

300 SOUTH WACKER DRIVE, SUITE 2050 CHICAGO, ILLINOIS 60606 (PHONE) 312.465.1740 (FAX) 414.837.3608

ENVIRONMENTAL CONSULTANTS

Crawford Station Manufactured Gas Plant Parcel L Chicago, Illinois Weekly Field Progress Report

Report Date: September 26, 2013

Prepared By: Natural Resource Technology, Inc. (NRT)

Ronald J. Horan, P.G. Timothy B. Norris, P.G. John M. Nardozzi, P.E.

Submitted To: Integrys Business Support, LLC (IBS)

Naren M. Prasad, P.E.

Activity Period: September 8, 2013 through September 14, 2013

The following summarizes the environmental field activities performed by NRT on behalf of IBS at the former Crawford Station manufactured gas plant (MGP) Time Critical Removal Action (AOC V-W-11-C-981):



Tasks	Environmental Activities
Sampling Activities Performed	The following sampling activities were conducted during the course of the week:
	A total of 10 SUMMA canister air samples (130909001-130909005 and 130911001-130911005), and six PUF air samples, including one duplicate (130909006-130909011) were collected and submitted to Test America laboratories for BTEX/Naphthalene and select PAH analyses, respectively.
	 Five post-excavation soil samples were collected (130911006-130911010) and submitted to Test America for analysis.
	 Three wastewater samples were collected (130911011-130911013) to determine whether newly installed granular activated carbon (GAC) filters were effective. GAC filters were replaced on September 9, 2013.
NRT Field Personnel	Edwards T. Effiong Ronald J. Horan Vincent M. Guiliani Rodney E. Lee Tim M. Norris Joseph R. Ridgway
Equipment Deployed	PUF sampling systems SUMMA canisters with 24-hour flow regulators AirLogics Air Monitoring Stations Photo ionization detectors (PIDs) GPS handheld unit Hand auger and shovels
Field Photos	See Field Photos below

Additional Site Activities:

- Concrete uncovered at Areas 4E and 5S was continuously broken into smaller pieces for future on-site use or off-site disposal.
- Portions of sewer from Area 5S are being powerwashed for future on-site use.
- A misting system is being installed on the western boundary of the site to suppress odors.

Work planned for the coming week, September 15, 2013 through September 21, 2013, is as follows:

- Continue excavation and sampling of Area 5S and Area 7E.
- Continue pumping wastewater from Area 4E and Area 5S.
- Continue breaking down concrete removed from Areas 4E and 5S.
- Provide continuous perimeter air monitoring of the site, and take air samples as described in the RAWP Addendum 1.
- Review sampling data received from laboratories who provided analyses, and apply this data in providing environmental oversight.

Crawford Station Manufactured Gas Plant, Parcel L Weekly Field Progress Report September 26, 2013 Page 3



A weekly field progress report will continue to be issued throughout the duration of field activities for this Time Critical Removal Action. A final written report summarizing the results and findings of the Time Critical Removal Action will be provided following completion of field activities.

A summary of the construction activities as detailed by the Construction Manager have been included with this report as Attachment 1.

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

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Timothy B. Norris, P.G.

Geologist

Attachment 1: Burns and McDonnell, Site Remediation - Construction Management Report (09/08/13-09/14/13)

John M. Nardozzi, P.E.

Principal Engineer

Crawford Station Manufactured Gas Plant, Parcel L Weekly Field Progress Report September 26, 2013 Page 4



Field Photos:



Photo 1: Foaming material at Area 5S

Direction: Facing southwest

Photo Date: 9/10/2013

Photo Taken By: RJH



Photo 2: Excavation along ERS at Area 5S

Direction: Facing south

Photo Date: 9/10/2013

Photo Taken By: RJH



Photo 3: Truck loading at Area 5S

Direction: Facing southwest

Photo Date: 9/10/2013

Photo Taken By: RJH

Crawford Station Manufactured Gas Plant, Parcel L Weekly Field Progress Report September 26, 2013 Page 5



Field Photos (continued):



Photo 4: Material from 12-16 feet at Area 5S

Direction: Facing east

Photo Date: 9/12/2013

Photo Taken By: RJH



Photo 5: Delivery of tank for the misting system

Direction: Facing southeast

Photo Date: 9/13/2013

Photo Taken By: RJH



Photo 6: Area 7E excavation

Direction: Facing north

Photo Date: 9/13/2013

Photo Taken By: RJH

WWW.NATURALRT.COM



1431 Opus Place, Suite 400 Downers Grove, Illinois 60515

Week of: 09/08/13 to 09/14/13

Subject: Site Remediation – Construction Management Peoples Gas – Former Crawford Station Parcel L

Burns & McDonnell Personnel Onsite

Site Construction Manager

• Bal Berena

Site Remediation Supervisor

• Danny Batten/Rebekah Schulenberg

Construction Manager

Mike Swieca

Others

- Mike Merkel
- Kevin Fagan
- Jason Blazier

Integrys/Peoples Gas Personnel Onsite

None

Subcontractors Onsite

- Tecnica Environmental Services (TES)
- Helm Electrical Services (HES)
- North Shore Environmental (NSE)
- RDNP Drilling

Others

- Natural Resource Technology (NRT)
 Tim Norris, Vince Giuliani, Rodney Lee, Ron Horan, Joseph Ridgway and Edwards Effiong.
- Dave Weber (WM) and Vito Pesoli (MT)

Miscellaneous Visitors

- Dan Opulinski (HES)
- Mark Norris (NSE)
- Gary Klein (TES)
- Paul Eger (RDNP Drilling)

Site Activities

BURNS & MCDONNELL

- Managed site activities with TES, NSE and HES;
- Kevin Fagan and Jason Blazier managed activities with RDNP Drilling at Parcel K;
- Pumped and discharged 165,927 gallons of treated water to MWRDGC;
- Received 1 load (90 cubic yards) of wood chips for odor and moisture control;
- Tracked 566 loads (10,889.17 tons) of direct disposal soil to Laraway Landfill. As of September 13, 2013, the project totals for disposal were 330,548.70 tons of direct disposal soils and 7,452.01 tons of concrete:
- Used 14 drums (55 gallon/drum) of foam for odor control;
- Issued truck tracking forms for all excavated soils from Areas 5S and 7E;
- Participated in daily subcontractors pre-task analysis safety meetings on site;

- Monitored site conditions and overall safety; and
- Held the weekly site construction meeting with Supervisors of Subcontractors and Waste Management.

