.S. ENVIRONMENTAL PROTECTION AGENCY

Location:	Cabot Hawthorn Investigation	**Date:**	May 18, 2015
Photo Number:	Photo 31	**Time:**	1233
Orientation:	Facing down.		
Photographer:	Joshua Hayes		
Subject:	View of HG – 36D well boring 70' – 75', clay begins at 71', no odor. Second isolation casing at HG – 36D will be installed at 72'.		

HG-36S
HG-36D
WMW-18E
SB-21/WS-21
SB-22
HG-20D
HG-20S
SB-18/WS-18
HG-37S
HG-37D
SB-30
HG-38S
HG-38D
CFW-1
ITW-15
ITW-16
SB-19/WS-19
HG-28D
HG-28S
WMW-17E
ITW-11
SB-29
ITW-14
ITW-13
SB-20/WS-20
SB-17/WS-17
SB-15
SB-16
HG-30S
HG-30D
SA-29
HG-29S
HG-29D
SA-30
SB-32
SB-9
ITW-8
ITW-9
SB-5/WS-5
SB-9A
SB-27
SB-28
P-3
SA-33
SB-6/WS-6
SB-10A
SB-10B
SB-1/WS-1
SB-4A
SB-4
SB-10
SB-14/WS-14
HG-39S
HG-39D
SB-3A
SB-7/WS-7
SB-11/WS-11
SB-3/WS-3
SB-2/WS-2
SB-26
ITW-6
ITW-7
SB-12/WS-12
SB-35
SB-25
P-5
SA-32
SB-8/WS-8
SB-31
Former Processing and Storage Area
SB-33
HG-26D
HG-26S
ESE-005
ITW-5
SB-34
P-6

HG-36S:
Well screen installed at 54'
Some smoky odors above 25', no odor below upper clay (~25')

HG-36D:
Second isolation casing installed at 72'
Some smoky odors above 25', no odors below upper clay (~25')

HG-37D:
Second isolation casing
Total depth = 108'
Smokey odor at 35' diminishing to no odor at 75'.
Well development ongoing, no odor in purge water.

HG-37S:
Total Depth = 33'
Well development complete
Some smoky odors in purge water.

HG-38S
Well Development completed
Total Depth = 49'
Distinct naphthalene odor in purge water

HG-38D:
Total Depth = 110'
Well development completed
No distinct odors in purge water

HG-39S:
First isolation casing installed at 30'
Some smoky odors

HG-39D:
First isolation casing installed at 30'
Some smoky odors

LEGEND

- Proposed Upper HG Boring
- Proposed HG Monitoring Well Cluster
- Proposed Floridan Monitoring Well
- Existing Well or Piezometer
- Surficial Aquifer
- Upper HG (Soil and GW)
- Plume Delineation Boring - Upper HG (GW)
- Historical Site Features - 1962 Plot Plan
- Former Lagoons
- Trees Planted/Tar Found

NOTES:
1) Former lagoon boundaries compiled from locations on 1956 and 1964 aerial images and 1962 plot plan.
2) GW = Groundwater
3) SB-8 also had a surficial aquifer water sample collected.
4) All site features and locations are approximate.
5) The original figure is produced in color. Significant information is lost if copied in black and white.

SOURCE:
1) ESRI, 2014.

0 80 160
Feet

GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

DAILY QUALITY CONTROL REPORT

DATE **18 May 2015**

DAY	S	**M**	T	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 15**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew completed second isolation casings installation at HG – 36D (~ 72').
- Well development ongoing at HG – 37D.
- Weston personnel onsite; Mark Taylor (Project Manager) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay
  - Corey

EQUIPMENT ON-SITE:

- 1 DPT rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 80°F, low 60°F.

0800 – Arrived onsite. Crew preparing to continue borings at HG -36D. Well development staring at HG – 37D (cloudy, only bromide tracer odor).
1030 – Borings ongoing at HG – 36D:

- 45' – 50':
  - Clay w/ sand, no odor, FID = 0 and PID = 0.
- 50' – 55':
  - Sandy soil, no odor.
- 55' – 60':
  - Clayey sand, no odor.
- 60' – 65':
  - Clayey sand, no odor.

Crew breaking for lunch.
1230 – Drilling crew continues borings at HG – 36D:

- 65' – 70':
  - Approximately bottom 3' of sample lost, sand w/ clay, no odor.

DAILY QUALITY CONTROL REPORT

DATE **18 May 2015**

DAY	S	**M**	T	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	70-85	**85-up**
WIND	Still	**Mod.**	High	**Report No. 15**	
HUMIDITY	Dry	Mod.	**Humid**		

- 70' – 75':
  - Clay starting at 71', no odor.

1400 – Second isolation casing will be set at 72' at HG – 36D.
1430 – Well development ends for the day at HG – 37D.
1600 – Drill crew continues to weld together second isolation casing for HG – 36D.
1630 – Second isolation casing for HG – 36D being installed.
1700 – Second isolation casing in place at HG – 36D; isolation casing will be grouted tomorrow morning. Leaving site.

