



ARKANSAS  
Department of Environmental Quality

April 30, 2013

Patrick Kellam, Environmental Manager  
Nabors Completion and Production Services Co.  
350 High Street  
Bradford, PA 16701

**RE: Compliance Inspection (Crawford County)**  
**AFIN: 17-00056 NPDES Permit No.: ARR000825**

Dear Mr. Kellam:

On April 5, 2013, I performed a routine Industrial Stormwater compliance inspection of your facility in accordance with the provisions of the Federal Clean Water Act, the Arkansas Water and Air Pollution Control Act, and the regulations promulgated thereunder. This inspection revealed the following violations:

1. During the inspection, four additional outfalls were noted, two on the east side of the property and two on the south. Currently the facility is not authorized to discharge from these locations. **This is a violation of Part 1.6 of the permit (Photos #1 through #6).**
2. Samples were not collected during the January to June 2012 monitoring period. **This is a violation of Part 3.5 of the permit.**
3. Samples for Outfall #1 were not being collected from the monitoring point specified in the NOI. Samples for 2012 were collected near a drainage pipe by the concrete pad adjacent to the maintenance shop building. **This is a violation of Part 3.6 of the permit (Photo #5).**
4. A Corrective Action Plan was not implemented for the benchmark exceedance of Total Suspended Solids (TSS) of 226 mg/L for the July to December 2011 monitoring period. **This is violation of Part 3.11.2 of the permit.**
5. The annual report for 2012 was not submitted to ADEQ by January 31, 2013. **This is a violation of Part 3.12.3.b of the permit.**
6. The pH was not analyzed within 15 minutes of the time of the sample collection. **This is a violation of Part 3.7.2.d of the permit.**
7. The SWPPP does not contain the updated facility name and NAICS code. **This is a violation of Part 4.6.1 of the permit.**
8. The facility site map does not contain the size of the property in acres. **This is a violation of Part 4.6.4.a of the permit.**

9. A drainage pipe running from the concrete slab by the maintenance shop building to the property line is not shown on the site map. **This is a violation of Part 4.6.4.f of the permit (Photos #5 and #6).**
10. The SWPPP does not include a section on risk identification and summary of potential pollutant sources. **This is a violation of Part 4.6.5.5 of the permit.**
11. The SWPPP does not include a description of the best management practices (BMPs) that are used by the facility to eliminate or reduce the potential to contaminate stormwater. **This is a violation of Part 4.6.6.1 of the permit.**
12. The SWPPP does not include a discussion on minimizing exposure. **This is a violation of Part 4.6.6.2 of the permit.**
13. Evidence of past spills was observed on the south side of the property along the fence line. This area had not been cleaned. **This is a violation of Part 4.6.6.5 of the permit (Photos #5 and #6).**
14. The SWPPP does not contain a narrative on the management of run-on and runoff. **This is a violation of Part 4.6.6.8 of the permit.**
15. A comprehensive site compliance evaluation was not completed for 2012. **This is a violation of Part 4.6.10.2 of the permit.**

Please submit a written response to these findings to the Water Division Inspection Branch of this Department. This response should be mailed to the address at the bottom of the first page of the letter or emailed to [Water-Inspection-report@adeq.state.ar.us](mailto:Water-Inspection-report@adeq.state.ar.us). This response should contain documentation describing the course of action taken to correct each item noted. This corrective action should be completed as soon as possible, and the written response with all necessary documentation (i.e. photos) is due by **May 15, 2013**

If I can be of any assistance, please contact me at 479-424-0331 or [Coats@adeq.state.ar.us](mailto:Coats@adeq.state.ar.us).

Sincerely,



Angela Coats  
Oil & Gas Field Inspector  
Water Division

cc: Heath Davis, Environmental Coordinator, [Dorian.Davis@nabors.com](mailto:Dorian.Davis@nabors.com)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

# NPDES Compliance Inspection Report

Form Approved  
OMB No. 2040-0003

## Section A: National Data System Coding

Transaction Code	NPDES	Yr/Mo/Day	Inspec. Type	Inspector	Fac. Type
1 N 2 5 3 A R R 0 0 0 8 2 5 11 12 1 3 0 4 0 5 17 18 C 19 S 20 2					
Remarks					
A F I N 1 7 - 0 0 0 5 6 F R A N K L I N C O					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70	71 N	72 N	73	74 75 80

## Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) <b>Nabors Completion and Production Services Co. 2802 Kibler Road Van Buren, AR 72956</b>	Entry Time/Date <b>1330 / April 5, 2013</b>	Permit Effective Date <b>November 28, 2011</b>
	Exit Time/Date <b>1500 / April 5, 2013</b>	Permit Expiration Date <b>June 30, 2014</b>
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) <b>David Rose / Iron Supervisor Jeremy Mauldin / Materials Supervisor Phone: 479-471-7467</b>	Other Facility Data	
Name, Address of Responsible Official/Title/Phone and Fax Number <b>Michael J. Seyman, Vice President of Operations 350 High Street Bradford, PA 16701 Phone: 814-368-6228 Fax: 814-368-6231</b>	Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

## Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

U	Permit	N	Flow Measurement	N	Operations & Maintenance	U	Sampling
M	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	M	Pollution Prevention
M	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
N	Effluent/Receiving Waters	N	Laboratory	N	Storm Water	N	Other:

## Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

**Permit** - Four additional outfalls were noted, two on the east side of the property and two on the south.  
**Pollution Prevention** - The SWPPP needs to be updated to include all required items. The comprehensive site compliance evaluation was not conducted for 2012.  
**Sampling** - Samples were not collected during the January - June 2012 monitoring period. Samples were not being collected from the location specified in the NOI or SWPPP. Samples were collected from an unpermitted area not representative of the entire facility. Samples for 2012 were collected by a drainage pipe by the concrete pad adjacent to the maintenance shop building at approximately 35.43512, -94.328412. The permitted outfall was not being monitored. The pH was not analyzed within 15 minutes of the time of the sample collection.  
**Records/Reports** - A corrective action plan for TSS was not created.  
**Facility Site Review** - Evidence of past spills was observed on the south side of the property along the fence line. This area had not been cleaned. One area of un-stabilized ground was noted during the inspection. This area was where the 2011 samples had been collected. The area should be stabilized to prevent any sediment from entering waters of the State.

PDS #071335

Name(s) and Signature(s) of Inspector(s) <i>Angela Coats</i> Angela Coats	Agency/Office/Telephone/Fax Arkansas Department of Environmental Quality / Fort Smith Phone 479-424-0331 / Fax 479-424-0330	Date April 23, 2013
Signature of Reviewer <i>Kerri McCabe</i> Kerri McCabe	Agency/Office/Phone and Fax Numbers ADEQ / NLR / 501-682-0642	Date April 30, 2013

### Inspection Form Legend:

**S = Satisfactory, M = Marginal, U = Unsatisfactory, Y = Yes, N = No, NI = Not Implemented, NA = Not Applicable, NE = Not Evaluated –**

*If Y and a NI are check it means it is in the SWPPP but not implemented in the field which is a violation.*