TECNICA ENVIRONMENTAL SERVICES

- Excavated and loaded out soils from Areas 5S and 7E;
- Consistently broke concrete generated from Area 4E;
- Performed housekeeping on site;
- Operated and maintained truck scale;
- Actively controlled dust through watering on site;
- Performed routine maintenance on decon and tracking pads;
- Performed street cleaning activities along the exit and entrance gate;
- Assisted BMcD in waste water treatment system operation and maintenance;
- Continuously monitored site fencing and erosion control materials;
- Actively controlled odors through foaming and wood chips;
- Pumped water from Area 4E;
- Started installations of perimeter misting system in the western end of the property; and
- Assisted NSE during the water treatment system carbon changed out.

HELM ELECTRICAL SERVICES

• Installed electrical disconnect and electrical plug for the misting system to be installed along the western fence.

NORTH SHORE ENVIRONMENTAL SERVICES

Performed water treatment system maintenance (carbon changed out).

RDNP DRILLING

• This company was on-site with Jason Blazier and Kevin Fagan of Burns & McDonnell. Equipment and materials were staged at Crawford L while the Parcel K investigation work was being completed.

Scope of work change for Area 5S and 7E

- The scope of the design for the floor of Area 5S east and west of the storm sewer has changed to 16 ft. in depth due to visual evidence of source material; and
- Continue excavation to the east and north of the original Area 4E design dig.

Open/Outstanding Items

• The ERS installation along the boundary between Parcel L and Parcel D will be temporarily suspended awaiting pending decisions regarding the Parcel D remedial work.

Anticipated Activities for the Week of September 15, 2013

- Continue breaking concrete generated from Area 4E;
- Continue digging and loading out soil from areas 5S and 7E along the sheeting wall.
- Load out concrete generated from Area 4E;
- Continue to pump water from Area 4E; and
- Continue repairing wind screens with wood lath as needed.



Crawford Station Site:

Remediation

Date: September 9, 2013

Description: View is towards the north side of the water treatment system. North Shore Environmental was on site to change the carbon in the lag tank. A vacuum truck was used to remove the old carbon.



Crawford Station Site:

Remediation

Date: September 10, 2013

Description: View is toward the north side of 4E. Tecnica continued to pressure wash the storm sewer pipe that was removed from Area 5S. The storm sewer pipe will be replaced during the restoration of Area 5S.



300 S. Wacker Drive, SUITE 2050 CHICAGO, IL 60606 (P) 312.465.1740 (F) 414.837.3608

Mr. Ross del Rosario USEPA Region 5 – SR6J 77 W. Jackson Boulevard Chicago, Illinois 60604-3590 January 10, 2014 2037

RE: December 2013 Monthly Progress Report Former Crawford Station MGP Site

Chicago, Illinois

Peoples Gas Light and Coke Company

CERCLA Docket No. V-W-08-C-917 and V-W-11-C-981 CERCLIS ID – ILN0000510192

Dear Mr. del Rosario:

On behalf of Integrys Business Support, LLC (IBS), Natural Resource Technology, Inc. (NRT) is providing this Monthly Progress Report for the Former Crawford Station Manufactured Gas Plant (MGP) Site. This report encompasses the Removal Action work and the Remedial Investigation/Feasibility Study (RI/FS) activities that are being performed concurrently.

I. Time Critical Removal Action (AOC V-W-11-C-981)

1) Progress Made During the Past Month

Removal Action Area - Parcels A, B, & O

Excavation and restoration of the Removal Action Area on Parcels A, B, & O is complete. No action was taken in the month of December.

Parcel L

- Soil excavation and removal is continuing. Soils are being transported to Waste Management's Laraway RDF facilities for disposal. For December 2013, a total of 26,254.52 tons of soil and concrete were transported off-site for disposal. For the project, a total of 481,816 tons of soil and concrete have been excavated and transported for disposal.
- Excavation continued in Area 5S. Source material was observed at the designed depth of Area 5S (12 ft below ground surface). Therefore, a determination was made based on visual evidence to extend the excavation in the immediate area to 16 ft below ground surface (bgs). Portions of Area 5S were extended to 14 ft bgs as deemed appropriate based on visual observations of source material. Excavation activities began in Area 6E. Based on visual evidence of source material at the designed depth of 15 ft bgs, the excavation was extended to 16 ft bgs. Bed ash was delivered and used to amend soils in Amendment Area 1 in the vicinity of Area 6E. Area 4E was extended to the north and east to excavate source material observed and verified via laboratory analysis at approximately 27 ft below grade. Excavation activities in Area 4E were suspended on November 14, 2013 due to site logistics. Once completed, Area 4E will be backfilled, pending removal of excess water within the excavation.