QUALITY CONTROL ACTIVITIES:

Weston project manager (Mark Taylor) and field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None

SPECIAL NOTES:

- None

EXPECTATIONS FOR May 19, 2015:

- EDS crew will complete grouting of second isolation casing at HG – 36D.
- Well development will continue at wells HG – 37D.
- Well screen will be installed at HG – 36S.
- Tour group for EPA personnel of Cabot-Koppers site.

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

From:	Taylor, Mark
To:	Hayes, Joshua (Jhayes@jmwaller.com); "Hutton, Richard H"; John Herbert; John Mousa; Kelsey Helton; Kestle, Rusty; McCoy, Carrie; Scott Miller; Stewart Pearson
Cc:	Wayne Reiber; Manu Sharma; Meghna Swamy
Subject:	Update for hawthorn Group Characterization Week Ending 5-15-2015
Date:	Monday, May 18, 2015 9:01:12 AM
Attachments:	Stakeholder-Cabot-Weekly-Update-5-15-2015.pdf

The Hawthorn Group Characterization update for the week ending 5-15-2015 is attached.

Please feel free to contact me if you have any questions.

Mark

Mark Taylor
Weston Solutions, Inc.
94072 Summer Breeze Drive
Fernandina Beach, FL 32034
Office **904-261-3085**
Cell: 904-557-8353

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From:	Taylor, Mark
To:	Hayes, Joshua (Jhayes@jmwaller.com); "Hutton, Richard H"; John Herbert; John Mousa; Kelsey Helton; Kestle, Rusty; McCoy, Carrie; Scott Miller; Stewart Pearson
Cc:	Wayne Reiber; Manu Sharma; Meghna Swamy
Subject:	Update for Hawthorn Group Characterization Week Ending 5-8-2015
Date:	Monday, May 11, 2015 3:00:32 PM
Attachments:	Stakeholder-Cabot-Weekly-Update-5-8-2015.pdf

The Hawthorn Group Characterization work on the Cabot portion of the Site is progressing as expected. The update for the week ending 5-8-2015 is attached.

Please contact me if you have any questions.

Mark

Mark Taylor
Weston Solutions, Inc.
94072 Summer Breeze Drive
Fernandina Beach, FL 32034
Office **904-261-3085**
Cell: 904-557-8353

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DAILY QUALITY CONTROL REPORT

DATE **1 May 2015**

DAY

S	M	T	W	TH	**F**	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorne Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 4**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorne investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew completed installation of second formation isolation casing at HG – 38D.
- Weston personnel onsite; Mark Taylor (Project Manager) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 5 laborers
- Weston
  - Mark Taylor
  - Ed McKay

EQUIPMENT ON-SITE:

- 1 DPT rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 80°F, low 60°F.

0800 – Arrived onsite. Grouting completed at first isolation casing (33') for HG – 37D. Borehole advanced down to 49' at HG – 38S, well install ongoing.
0900 – Leaving site for conference call. Well installation complete at HG – 38S. Advancing borehole for HG – 38D down to 65'.
1400 – Borehole segment completed at HG – 38D, isolation casing being installed.
1700 – Isolation casing and grouting installed at HG – 38D. Leaving site.

QUALITY CONTROL ACTIVITIES:
Weston project manager (Mark Taylor) and field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None.

SPECIAL NOTES:

- None

EXPECTATIONS FOR May 4, 2015:

- EDS crew will continue well installations at HG – 37S, HG – 37D, HG – 38S, and HG – 38D.