<b>SECTION A: PERMIT VERIFICATION</b>	
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. ALL DISCHARGES ARE PERMITTED:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>Comments:</b> Facility was originally permitted under "Superior Well Services, Inc." Four additional outfalls were noted, two on the east side of the property and two on the south. Sampling from the permitted outfall location was not occurring.	
<b>SECTION B: STORM WATER POLLUTION PREVENTION PLAN EVALUATION</b>	
PERMITTEE SWPPP MEETS PERMIT REQUIRMENTS	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
1. Is the SWPPP available for review by ADEQ? (Part 4.2)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
2. Does the SWPPP contain facility name, general permit tracking number, facility physical address, and SIC and NAICS codes? (Part 4.6.1)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>3. Pollution Prevention Team</b>	
A. Does the SWPPP identify specific individuals or positions?(Part 4.6.2)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
B. Does the SWPPP outline the responsibilities of each member of the Pollution Prevention Team? (Part 4.6.2)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
4. Does the SWPPP contain a facility description (process diagram, general layout, storage of raw materials, the flow of goods and materials through the facility and seasonal variations)? (Part 4.6.3)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>5. Does the facility site map contain the following items?</b>	
A) The size of the property in acres? (Part 4.6.4.a)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
B) The location and extent of significant structures and impervious surfaces? (Part 4.6.4.b)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
C) The direction of stormwater flow using arrows? (Part 4.6.4.c)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
D) The locations of all existing structural control measures? (Part 4.6.4.d)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
E) The locations of all receiving waters in the immediate vicinity of the facility? (Part 4.6.4.e)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
F) The locations of all stormwater conveyances including ditches, pipes, and swales? (Part 4.6.4.f)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
G) The locations of potential pollutant sources? (Part 4.6.4.g)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
H) The locations of all stormwater monitoring points? (Part 4.6.4.h)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
I) The locations of stormwater inlets and outfalls with unique identification code for each outfall with indications if one or more outfall is being treated as "substantially identical" and an approximate outline of the areas draining to each outfall? (Part 4.6.4.i)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
J) Where the stormwater discharges to municipal separate storm sewer system (MS4), if applicable? (Part 4.6.4.j)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
K) The locations and descriptions of all non-stormwater discharges identified in the SWPPP? (Part 4.6.4.k)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
L) The locations of the following activities if they are exposed to precipitation? (Part 4.6.4.l)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Fueling Stations	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
Vehicle and equipment maintenance and/or cleaning areas	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Loading and unloading areas	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Locations used for the treatment, storage, or disposal of waste	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
Liquid storage tanks	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Processing and storage areas	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Transfer areas for substances in bulk	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
Machinery	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
M) The locations and sources of run-on to the site from adjacent property that contains significant quantities of pollutants? (Part 4.6.4.m)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
<b>6. A description of potential pollutant sources</b>	



A) An inventory of industrial activities which have been or may potentially be sources of significant amounts of pollutants? (Part 4.6.5.1)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
B) An inventory of all types of materials handled at the site that might potentially be exposed to precipitation? (Part 4.6.5.2)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
C) A list of significant spills and significant leaks of toxic or hazardous pollutants that have occurred in areas exposed to precipitation or drained to a stormwater conveyance for three years prior to the effective date of the permit. (Part 4.6.5.3)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
D) A summary of existing discharge sampling data (Part 4.6.5.4)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
E) Risk Identification and Summary of Potential Pollutant Sources (Part 4.6.5.5)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>7. Measures and Controls –SWPPP must describe how these are used.</b>	
A) Best Management Practices (BMPs) (Part 4.6.6.1)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
B) Exposure Minimization (Part 4.6.6.2)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
C) Good Housekeeping (Part 4.6.6.3)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
D) Preventative Maintenance (Part 4.6.6.4)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
E) Spill Prevention and Response Procedures (Part 4.6.6.5)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
F) Employee Training Procedures (Part 4.6.6.6)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
G) Erosion and Sediment Control (Part 4.6.6.7)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
H) Management of Run-on and Runoff (Part 4.6.6.8)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
I) Additional Requirements for Salt Storage (Part 4.6.6.9)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
8. Authorized Non-stormwater Discharges (Part 4.6.7) – list must be in SWPPP	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
<b>9. Evaluations and Inspections (Part 4.6.10)</b>	
A) Visual Site Inspections (minimum 4/year) (Part 4.6.10.1)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
At least one visual inspection conducted during a rain event	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
Inspections recorded and include: date of inspection, person doing inspection; major observations, and corrective actions required.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
B) Comprehensive Site Compliance Evaluation (Annual) (Part 4.6.10.2)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>Comments:</b> SWPPP does not contain NAICS code and still refers to the facility as Superior Well Services, Inc. The Stormwater Pollution Prevention Team has listed an individual no longer in that position. This list needs to be updated. A drainage pipe running from the concrete slab by the maintenance shop building to the property line is not shown on the site map.	
<b>SECTION C: MONITORING</b>	
<b>PERMITTEE MONITORING MEETS PERMIT REQUIREMENTS</b>	
<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
<b>1. Is the facility one of the four Effluent Guideline Facilities in the Permit? (Cement MFG, Fertilizer MFG, Steam Electric coal pile, or Paving and Roofing Materials)(Part 3.1.1)</b>	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE	
A) Are all outfalls from the regulated process being sampled? (Part 3.1.3)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
B) If coal pile run off is monitored, are all other stormwater flows excluded? (Part 3.1.1)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
<b>2 Which of the monitoring categories is this facility subject to: (Part 3.3)</b>	
A) Are samples being collected for each semi-annual monitoring period (Part 3.5)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
B) Are samples being collected from the location specified in the NOI and SWPPP (Part 3.6)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
C) Has the permittee determined that some of the outfalls are similar? (Part 3.7.1)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Are the conditions on the ground still the same as documented for the similar outfalls (Part 3.7.1)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
D) Are all parameters for the monitoring category being sampled and analyzed? (Part 3.7.2)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
E) Were the samples collected during a measurable storm event? (Part 3.7.2.b)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
F) Were the samples properly preserved and analyzed? (Part 3.7.2)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
G) Are the sample locations suitable for the collection of a representative sample? (Part 3.3)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>3. Has any of the monitoring revealed an exceedance of the benchmark values for this facility?(Part 3.11.2)</b>	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE	
A) Has a process to develop a corrective action plan been started within 30 days of exceedances? (Part 3.11.2)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
B) If four monitoring periods have passed without an exceedance of a benchmark value, has the permittee requested a reduction in monitoring? (Part 3.11.1)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
<b>Comments:</b> Samples were not collected during the January – June 2012 monitoring period. Samples were not being collected from the location specified in the NOI or SWPPP. Samples were collected from an unpermitted area not representative of the entire facility. Samples for 2012 were collected by a drainage pipe by the concrete pad adjacent to the	