- Thatcher Engineering was on the site to weld exposed sheet piling in the northwest corner of Area 5S that was observed to be leaking after its initial installation.
- A former gas relief holder was encountered along the eastern excavation wall of Area 5S consisting of large quantities of concrete and riveted metal lining. The relief holder will be demolished once it is completely exposed and cleaned out.
- Backfilling of excavations has continued in several areas on Parcel L. Clean gravel obtained from Vulcan Materials in McCook, Illinois is being compacted to 95% Modified Proctor.
- Water treatment system is in operation. Metropolitan Water Reclamation District of Greater Chicago (MWRD) discharge permit has been approved. A total of 1,392,650 gallons of water were treated and discharged to the MWRD during the month of December.
- Soil samples were collected from the walls and base of the excavations at the frequency outlined in the Removal Action Work Plan Addendum 1 Revision 1 (RAWP).
- NRT provided continuous perimeter air monitoring utilizing nine Fixed Air Monitoring Stations. Full-Scale sampling was conducted with the construction activities consisting of two SUMMA and one PUF 24-hour sampling event per week. Air monitoring and sampling activities are being conducted in accordance with the RAWP.
- Work was suspended during the week of December 22 due to the Christmas Holiday. During the break, the air monitoring program was suspended as well.
- The anticipated source material removal estimate was updated based on site observations. The updated total quantity is estimated to be approximately 800,000 tons.

2) Analytical and Other Testing Results Received

Parcel L

- Full-Scale SUMMA sampling data from Parcel L is provided in tabular form as Attachment No. 1.
- Full-Scale PUF sampling data from Parcel L is provided in tabular form as Attachment No. 2.
- Post-Excavation soil sample data received in December from Parcel L is provided in tabular form as Attachment No. 3
- Landfill Acceptance soil sample data for the Amendment Areas received in December is provided in tabular form as Attachment No. 4.



3) Project Work Next Month (January 2014)

IBS Actions

Removal Action Area - Parcels A, B, & O

Site restoration completed. No additional removal action activities are scheduled for Parcels A, B, & O at this time.

Parcel L

- Continue Full Scale Perimeter Air Monitoring consisting of two 24-hour SUMMA sampling events and one 24-hour PUF sampling event per week.
- Conduct Continuous Real-Time Air Monitoring with the nine perimeter FAMs.
- Continue excavation and hauling of source material to Laraway Road RDF.
- Collect post-excavation soil samples from the walls and bases of excavations in accordance with sampling protocols outlined in the RAWP.

USEPA Actions

None

4) Anticipated Schedule

Deliverable or Milestone	Target Date	Actual Date
Parcels AB	O Removal	
Settlement Agreement Signed		October 12, 2011
Project Start Date		October 12, 2011
Monthly Progress Reports	Due the 11 th of Each Month	
Removal Action Work Plan, Rev 0 ¹		August 1, 2011
Removal Action Work Plan, Rev. 1 ¹		September 6, 2011
USEPA Approval of RAWP ¹		September 8, 2011
Removal Action (AB&O) – Start Date	November 2011	January 31, 2012
Removal Action (AB&O) – Completion Date	October 2013	
Parcel L	Removal	
RAWP Addendum #1		August 15, 2012
USEPA Comments on RAWP Add #1		September 19, 2012
RAWP Add #1, Rev. #1		October 19, 2012
USEPA Approval of RAWP Addendum		November 1, 2012
Site-Specific Soil Attenuation Capacity Determination		November 29, 2013
Site-Specific Soil Attenuation Capacity Determination – USEPA Approval		December 3, 2013
Removal Action (L) – Start Date		January 24, 2013

WWW.NATURALRT.COM



Deliverable or Milestone	Target Date	Actual Date
Removal Action (L) – Completion Date	Summer 2014	
¹ Removal Action Work Plan documents v	vere prepared pursuant t	o AOC V-W-08-C-917

5) Problems or Potential Problems Encountered

None

6) Actual or Planned Resolution of Problems or Potential Problems

None

II. RI/FS Activities (AOC V-W-08-C-917)

1) Progress Made During the Past Month

- Remedial Investigation work is underway on the Group I Parcels as outlined in the SSWP Revision 1, dated October 19, 2012.
- Access agreements have been obtained for Parcels Q and U (ComEd); and Parcel P (American National Bank & Trust). The High Risk Evaluation (HRE) plan for work on the ComEd substation has been approved by ComEd. Investigation of the ComEd parcels is delayed pending ComEd availability to have a spotter on site.
- RI field activities have been conducted on Parcels K, O, P, A and B. Activities included soil probing, soil sample collection and monitoring well installation/development. Parcels Q and U have not been completed at this time but have been scheduled to begin in February 2014 pending ComEd oversight personnel availability.
- Revision 1 for the SSWP for Group II Parcels and Response to Comments was prepared and submitted to USEPA on September 6, 2013. IEPA's comments on the Rev. 1 document were received via email on November 5, 2013. A response will be submitted in early January 2014.
- Soil samples have been submitted to Pace Analytical Services, Inc for analysis as detailed in the SSWP Rev 1.

2) Analytical and Other Testing Results Received

None

3) Project Work Next Month

IBS Actions

- The RI for Group I parcels will continue.
- IBS will provide a response to the comments received from IEPA regarding the SSWP for Group 2 (Rev. 1).

USEPA Actions



■ None.

4) Anticipated Schedule

Deliverable or Milestone	Target Date	Actual Date
Settlement Agreement Signed		October 31, 2008
Project Start Date		December 15, 2011
Monthly Progress Reports	Due the 14 th of Each Month	
Completion Report , Rev. 0	December 15, 2011	December 23, 2012
Pre-Site Specific Scoping Meeting	January 24, 2012	January 24, 2012
Site Specific Work Plan, Rev. 0	March 14, 2012	March 14, 2012
Receive USEPA Comments on SSWP, Rev. 0	May 14, 2012	May 22, 2012
Site Specific Work Plan, Rev. 1	August 5, 2012	August 6, 2012
USEPA Comments on Rev. 1	September 6, 2012	September 4, 2012
Response to Comments, SSWP, Rev. 1	October 19, 2012	October 19, 2012
USEPA Approves SSWP, Rev. 1	November 19, 2012	December 5, 2012
SSWP Addendum #1 (Group II Parcels)	April 5, 2013	April 5, 2013
USEPA/IEPA Comments, SSWP Group II, Rev. 0	May 20, 2013	July 11, 2013
Response to Comments SSWP Group II	September 6, 2013	September 6, 2013
USEPA Comments, SSWP Group II, Rev 1		November 5, 2013
RI/FS (Parcel Group I)	December, 2012 to Sept. 2014	

5) Problems or Potential Problems Encountered

None.