DAILY QUALITY CONTROL REPORT

DATE **1 May 2015**

DAY	S	M	T	W	TH	**F**	S

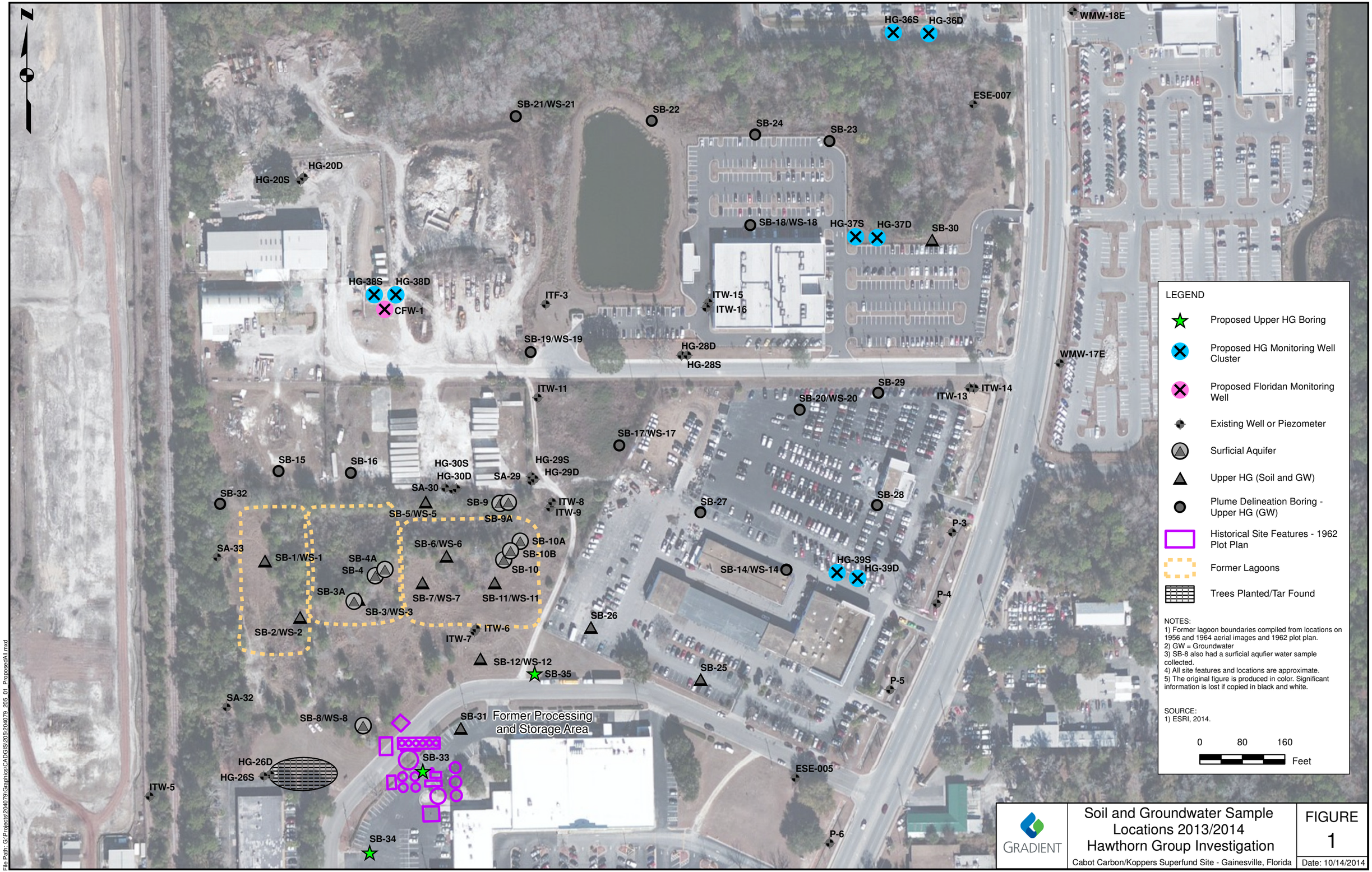
USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorne Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 4**	
HUMIDITY	Dry	Mod.	**Humid**		

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



GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

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DAILY QUALITY CONTROL REPORT

DATE **4 May 2015**

DAY	S	**M**	T	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	**Clear**	Partly Cloudy	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 5**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:
- Environmental Drilling Services (EDS) crew completed final boring depth to 110' at HG – 38D.
- Weston personnel onsite; Mark Taylor (Project Manager) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:
- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 5 laborers
- Weston
  - Mark Taylor
  - Ed McKay

EQUIPMENT ON-SITE:
- 1 DPT rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 80°F, low 60°F.

0800 – Arrived onsite. EDS crew preparing to advance borehole down to approx. 100' (final depth) at HG – 38D.
1100 – Advancing borehole for HG – 38D continues.
1330 – Boring at HG – 38D continues, drilling is slow due to thick clay and limestone nodules in formation. It is unlikely time will permit installation of well screen or work on other wells today.
1800 – Borehole segment completed at HG – 38D (total depth 110', screen will be 100' – 110'), well screen will be installed tomorrow. Leaving site.

QUALITY CONTROL ACTIVITIES:
Weston project manager (Mark Taylor) and field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:
- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:
- Slow drilling due to thick clay and limestone nodules in formation.

SPECIAL NOTES:
- None

EXPECTATIONS FOR May 5, 2015:
- EDS crew will continue well installations at HG – 37S, HG – 37D, HG – 38S, and HG – 38D.