maintenance shop building at approximately 35.43512, -94.328412. The permitted outfall was not being monitored. The pH was not analyzed within 15 minutes of the time of the sample collection.

#### SECTION D: RECORD KEEPING AND REPORTING

PERMITTEE RECORD KEEPING AND REPORTING MEETS PERMIT REQUIREMENTS	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
1. Have DMRs for the previous year of monitoring been submitted to ADEQ and is a copy in the file? (Part 3.12.3.a)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Are the DMRs properly completed?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
Does the permittee have copies of lab reports and chain of custody records?	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
Are the appropriate records of the measureable storm event and sampling being kept? (Part 3.7.2.e)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
2. Has a copy of the annual comprehensive evaluation been submitted to the agency and is a copy on file? (Part 3.12.3.b)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
3. Is permittee keeping copies of inspections and corrective actions on file? (Part 4.6.10.1)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
4. Are copies of training records being kept on file? (Part 4.6.6.6)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input checked="" type="checkbox"/> NE
5. Is there a list of significant spills and leaks being maintained? (Part 4.6.5.3)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE

**Comments:** A corrective action plan has not been implemented and kept on file.

#### SECTION E: FACILITY TOUR

PERMITTEE FACILITY TOUR MEETS PERMIT REQUIREMENTS	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
1. Any evidence of spills or leaks that have not been properly cleaned up as required by the SWPPP?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
2. Any evidence of erosion or un-stabilized ground?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
3. Any controls, structures, or storage areas that are not as identified in the SWPPP?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
4. Any non-stormwater discharges <u>not</u> identified in the SWPPP? (see Part 1.7 of permit for list of allowable non-stormwater discharges)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
5. Any non-stormwater discharges that are not allowed under this permit? (see Part 1.7 of permit for list of allowable non-stormwater discharges)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE
6. Are BMPs being properly operated and maintained? (Part 6.1)	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NI <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
7. Are housekeeping procedures being implemented and are they sufficient?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NI <input type="checkbox"/> NA <input type="checkbox"/> NE

**Comments:** Evidence of past spills was observed on the south side of the property along the fence line. This area had not been cleaned. One area of un-stabilized ground was noted during the inspection. This area was where the 2011 samples had been collected. The area should be stabilized to prevent any sediment from entering waters of the State.