6) Actual or Planned Resolution of Problems or Potential Problems

None.

Mr. Ross del Rosario January 10, 2014 Page 6



Please contact Mr. Naren Prasad of IBS at 312.240.4569 if you should have any questions regarding the content of this progress report.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

John M. Nardozzi, PE Principal Engineer

Timothy B. Norris, PG

Geologist

Attachments:

Attachment No. 1 - Full Scale SUMMA Air Sampling Data - Parcel L

Attachment No. 2 - Full Scale PUF Air Sampling Data - Parcel L

Attachment No. 3 - Post-Excavation Soil Sample Analytical - Parcel L

Attachment No. 4 - Post-Excavation Amendment Soil Sample Analytical - Parcel L

Mr. Doyle Wilson, IEPA (via email) CC:

Mr. Naren Prasad, Integrys (via email)

Mr. Chris Szela, Integrys (via email)

Mr. David Klatt, CH2M Hill (via email)

Ms. Jennifer Hagen, NRT

ILN0000510192

				Sample Date	te/Sample ID/Stat	ion ID/Concentrat	ion (µg/m3)			
	11/25/2013	11/25/2013	11/25/2013	11/25/2013	11/25/2013	11/26/2013	11/26/2013	11/26/2013	11/26/2013	11/26/2013
	131125001	131125002	131125003	131125004	131125005	131126001	131126002	131126003	131126004	131126005
Analyte	FAM01	FAM02	FAM03	FAM05	FAM07	FAM01	FAM02	FAM03	FAM06	FAM07
Benzene	3.5	NA	NA	0.85	0.85	2.4	0.63 J	1.3	0.60 J	1.1
Ethylbenzene	6.8	NA	NA	0.25 J	0.24 J	4.6	1.1	0.77 J	0.48 J	0.41 J
Toluene	2.2	NA	NA	1.5	1.3	1.3 3.1 1.5 6.2 1		1.7	7.1	
Xylene (total)	6.8	NA	NA	0.96	1.4	7.2	5.3	2.7	1.9	0.62 J
Naphthalene	4.3 *	NA	NA	0.70 J*	0.53 J *	1.9 J	0.22 U	0.22 U	0.22 U	0.22 U

- 1) Sampling and analysis was conducted in accordance with EPA method TO-15.
- 2) U Analyte was not detected. The associated value is the detection limit.
- 3) J Result is an estimated value.
- 4) NA Sample was not analyzed because field measurements and laboratory checks indicated the flow controller became obstructed during collection or the final pressure reading indicated the cannister was at ambient pressure.
- 5) * Recovery or Relative Percent Difference exceeds control limits.

ILN0000510192

				Sample Da	te/Sample ID/Stat	ion ID/Concentrat	ion (µg/m3)			
	12/3/2013	12/3/2013	12/3/2013	12/3/2013	12/3/2013	12/5/2013	12/5/2013	12/5/2013	12/5/2013	12/5/2013
	131203001	131203002	131203003	131203004	131203005	05 131205001 1312050		131205003	131205004	131205005
Analyte	FAM01	FAM02	FAM04	FAM06	FAM07	FAM07 FAM02 FAM03 FAM04 FAM07		FAM08		
Benzene	3.7	1.1	1.0	1.3	0.91	2.4	0.92	1.1	0.67 J	0.81
Ethylbenzene	3.6	0.42 J	0.39 J	0.51 J	0.34 J	1.9	0.67 J	0.96	0.27 J	0.22 J
Toluene	2.9	2.1	1.9	2.0	1.8	2.0	2.0 1.2		0.87	1.2
Xylene (total)	3.5	1.9	1.6	1.5	1.3	3.5	1.4	1.2	0.72 J	0.67 J
Naphthalene	0.21 U	0.50 J	0.22 U	0.22 U	0.22 U	0.22 U				

- 1) Sampling and analysis was conducted in accordance with EPA method TO-15.
- 2) U Analyte was not detected. The associated value is the detection limit.
- 3) J Result is an estimated value.
- 4) NA Sample was not analyzed because field measurements and laboratory checks indicated the flow controller became obstructed during collection or the final pressure reading indicated the cannister was at ambient pressure.
- 5) * Recovery or Relative Percent Difference exceeds control limits.

ILN0000510192

				Sample Da	te/Sample ID/Stat	ion ID/Concentrat	ion (µg/m3)			
	12/9/2013	12/9/2013	12/9/2013	12/9/2013	12/9/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013
	131209001	131209002	131209003	131209004	131209005	131212001	131212002	131212003	131212004	131212005
Analyte	FAM02	FAM03	FAM04	FAM08	FAM09	AM09 FAM02 FAM03 FAM04 FAM07		FAM08		
Benzene	1.3	1.1	0.87	0.98	0.83	1.6	NA	1.7	1.6	1.9
Ethylbenzene	0.074 U	0.69 J	0.31 J	0.27 J	0.22 J	0.75 J	NA	0.65 J	0.75 J	0.91 J
Toluene	0.41 J	1.2	0.90	1.2	0.98	2.6	NA	2.7	2.7	4.0
Xylene (total)	0.079 U	1.5	0.89 J	0.89 J	0.74 J	2.1	NA	2.3	2.3	2.7
Naphthalene	0.23 U	0.71 J	0.23 U	0.23 U	0.89 J	1.2 U	NA	1.2 U	1.2 U	1.2 U

- 1) Sampling and analysis was conducted in accordance with EPA method TO-15.
- 2) U Analyte was not detected. The associated value is the detection limit.
- 3) J Result is an estimated value.
- 4) NA Sample was not analyzed because field measurements and laboratory checks indicated the flow controller became obstructed during collection or the final pressure reading indicated the cannister was at ambient pressure.
- 5) * Recovery or Relative Percent Difference exceeds control limits.