DAILY QUALITY CONTROL REPORT

DATE **4 May 2015**

DAY	S	**M**	T	W	TH	F	S

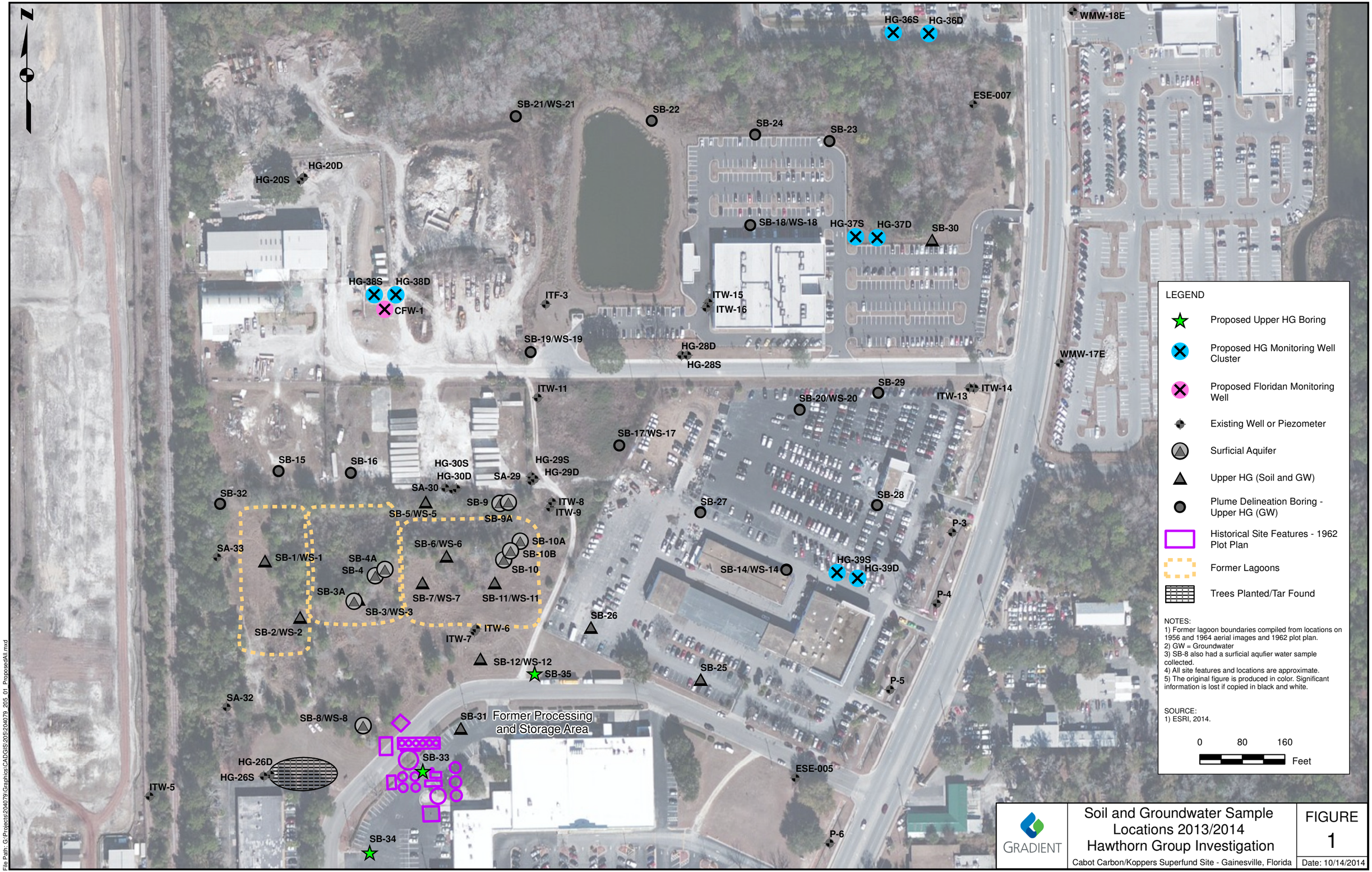
USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	**Clear**	Partly Cloudy	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 5**	
HUMIDITY	Dry	Mod.	**Humid**		

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



GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

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DAILY QUALITY CONTROL REPORT

DATE **5 May 2015**

DAY	S	M	**T**	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 6**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:
- Environmental Drilling Services (EDS) crew completed final boring depth to 110' at HG – 38D.
- Weston personnel onsite; Mark Taylor (Project Manager) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:
- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 5 laborers
- Weston
  - Mark Taylor
  - Ed McKay

EQUIPMENT ON-SITE:
- 1 DPT rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 80°F, low 60°F.

0800 – Arrived onsite. EDS crew preparing to install well screen (total depth 110', screen 100' – 110') at HG – 38D.
0900 – A grab sample has been collected by Weston personnel from the newly installed HG – 38D well.
1330 – Well screen install continues at HG – 38D.
1500 – Well screen install complete at HG – 38D, decontamination of equipment ongoing.
1630 – Borings starting at HG – 37D, advancing down to 75'. Strong "Cabot odor/campfire odor" encountered in borings at this depth (~35').
1700 – Well development beginning at HG – 37S, smokey gray groundwater pumped with some BTEX/naphthalene odor. Leaving site.

QUALITY CONTROL ACTIVITIES:
Weston project manager (Mark Taylor) and field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:
- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:
- Slow drilling due to thick clay and limestone nodules in formation.