**Water Division NPDES Photographic Evidence Sheet**

**Location:** Nabors Completion and Production Services Co.; located at 2802 Kibler Road, Van Buren, AR

**Photographer:** Angela Coats      **Witness:** None

**Photo #** 1    **Of** 8      **Date:** 4/5/13      **Time:** 1336

**Description:** Outfalls noted on the east side of the facility (view to northeast).



**Photographer:** Angela Coats      **Witness:** None

**Photo #** 2    **Of** 8      **Date:** 4/5/13      **Time:** 1338

**Description:** Outfalls noted on the east side of the facility (view to southeast).





**Water Division NPDES Photographic Evidence Sheet**

**Location:** Nabors Completion and Production Services Co.; located at 2802 Kibler Road, Van Buren, AR

**Photographer:** Angela Coats      **Witness:** None

**Photo #** 3    **Of** 8      **Date:** 4/5/13    **Time:** 1348

**Description:** Outfall on facility's south fence line (view to south).



**Photographer:** Angela Coats      **Witness:** None

**Photo #** 4    **Of** 8      **Date:** 4/5/13    **Time:** 1348

**Description:** Outfall on facility's south fence line (view to north).



**Water Division NPDES Photographic Evidence Sheet**

**Location:** Nabors Completion and Production Services Co.; located at 2802 Kibler Road, Van Buren, AR

**Photographer:** Angela Coats      **Witness:** None

**Photo #**    5    **Of**    8      **Date:**    4/5/13      **Time:**    1350

**Description:** Location of where the 2012 samples were taken. Drainage pipe to bottom right discharges at the fence line. Sampling from this area is not representative of the entire facility's stormwater runoff.



**Photographer:** Angela Coats      **Witness:** None

**Photo #**    6    **Of**    8      **Date:**    4/5/13      **Time:**    1348

**Description:** Discharge from pipe that originates by concrete slab in previous photo. This discharge is not permitted.





**Water Division NPDES Photographic Evidence Sheet**

**Location:** Nabors Completion and Production Services Co.; located at 2802 Kibler Road, Van Buren, AR

**Photographer:** Angela Coats      **Witness:** None

**Photo #** 7    **Of** 8      **Date:** 4/5/13    **Time:** 1345

**Description:** Evidence of a past spill not cleaned along the south fence line.



**Photographer:** Angela Coats      **Witness:** None

**Photo #** 8    **Of** 8      **Date:** 4/5/13    **Time:** 1345

**Description:** Closer view of the stained ground along the fence line.



## Oil & Gas Violation Summary Sheet

- No Violations Noted
- Placing Waste
- Permitting Issues
- Spills & Leaks
- Turbidity, Sedimentation, etc. (Regulation #2 Violations)
- Stormwater &/or Erosion Issues
- Notification/Reporting Violations
- Unpermitted Discharges
- Record Keeping/Paperwork Violations
- Trash/Unauthorized Fluids in Pits
- Improper Closure of Pit
- Insufficient Freeboard
- Poor Pit Construction
- Other (Describe):

## Schaeffer, Karla

---

**From:** McCabe, Kerri  
**Sent:** Thursday, May 16, 2013 10:29 AM  
**To:** Schaeffer, Karla  
**Cc:** Coats, Angela  
**Subject:** FW: 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

Karla,

When you get back, please add this to PDS# 071335/ WID 11236. I've adjusted Angela's Tracker to extend the date. Thank you!

### Kerri McCabe

ADEQ—North Little Rock Office  
Water Division  
Field Services Branch  
Inspector Supervisor

[mccabe@adeq.state.ar.us](mailto:mccabe@adeq.state.ar.us)

Office Location: 5<sup>th</sup> Floor (5W37)

Office: 501.682.0642

Cell: 501.352.5641

Fax: 501.682.0880 (address to Kerri McCabe)

---

**From:** Cusick, Daniel [<mailto:dcusick@croworld.com>]  
**Sent:** Thursday, May 16, 2013 10:23 AM  
**To:** Coats, Angela  
**Cc:** McCabe, Kerri  
**Subject:** Re: 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

Thank you Ms. Coats.

Daniel P. Cusick, P.G.  
Conestoga-Rovers and Associates  
103 Gamma Drive Ext., Suite 110  
Pittsburgh, PA 15238  
412-963-7313 tele  
412-327-0863 mobile

---

**From:** Coats, Angela [<mailto:COATS@adeq.state.ar.us>]  
**Sent:** Thursday, May 16, 2013 11:20 AM  
**To:** Cusick, Daniel  
**Cc:** McCabe, Kerri <[MCCABE@adeq.state.ar.us](mailto:MCCABE@adeq.state.ar.us)>  
**Subject:** RE: 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

I will change your response due date to May 31, 2013.