ILN0000510192

	Sa	mple Date/Sampl	e ID/Station ID/Co	oncentration (µg/m	n3)	
	12/17/2013	12/17/2013	12/17/2013	12/17/2013	12/17/2013	
	131217001	131217002	131217003	131217004	131217005	
Analyte	FAM01	FAM02				
Benzene	14	3.0	3.4	0.71	0.78	
Ethylbenzene	14	2.8	2.2	0.13 J	0.11 J	
Toluene	5.9	2.5	4.6	0.84	0.71 J	
Xylene (total)	Xylene (total) 12		3.2	0.68 J	0.17 J	
Naphthalene	1.2 U	1.3 J	1.2 U	1.2 U	1.2 U	

- 1) Sampling and analysis was conducted in accordance with EPA method TO-15.
- 2) U Analyte was not detected. The associated value is the detection limit.
- 3) J Result is an estimated value.
- 4) NA Sample was not analyzed because field measurements and laboratory checks indicated the flow controller became obstructed during collection or the final pressure reading indicated the cannister was at ambient pressure.
- 5) * Recovery or Relative Percent Difference exceeds control limits.

ILN0000510192

				Sample Da	te/Sample ID/Stat	ion ID/Concentrat	ion (µg/m3)			
	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013	11/4/2013
	131029006	131029007	131029008	131029009	131029010	131104006	131104007	131104008	131104009	131104010
Analyte	FAM02	FAM03	FAM06	FAM08	FAM09	FAM01 FAM02 FAM04 FAM05		FAM06		
Benzo[a]anthracene	0.0020 U	0.0018 U	0.0021 U	0.0019 U	0.0018 U	0.0019 U	0.0019 U	0.0018 U	0.0019 U	0.0020 U
Benzo[a]pyrene	0.0018 U	0.0017 U	0.0019 U	0.0017 U	0.0016 U	0.0017 U	0.0018 U	0.0017 U	0.0017 U	0.0019 U
Benzo[b]fluoranthene	0.0025 U	0.0024 U	0.0026 U	0.0024 U	0.0023 U	0.0025 U	0.0025 U	0.0023 U	0.0024 U	0.0026 U
Benzo[k]fluoranthene	0.0021 U	0.0019 U	0.0021 U	0.0020 U	0.0019 U	0.0020 U	0.0020 U	0.0019 U	0.0020 U	0.0021 U
Chrysene	0.0025 U	0.0024 U	0.0026 U	0.0024 U	0.0023 U	0.0025 U	0.0025 U	0.0023 U	0.0024 U	0.0026 U
Dibenz(a,h)anthracene	0.0025 U	0.0023 U	0.0026 U	0.0024 U	0.0023 U	0.0024 U	0.0025 U	0.0023 U	0.0024 U	0.0026 U
Indeno[1,2,3-cd]pyrene	0.0024 U	0.0022 U	0.0025 U	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0022 U	0.0023 U	0.0024 U

¹⁾ Sampling and analysis was conducted in accordance with EPA method TO-13A.

²⁾ U - Analyte was not detected. The associated value is the detection limit.

ILN0000510192

				Sample Da	te/Sample ID/Stat	ion ID/Concentrat	ion (µg/m3)			
	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013	11/18/2013
	131112006	131112007	131112008	131112009	131112010	131118006	131118007	131118008	131118009	131118010
Analyte	FAM01	FAM04	FAM05	FAM06	FAM09	FAM02 FAM03 FAM04 FAM07			FAM09	
Benzo[a]anthracene	0.0018 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U 0.0017 U 0.0019 U		0.0018 U	0.0018 U	0.0017 U	0.0017 U
Benzo[a]pyrene	0.0017 U	0.0016 U	0.0016 U	0.0018 U	0.0015 U	0.0017 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U
Benzo[b]fluoranthene	0.0023 U	0.0022 U	0.0022 U	0.0025 U	0.0022 U	0.0025 U	0.0023 U	0.0023 U	0.0022 U	0.0022 U
Benzo[k]fluoranthene	0.0019 U	0.0018 U	0.0018 U	0.0020 U	0.0018 U	0.0020 U	0.0019 U	0.0018 U	0.0018 U	0.0018 U
Chrysene	0.0023 U	0.0022 U	0.0022 U	0.0025 U	0.0022 U	0.0025 U	0.0023 U	0.0023 U	0.0022 U	0.0022 U
Dibenz(a,h)anthracene	0.0023 U	0.0022 U	0.0022 U	0.0025 U	0.0022 U	0.0024 U	0.0023 U	0.0022 U	0.0022 U	0.0022 U
Indeno[1,2,3-cd]pyrene	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0020 U	0.0023 U	0.0022 U	0.0021 U	0.0021 U	0.0021 U

¹⁾ Sampling and analysis was conducted in accordance with EPA method TO-13A.

²⁾ U - Analyte was not detected. The associated value is the detection limit.