SPECIAL NOTES:
- None

DAILY QUALITY CONTROL REPORT

DATE **5 May 2015**

DAY	S	M	**T**	W	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

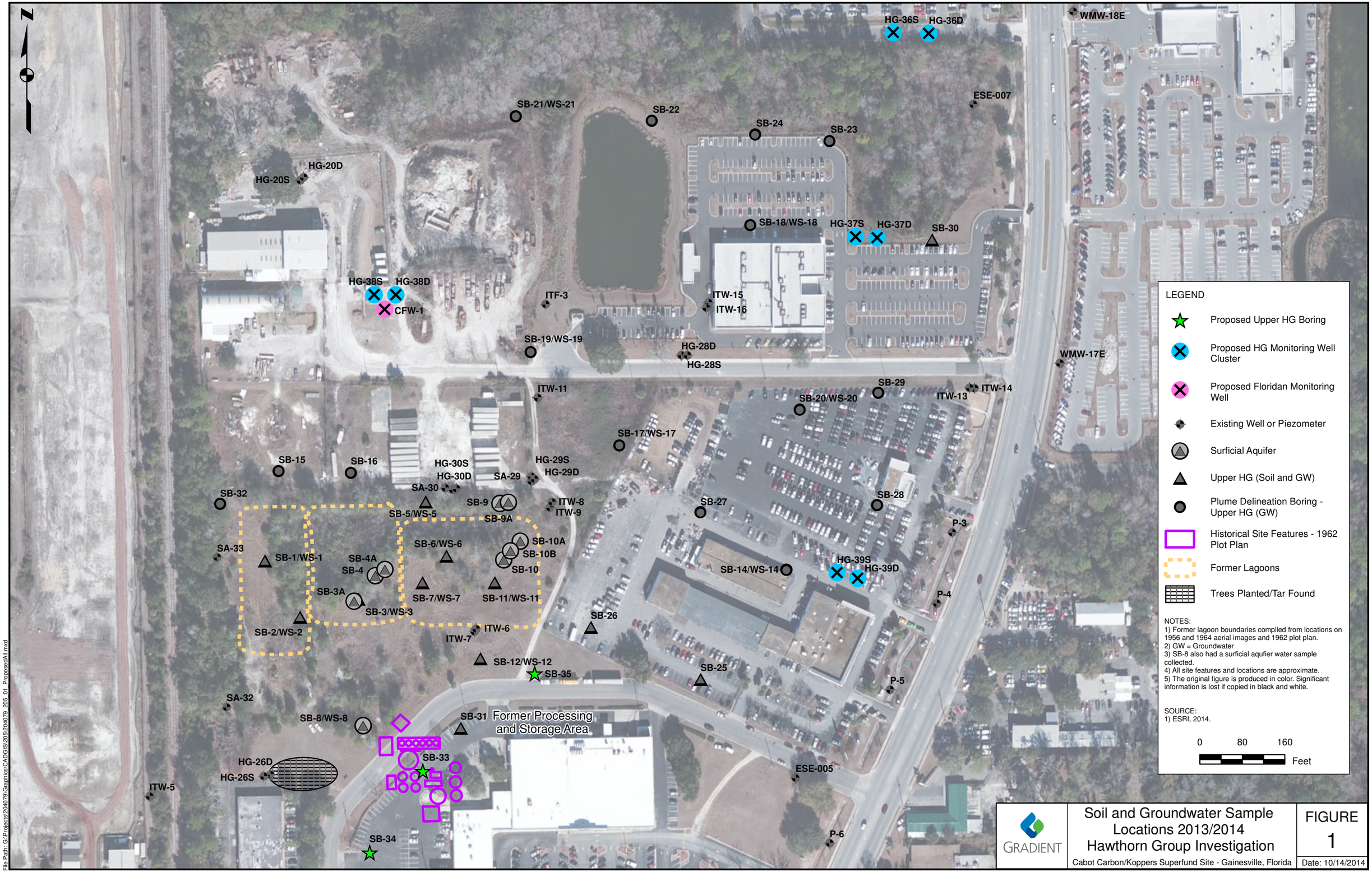
CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 6**	
HUMIDITY	Dry	Mod.	**Humid**		

EXPECTATIONS FOR May 6, 2015:

- EDS crew will continue well installations at HG – 37S and HG – 37D. Well development will continue at wells HG – 38S and HG – 38D.

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



GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

DAILY QUALITY CONTROL REPORT

DATE **6 May 2015**

DAY	S	M	T	**W**	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 7**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew completed final boring depth to 77' at HG – 37D.
- Grouting completed on well screen at HG – 38D.
- Well development continues at HG – 37S.
- Weston personnel onsite; Mark Taylor (Project Manager) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay

EQUIPMENT ON-SITE:

- 1 DPT rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 80°F, low 60°F.