Thanks,



*Angela Coats*

ADEQ Inspector  
Water Division  
Fort Smith Field Office  
Office: 479-424-0331  
Cell: 501-454-3139

---

**From:** Cusick, Daniel [<mailto:dcusick@croworld.com>]

**Sent:** Wednesday, May 15, 2013 9:28 AM

**To:** Coats, Angela

**Subject:** 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

Ms. Coats:

Due to business travel, the attached document with noted violations from an inspection was just received by the client. Unfortunately the due date for corrective actions is noted in the letter as today. Therefore, on behalf of Nabors Completion & Production Services (NCPS), we are respectfully requesting an extension for submittal of the corrective actions and revised documents. The due date requested is May 31, 2013.

Please respond to this email as your formal approval of this request.

Thank you for your consideration and cooperation.

Best regards,

---

**DANIEL P. CUSICK, P.G.**

**CONESTOGA-ROVERS & ASSOCIATES (CRA)**

103 Gamma Drive Extension., Suite 110

Pittsburgh, Pennsylvania 15238


(412) 963-7313 (office)

(412) 963-7314 (fax)

(412) 327-0863 (cell)

Email: [dcusick@CRAworld.com](mailto:dcusick@CRAworld.com)

[www.CRAworld.com](http://www.CRAworld.com)

Think before you print 

Perform every task the safe way, the right way, every time!

## Schaeffer, Karla

---

**From:** McCabe, Kerri  
**Sent:** Friday, May 31, 2013 4:51 PM  
**To:** Schaeffer, Karla  
**Cc:** Coats, Angela  
**Subject:** FW: 075049 -Nabors Completion & Production Services - Van Buren, AR  
**Attachments:** 075095-RPT-1 Rev1.pdf; 075095COAT-001-053113.pdf

Karla,

Please attach the following response(s) to Angela's report.

Angela, provide the WID for Karla is it isn't somewhere on the report. Thank you!

Kerri McCabe  
Inspector Supervisor

ADEQ  
Water Division  
Field Services Branch  
1-501-682-0642 (office)

---

**From:** Cusick, Daniel [dcusick@croworld.com]  
**Sent:** Friday, May 31, 2013 2:29 PM  
**To:** Coats, Angela; Water-Inspection-Report  
**Cc:** McCabe, Kerri; Kellam, Patrick; Davis, Doran  
**Subject:** 075049 -Nabors Completion & Production Services - Van Buren, AR

Ms. Coats:

Attached, please find the Corrective Action/Response letter on behalf of Nabors Completion & Production Services Co. (NCPS) for the violations noted for their facility in Van Buren, AR. A revised Storm Water Pollution Prevention Plan (SWPPP) is also included which addresses modification and amendments made for the facility and corrective actions. A hard copy of each will be delivered to your attention on Monday, June 3, 2013. Please let us know if you have any questions or concerns during your review.

Thank you again for the extension and your cooperation in moving forward with environmental compliance at this facility.

Have a great weekend.

Best regards,

---

DANIEL P. CUSICK, P.G.  
CONESTOGA-ROVERS & ASSOCIATES (CRA)  
103 Gamma Drive Extension., Suite 110  
Pittsburgh, Pennsylvania 15238

(412) 963-7313 (office)

(412) 963-7314 (fax)

(412) 327-0863 (cell)

Email: [dcusick@CRAworld.com](mailto:dcusick@CRAworld.com)<blocked::mailto:dcusick@CRAworld.com>

[www.CRAworld.com](http://www.craworld.com/)<blocked::http://www.craworld.com/>

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Perform every task the safe way, the right way, every time!

---

From: Coats, Angela [<mailto:COATS@adeq.state.ar.us>]

Sent: Thursday, May 16, 2013 11:21 AM

To: Cusick, Daniel

Cc: McCabe, Kerri

Subject: RE: 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

I will change your response due date to May 31, 2013.

Thanks,

Angela Coats

ADEQ Inspector

Water Division

Fort Smith Field Office

Office: 479-424-0331

Cell: 501-454-3139

---

From: Cusick, Daniel [<mailto:dcusick@craworld.com>]

Sent: Wednesday, May 15, 2013 9:28 AM

To: Coats, Angela

Subject: 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

Ms. Coats:

Due to business travel, the attached document with noted violations from an inspection was just received by the client. Unfortunately the due date for corrective actions is noted in the letter as today. Therefore, on behalf of Nabors Completion & Production Services (NCPS), we are respectfully requesting an extension for submittal of the corrective actions and revised documents. The due date requested is May 31, 2013.