ILN0000510192

								Constituer	t/Screening	Level/Resu	lt [miligram	per kilogra	m (mg/kg)]		
		Sample	Sample	Date	Below Post- Excavation Sampling	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	3 & 4 Methylphenol	Acenaphthene	Acenaphthylene	Anthracene	Benzene
Client Project	Sample ID	Location	Depth (ft bgs)	Collected	Criteria	146	70.6	4678							870
2037 Crawford	131203012	L-EB-116	14	12/3/2013	Υ	0.069 J	0.019 J	< 0.14	0.13 J	< 0.061	< 0.063	0.013 J	0.032 J	0.022 J	0.023
2037 Crawford	131203013	L-EB-116	14	12/3/2013	Υ	0.077 J	0.025 J	< 0.14	0.12 J	< 0.059	< 0.061	0.013 J	0.025 J	0.013 J	0.025
2037 Crawford	131203014	L-EB-117	14	12/3/2013	Υ	0.043 J	< 0.011	< 0.14	2.4	< 0.061	< 0.063	0.72	0.99	0.63	0.015
2037 Crawford	131205006	L-EB-118	16	12/5/2013	Υ	0.044 J	< 0.0095	< 0.14	0.095 J	< 0.059	< 0.061	< 0.0066	< 0.0048	< 0.0061	< 0.0034
2037 Crawford	131205007	L-EB-119	16	12/5/2013	Υ	0.35	0.12	< 0.14	0.085 J	< 0.058	< 0.061	0.011 J	0.028 J	0.017 J	< 0.0036
2037 Crawford	131205008	L-EB-120	16	12/5/2013	Υ	< 0.00053	< 0.00061	< 0.14	< 0.060	< 0.061	< 0.063	< 0.0068	< 0.0050	< 0.0064	< 0.00063
2037 Crawford	131206001	L-EB-121	16	12/6/2013	Υ	< 0.00060	< 0.00068	< 0.15	0.084 J	< 0.063	< 0.066	0.016 J	< 0.0052	0.014 J	< 0.00071
2037 Crawford	131213001	L-EB-122	16	12/13/2013	Υ	< 0.00075	< 0.00085	< 0.15	0.086 J	< 0.061	< 0.064	0.019 J	< 0.0050	< 0.0064	< 0.00089
2037 Crawford	131213002	L-EB-123	16	12/13/2013	Υ	< 0.00051	< 0.00058	< 0.15	0.11 J	< 0.062	< 0.065	0.023 J	0.027 J	0.024 J	< 0.00061
2037 Crawford	131220001	L-EB-124	14	12/20/2013	Υ	0.039	0.0095	< 0.72	0.70 J	< 0.31	< 0.32	0.094 J	0.18 J	0.29	0.0030 J
2037 Crawford	131220002	L-EB-125	16	12/20/2013	Υ	< 0.00050	< 0.00058	< 0.15	0.18 J	< 0.062	< 0.065	0.034 J	0.041	0.039	< 0.00060
2037 Crawford	131220003	L-EB-126	16	12/20/2013	Υ	< 0.00057	< 0.00065	< 0.16	0.50	< 0.066	< 0.068	0.37	0.11	0.11	< 0.00068

- 1) Samples L-EB-22 and L-EB-23 exceeded the site-specfiic TPH value and will be further excavated at a future date.
- 2) ft bgs feet below ground surface
- 3) -- No screening level for this analyte.
- 4) J Result is an estimated value.
- 5) * Lab control sample or lab control sample duplicate exceeds the control limits
- 6) † Total Petroleum Hydrocarbons (TPH) is the sum of Diesel Range Organics and Gasoline Range Organics. If either parameter was not detected, half of the detection limit was used for the sum.
- 7) V Serial Dilution exceeded the control limits.
- 8) B Compound was found in the blank and sample.
- 9) NA Not Analyzed
- 10) ^ Instrument related QC exceeds the control limits.

ILN0000510192

						Constituent/Screening Level/Result (mg/kg)									
		Sample	Sample	Date	Below Post- Excavation Sampling	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Ethylbenzene
Client Project	Sample ID	Location	Depth (ft bgs)	Collected	Criteria										400
2037 Crawford	131203012	L-EB-116	14	12/3/2013	Υ	0.020 J	0.014 J	0.020 J	0.021 J	0.011 J	< 0.097	0.030 J	0.0085 J	< 0.044	0.066
2037 Crawford	131203013	L-EB-116	14	12/3/2013	Υ	0.024 J	0.015 J	0.020 J	0.018 J	0.012 J	< 0.094	0.030 J	< 0.0071	< 0.043	0.075
2037 Crawford	131203014	L-EB-117	14	12/3/2013	Υ	0.45	0.34	0.27	0.17	0.14	< 0.098	0.49	0.064	0.11 J	0.13
2037 Crawford	131205006	L-EB-118	16	12/5/2013	Υ	< 0.0049	< 0.0071	0.0088 J	< 0.012	< 0.011	< 0.094 *	0.012 J	< 0.0071	< 0.043	0.014
2037 Crawford	131205007	L-EB-119	16	12/5/2013	Υ	0.050	0.040	0.033 J	0.024 J	0.015 J	< 0.094 *	0.048	< 0.0070	< 0.043	0.22
2037 Crawford	131205008	L-EB-120	16	12/5/2013	Υ	< 0.0051	< 0.0074	< 0.0082	< 0.012	< 0.011	< 0.098 *	< 0.010	< 0.0074	< 0.045	< 0.00093
2037 Crawford	131206001	L-EB-121	16	12/6/2013	Υ	0.0088 J	0.012 J	< 0.0085	0.023 J	< 0.012	< 0.10	0.021 J	< 0.0076	< 0.046	< 0.0010
2037 Crawford	131213001	L-EB-122	16	12/13/2013	Υ	0.031 J	0.028 J	0.039	0.032 J	0.016 J	< 0.099	0.048	< 0.0074	< 0.045	< 0.0013
2037 Crawford	131213002	L-EB-123	16	12/13/2013	Υ	0.025 J	0.019 J	0.020 J	0.022 J	< 0.011	< 0.10	0.036 J	< 0.0075	< 0.045	< 0.00089
2037 Crawford	131220001	L-EB-124	14	12/20/2013	Υ	0.19	0.11 J	0.082 J	< 0.061	< 0.056	< 0.49	0.15 J	< 0.037	< 0.22	0.032
2037 Crawford	131220002	L-EB-125	16	12/20/2013	Υ	0.048	0.027 J	0.024 J	< 0.013	< 0.011	< 0.10	0.048	< 0.0075	< 0.046	< 0.00089
2037 Crawford	131220003	L-EB-126	16	12/20/2013	Υ	0.17	0.14	0.11	0.069	0.027 J	< 0.11	0.14	0.0097 J	< 0.048	< 0.0010