0800 – Arrived onsite. Borings continue at HG – 37D.
0900 – Well development continues at HG – 38S.
1300 – Middle clay reached at HG – 38D (~77'). Crew will move to HG – 38D to complete grouting of well.
1400 – Grouting at HG – 38D ongoing.
1500 – Grouting complete at HG – 38D, will begin installing isolation casing at HG – 37D soon.
1700 – Welding of isolation casing ongoing, install will be completed in the morning. Leaving site.

QUALITY CONTROL ACTIVITIES:
Weston project manager (Mark Taylor) and field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None

SPECIAL NOTES:

- None

DAILY QUALITY CONTROL REPORT

DATE **6 May 2015**

DAY	S	M	T	**W**	TH	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

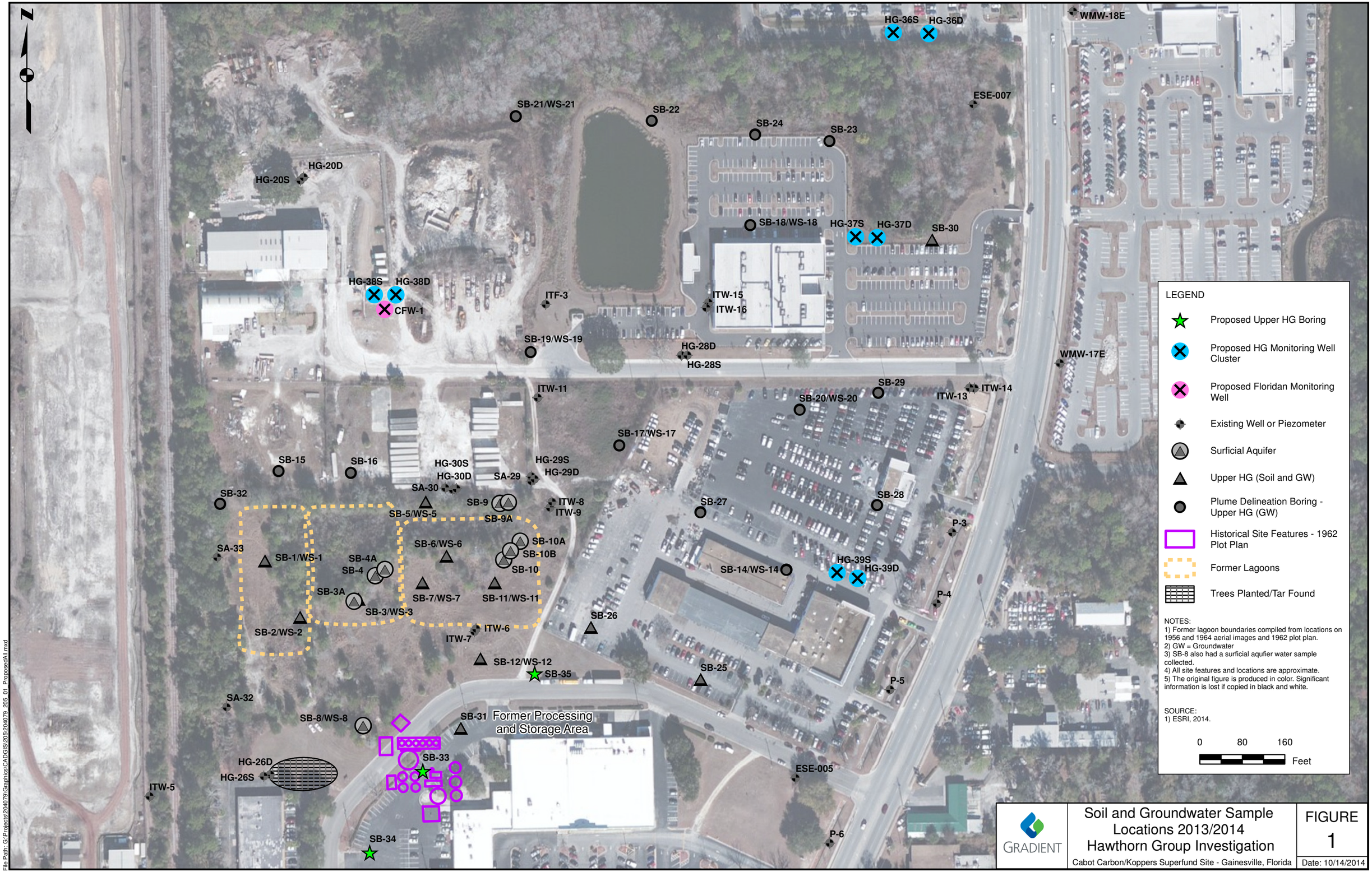
CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 7**	
HUMIDITY	Dry	Mod.	**Humid**		

EXPECTATIONS FOR May 7, 2015:

- EDS crew will continue well installations at HG – 37S and HG – 37D. Well development will continue at wells HG – 38S and HG – 38D.

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



GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd

N

HG-36S
HG-36D
WMW-18E
No action yet
No action yet
ESE-007
SB-21/WS-21
SB-22
SB-24
SB-23
HG-20D
HG-20S
HG-37D:
Second isolation casing depth = 77'
Well screen install next week
Smokey odor at 35' diminishing to no odor at 75'
HG-38S
Well Development ongoing
Total Depth = 49'
Distinct naphthalene odor
HG-38D:
Total Depth = 110'
Well development to begin on 5/10/15
SB-18/WS-18
HG-37S
HG-37D
SB-30
HG-38S
HG-38D
CFW-1
ITF-3
ITW-15
ITW-16
HG-37S:
Total Depth = 33'
Well development to begin next week
SB-19/WS-19
HG-28D
HG-28S
WMW-17E
ITW-11
SB-29
ITW-14
ITW-13
SB-20/WS-20
SB-17/WS-17
SB-15
SB-16
HG-30S
HG-30D
SA-29
HG-29S
HG-29D
SA-30
SB-32
SB-9
ITW-8
ITW-9
SB-5/WS-5
SB-9A
SB-27
SB-28
P-3
SA-33
SB-6/WS-6
SB-10A
SB-10B
SB-1/WS-1
SB-4A
SB-4
SB-10
SB-14/WS-14
HG-39S
HG-39D
SB-3A
SB-7/WS-7
SB-11/WS-11
SB-3/WS-3
SB-2/WS-2
SB-26
ITW-6
ITW-7
HG-39S:
Pilot borehole to 30' completed
HG-39D:
Pilot borehole to 30' complete
Smokey odor from 10'-30'
SB-12/WS-12
SB-35
SB-25
P-5
SA-32
SB-8/WS-8
SB-31
Former Processing and Storage Area
SB-33
HG-26D
HG-26S
ESE-005
ITW-5
SB-34
P-6

LEGEND

- Proposed Upper HG Boring
- Proposed HG Monitoring Well Cluster
- Proposed Floridan Monitoring Well
- Existing Well or Piezometer
- Surficial Aquifer
- Upper HG (Soil and GW)
- Plume Delineation Boring - Upper HG (GW)
- Historical Site Features - 1962 Plot Plan
- Former Lagoons
- Trees Planted/Tar Found

NOTES:
1) Former lagoon boundaries compiled from locations on 1956 and 1964 aerial images and 1962 plot plan.
2) GW = Groundwater
3) SB-8 also had a surficial aquifer water sample collected.
4) All site features and locations are approximate.
5) The original figure is produced in color. Significant information is lost if copied in black and white.

SOURCE:
1) ESRI, 2014.

0 80 160
Feet

GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

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DAILY QUALITY CONTROL REPORT

DATE **7 May 2015**

DAY

S	M	T	W	**TH**	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 8**	
HUMIDITY	Dry	Mod.	**Humid**		

TASK:
Oversight of Cabot Supplemental Hawthorn investigation

DAY-SPECIFIC TASK:

- Environmental Drilling Services (EDS) crew completed well screen at HG – 37S (~33').
- Second isolation casing and grouting completed at HG – 37D.
- Well development continues at HG – 37S.
- Weston personnel onsite; Mark Taylor (Project Manager) and Ed McKay (Field Geologist).

PERSONNEL ON-SITE:

- J.M. Waller
  - Joshua Hayes
- Environmental Drilling Services (EDS)
  - 3 laborers
- Weston
  - Mark Taylor
  - Ed McKay
  - Corey

EQUIPMENT ON-SITE:

- 1 DPT rig
- 1 rotary rig
- 1 skid steer
- 1 cargo truck
- I work truck

WORK PERFORMED:
Site Weather – Partly cloudy, high 80°F, low 60°F.

0800 – Arrived onsite. Well screen install at HG-37S ongoing.
0900 – Well development suspended at HG-38S due to pump failure.
1100 – Isolation casing installation ongoing at HG-37D (33' – 77').
1300 – Isolation casing installation continues at HG – 37D.
1500 – Isolation casing installation complete at HG – 37D, grouting ongoing.
1700 – Grouting complete, decontaminating equipment and preparing equipment for moving to HG – 39 cluster tomorrow morning. Leaving site.

QUALITY CONTROL ACTIVITIES:
Weston project manager (Mark Taylor) and field geologist (Ed McKay) onsite to oversee EDS crew. J.M. Waller oversight personnel onsite.

HEALTH AND SAFETY LEVELS AND ACTIVITIES:

- All activities performed in routine Level D PPE.