- 1) Samples L-EB-22 and L-EB-23 exceeded the site-specfiic TPH value and will be further excavated at a future date.
- 2) ft bgs feet below ground surface
- 3) -- No screening level for this analyte.
- 4) J Result is an estimated value.
- 5) * Lab control sample or lab control sample duplicate exceeds the control limits
- 6) † Total Petroleum Hydrocarbons (TPH) is the sum of Diesel Range Organics and Gasoline Range Organics. If either parameter was not detected, half of the detection limit was used for the sum.
- 7) V Serial Dilution exceeded the control limits.
- 8) B Compound was found in the blank and sample.
- 9) NA Not Analyzed
- 10) ^ Instrument related QC exceeds the control limits.

ILN0000510192

						Constituent/Screening Level/Result (mg/kg)									
		Sample	Sample	Date	Below Post- Excavation Sampling	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	m&p-Xylene	Naphthalene	o-Xylene	Phenanthrene	Phenol	Pyrene	Toluene
Client Project	Sample ID	Location	Depth (ft bgs)	Collected	Criteria										650
2037 Crawford	131203012	L-EB-116	14	12/3/2013	Υ	0.025 J	0.036 J	0.011 J	0.047	0.15	0.034	0.15	< 0.084	0.047	0.013
2037 Crawford	131203013	L-EB-116	14	12/3/2013	Υ	0.020 J	0.023 J	0.010 J	0.059	1.1	0.042	0.11	< 0.081	0.038	0.016
2037 Crawford	131203014	L-EB-117	14	12/3/2013	Υ	0.86	0.99	0.095	0.096	3.9	0.082	2.6	< 0.084	1.5	0.026
2037 Crawford	131205006	L-EB-118	16	12/5/2013	Υ	< 0.0068	< 0.0051	< 0.0095	0.030	0.027 J	0.015	0.048	< 0.081	0.0093 J	< 0.0053
2037 Crawford	131205007	L-EB-119	16	12/5/2013	Υ	0.054	0.024 J	0.013 J	0.091	0.080	0.094	0.11	< 0.081	0.071	0.017
2037 Crawford	131205008	L-EB-120	16	12/5/2013	Υ	< 0.0071	< 0.0053	< 0.0099	< 0.0011	0.0086 J	< 0.00042	0.031 J	< 0.085	0.0082 J	< 0.00065
2037 Crawford	131206001	L-EB-121	16	12/6/2013	Υ	0.021 J	0.015 J	< 0.010	< 0.0013	0.082	< 0.00047	0.087	< 0.087	0.042	< 0.00073
2037 Crawford	131213001	L-EB-122	16	12/13/2013	Υ	0.044	0.014 J	0.017 J	< 0.0016	0.10	< 0.00059	0.099	< 0.085	0.089	< 0.00091
2037 Crawford	131213002	L-EB-123	16	12/13/2013	Υ	0.044	0.039	< 0.010	< 0.0011	0.17	< 0.00040	0.18	< 0.086	0.096	< 0.00062
2037 Crawford	131220001	L-EB-124	14	12/20/2013	Υ	0.26	0.26	< 0.049	0.027	0.89	0.026	1.2	< 0.42	0.53	0.0074
2037 Crawford	131220002	L-EB-125	16	12/20/2013	Υ	0.061	0.046	< 0.010	< 0.0011	0.17	< 0.00040	0.28	< 0.086	0.12	< 0.00061
2037 Crawford	131220003	L-EB-126	16	12/20/2013	Υ	0.28	0.22	0.032 J	< 0.0012	0.63	< 0.00045	1.0	0.12 J	0.97	< 0.00069

- 1) Samples L-EB-22 and L-EB-23 exceeded the site-specfiic TPH value and will be further excavated at a future date.
- 2) ft bgs feet below ground surface
- 3) -- No screening level for this analyte.
- 4) J Result is an estimated value.
- 5) * Lab control sample or lab control sample duplicate exceeds the control limits
- 6) † Total Petroleum Hydrocarbons (TPH) is the sum of Diesel Range Organics and Gasoline Range Organics. If either parameter was not detected, half of the detection limit was used for the sum.
- 7) V Serial Dilution exceeded the control limits.
- 8) B Compound was found in the blank and sample.
- 9) NA Not Analyzed
- 10) ^ Instrument related QC exceeds the control limits.

ILN0000510192

						Constituent/Screening Level/Result (mg/kg)									
		Sample	Sample	Date	Below Post- Excavation Sampling	Xylenes, Total	Diesel Range Organics [C10-C28]	Gasoline Range Organics (C6-C9)	Total Petroleum Hydrocarbons†	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium
Client Project	Sample ID	Location	Depth (ft bgs)	Collected	Criteria	320			2000						
2037 Crawford	131203012	L-EB-116	14	12/3/2013	Υ	0.081	180	7.3	187.3	11000 B	< 0.90	8.7	44	0.46 B	18 B
2037 Crawford	131203013	L-EB-116	14	12/3/2013	Υ	0.10	200	12	212	11000 B	< 0.77	8.1	40	0.46 B	18 B
2037 Crawford	131203014	L-EB-117	14	12/3/2013	Υ	0.18	200	4.0	204	13000 B	< 0.90	10	50	0.56 B	22 B
2037 Crawford	131205006	L-EB-118	16	12/5/2013	Υ	0.045	160	14	174	6700	< 0.81	6.3	23	0.20 B	12
2037 Crawford	131205007	L-EB-119	16	12/5/2013	Υ	0.18	56	14	70	10000	< 0.85	7.5	36	0.24 B	17
2037 Crawford	131205008	L-EB-120	16	12/5/2013	Υ	< 0.00042	83	19	102	7000	< 0.85	4.3	28	0.14 J B	12
2037 Crawford	131206001	L-EB-121	16	12/6/2013	Υ	< 0.00047	130	9.7	139.7	11000	< 0.89	6.8	44	< 0.028	19 V B
2037 Crawford	131213001	L-EB-122	16	12/13/2013	Υ	< 0.00059	180	4.7	184.7	7200	< 0.87	10	35	0.38 B	14
2037 Crawford	131213002	L-EB-123	16	12/13/2013	Υ	< 0.00040	120	7.9	127.9	6100	< 0.84	4.6	22	0.15 J B	12
2037 Crawford	131220001	L-EB-124	14	12/20/2013	Υ	0.053	170	10	180	9500 B	< 0.81	6.2	34	0.28 B	16
2037 Crawford	131220002	L-EB-125	16	12/20/2013	Υ	< 0.00040	160	12	172	9000 B	< 0.87	11	39	0.26 B	15
2037 Crawford	131220003	L-EB-126	16	12/20/2013	Υ	< 0.00045	170	4.1	174.1	9200 B	< 0.96	5.5	34	0.19 J B	15