PROBLEMS ENCOUNTERED/CORRECTION ACTION TAKEN:

- None

SPECIAL NOTES:

DAILY QUALITY CONTROL REPORT

DATE **7 May 2015**

DAY	S	M	T	W	**TH**	F	S

USEPA RPM: Scott Miller

PROJECT: Cabot Supplemental Hawthorn Investigation

CONTRACT: EP-S4-08-03

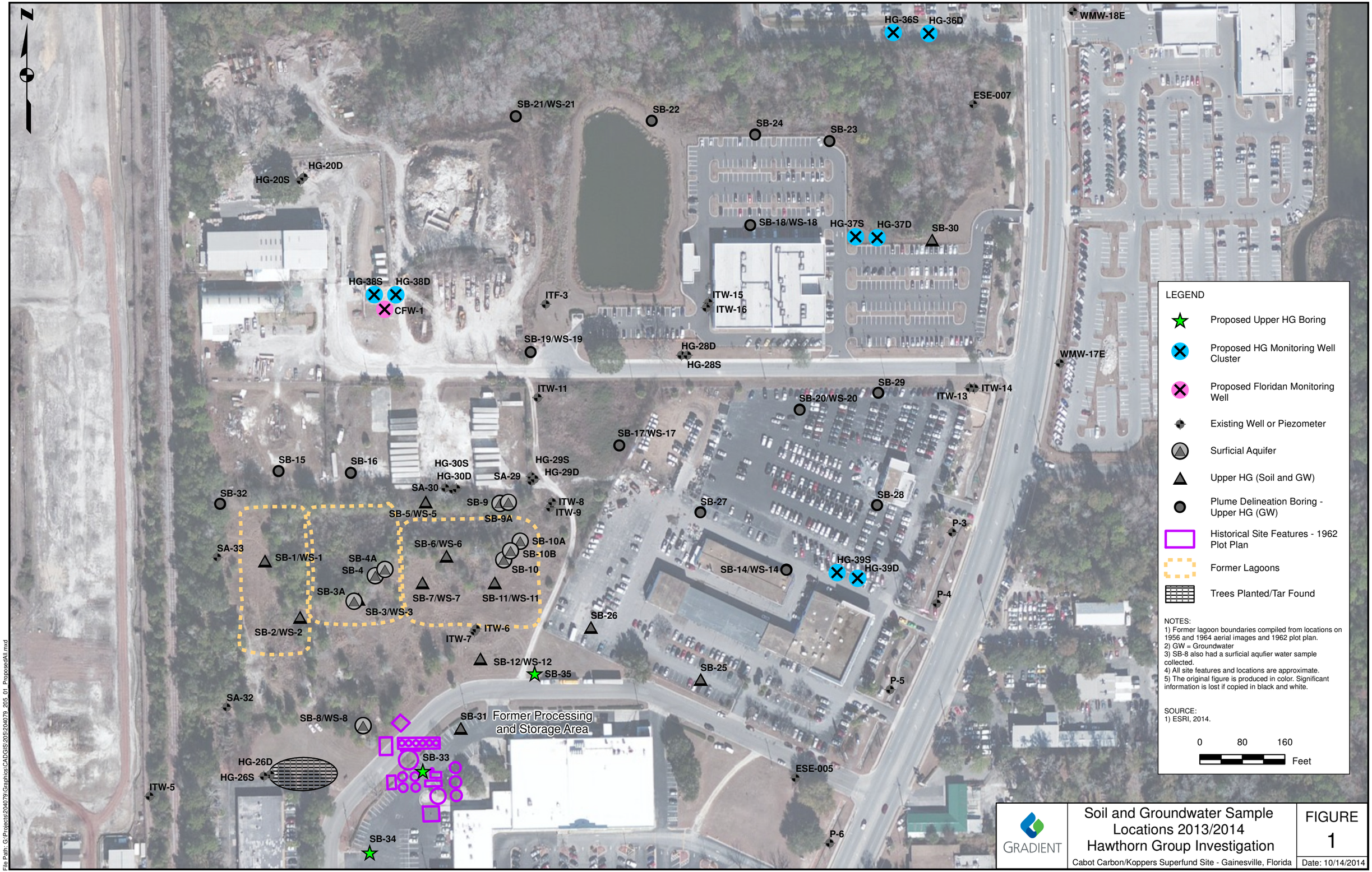
WEATHER	Clear	**Partly Cloudy**	Overcast	Rain	Fog/Haze
TEMPERATURE	to 32	32-50	50-70	**70-85**	85-up
WIND	Still	**Mod.**	High	**Report No. 8**	
HUMIDITY	Dry	Mod.	**Humid**		

- None

EXPECTATIONS FOR May 8, 2015:

- EDS crew will begin boreholes at HG – 39S and HG – 39D. Well development will continue at wells HG – 38S.

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



GRADIENT

Soil and Groundwater Sample Locations 2013/2014 Hawthorn Group Investigation

Cabot Carbon/Koppers Superfund Site - Gainesville, Florida

FIGURE 1

Date: 10/14/2014

File Path: G:\Projects\204079\Graphics\CADGIS\205\204079_205_01_ProposedAll.mxd