- 1) Samples L-EB-22 and L-EB-23 exceeded the site-specfiic TPH value and will be further excavated at a future date.
- 2) ft bgs feet below ground surface
- 3) -- No screening level for this analyte.
- 4) J Result is an estimated value.
- 5) * Lab control sample or lab control sample duplicate exceeds the control limits
- 6) † Total Petroleum Hydrocarbons (TPH) is the sum of Diesel Range Organics and Gasoline Range Organics. If either parameter was not detected, half of the detection limit was used for the sum.
- 7) V Serial Dilution exceeded the control limits.
- 8) B Compound was found in the blank and sample.
- 9) NA Not Analyzed
- 10) ^ Instrument related QC exceeds the control limits.

ILN0000510192

						Constituent/Screening Level/Result (mg/kg)											
		Sample	Sample	Date	Below Post- Excavation Sampling	Copper	Cyanide, Total	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Client Project	Sample ID	Location	Depth (ft bgs)	Collected	Criteria												
2037 Crawford	131203012	L-EB-116	14	12/3/2013	Υ	25	< 0.16	18000	13	350	0.019	27 V	< 0.40	0.046 J B	< 0.47	24 B V	44 B V
2037 Crawford	131203013	L-EB-116	14	12/3/2013	Υ	27	< 0.18	18000	13	360	0.027	29	< 0.34	0.072 J B	< 0.41	24 B	45 B
2037 Crawford	131203014	L-EB-117	14	12/3/2013	Υ	27	< 0.18	24000	14	370	0.024	29	< 0.40	0.049 J B	< 0.47	28 B	72 B
2037 Crawford	131205006	L-EB-118	16	12/5/2013	Υ	17	< 0.19	13000	9.6	250	0.024	22	0.38 J	< 0.036	< 0.42	13	40 B
2037 Crawford	131205007	L-EB-119	16	12/5/2013	Υ	23	< 0.16	19000	16	320	0.021	31	< 0.38	< 0.038	0.54 J	19	57 B
2037 Crawford	131205008	L-EB-120	16	12/5/2013	Υ	14	< 0.19	12000	7.5	200	0.020	19	< 0.37	< 0.038	< 0.45	13	30 B
2037 Crawford	131206001	L-EB-121	16	12/6/2013	Υ	24	< 0.18	20000 V	12 V B	340 V	0.024	28 V	0.70 J	< 0.040	< 0.47	24 V	47 V
2037 Crawford	131213001	L-EB-122	16	12/13/2013	Υ	25	< 0.16	18000	12	370	0.022	20	0.54 J	< 0.039	< 0.46	18	34
2037 Crawford	131213002	L-EB-123	16	12/13/2013	Υ	15	< 0.16	12000	7	220	0.025	16	0.57 J	< 0.038	< 0.44	13	44
2037 Crawford	131220001	L-EB-124	14	12/20/2013	Υ	21	< 0.17	17000	12	300	0.023	29	0.54 J B	< 0.036	< 0.42	19	67
2037 Crawford	131220002	L-EB-125	16	12/20/2013	Υ	29	< 0.17	20000	16	330	0.024	32	0.95 J B	< 0.039	0.67 J	19	55
2037 Crawford	131220003	L-EB-126	16	12/20/2013	Υ	16	< 0.18	18000	9.5	260	0.019	24	0.72 J B	< 0.043	< 0.50	18	40

- 1) Samples L-EB-22 and L-EB-23 exceeded the site-specfiic TPH value and will be further excavated at a future date.
- 2) ft bgs feet below ground surface
- 3) -- No screening level for this analyte.
- 4) J Result is an estimated value.
- 5) * Lab control sample or lab control sample duplicate exceeds the control limits
- 6) † Total Petroleum Hydrocarbons (TPH) is the sum of Diesel Range Organics and Gasoline Range Organics. If either parameter was not detected, half of the detection limit was used for the sum.
- 7) V Serial Dilution exceeded the control limits.
- 8) B Compound was found in the blank and sample.
- 9) NA Not Analyzed
- 10) ^ Instrument related QC exceeds the control limits.

ILN0000510192

Client Project	Sample ID	Sample Location	Sample Depth (ft bgs)	Date Collected	Below Post- Excavation Sampling Criteria	0 Benzene
2037 Crawford	131205009	L-PST-5		12/5/2013	N ²	33
2037 Crawford	131205010	L-PST-6		12/5/2013	N ³	49
2037 Crawford	131211001	L-PST-7		12/11/2013	Υ	< 0.00078
2037 Crawford	131211002	L-PST-8		12/11/2013	Υ	0.39

- 1) mg/kg miligrams per kilogram
- 2) Sample was further amended and resampled as L-PST-7
- 3) Sample was further amended and resampled as L-PST-8