Please respond to this email as your formal approval of this request.

Thank you for your consideration and cooperation.

Best regards,

---

DANIEL P. CUSICK, P.G.  
CONESTOGA-ROVERS & ASSOCIATES (CRA)  
103 Gamma Drive Extension., Suite 110  
Pittsburgh, Pennsylvania 15238

(412) 963-7313 (office)

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Email: [dcusick@CRAworld.com](mailto:dcusick@CRAworld.com)<blocked::mailto:dcusick@CRAworld.com>

[www.CRAworld.com](http://www.craworld.com/)<blocked::http://www.craworld.com/>

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Perform every task the safe way, the right way, every time!



**CONESTOGA-ROVERS  
& ASSOCIATES**

103 G... Drive, Suite 110  
Pittsburg, Pennsylvania 15238  
Telephone: (412) 933-7313 Fax: (412) 933-7314  
www.CRA.com

May 31, 2013

Reference No. 075095

Ms. Angela Coats  
Oil & Gas Field Inspector  
Water Division  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

Dear Ms. Coats:

Re: **Corrective Actions for Compliance Inspection**  
**Permit Number ARR000825**  
**AFIN: 17-00056**  
**Nabors Completion and Production Services Co.**  
**2802 Kibler Road**  
**Van Buren, Arkansas 72956**

---

## INTRODUCTION

On behalf of Nabors Completion and Production Services Co. (NCPS), this letter is in response to the Arkansas Department of Environmental Quality (ADEQ) Industrial Stormwater Compliance Inspection performed on April 5, 2013. The results and violations noted during the inspection were detailed in a letter dated April 30, 2013. The facility has been issued a National Pollutant Discharge Elimination System (NPDES) Permit No. ARR000825 (the Permit). The ADEQ comments regarding the stormwater inspection, and the comments and/or corrective actions to mitigate these concerns are addressed in the remainder of this letter.

## VIOLATIONS AND RESPONSES

**ADEQ Comment No. 1:** *During the inspection, four additional outfalls were noted, two on the east side of the property and two on the south. Currently the facility is not authorized to discharge from these locations. This is a violation of Part 1.6 of the permit.*

**NCPS Response No. 1:** Only one outfall was identified during the inspection for the Notice of Intent (NOI) submitted for the Permit. The four additional outfall locations (Outfalls 002 through 005) have been identified and will be sampled in accordance with the Permit requirements. Figure 2 in the revised Storm Water Pollution Prevention Plan (SWPPP) shows the five outfall locations. Please advise if ADEQ is requiring a Notice of Intent (NOI) for submittal to add these outfalls.

---

Engineer  
Professional Engineer  
Engineer

REGISTERED COMPANY FOR  
**ISO 9001**  
ENGINEERING DESIGN





***ADEQ Comment No. 2:** Samples were not collected during the January to June 2012 monitoring period. This is a violation of Part 3.5 of the permit.*

**NCPS Response No. 2:** Samples were not collected in error during this semiannual period. Sample collection and monitoring will be conducted semiannually in accordance with the Permit frequency.

***ADEQ Comment No. 3:** Samples for Outfall #1 were not being collected from the monitoring point specified in the NOI. Samples for 2012 were collected near a drainage pipe by the concrete pad adjacent to the maintenance shop building. This is a violation of Part 3.6 of the permit (Photo #5).*

**NCPS Response No. 3:** NCPS personnel will be retrained on where to collect samples from all outfall locations.

***ADEQ Comment No. 4:** A Corrective Action Plan was not implemented for the benchmark exceedance of Total Suspended Solids (TSS) of 226 milligrams/Liter (mg/L) for the July to December 2011 monitoring period. This is violation of Part 3.11.2 of the permit.*

**NCPS Response No. 4:** NCPS has installed sediment controls to reduce solids from entering the storm water discharge. Section 5.5 of the revised SWPPP details the corrective actions implemented. As a corrective action for the TSS exceedance, NCPS has installed silt/sediment barriers along the eastern property boundary in an effort to reduce solids from run-off. The barriers (e.g., silt fence and/or silt socks) will be adjusted as needed based on the analytical results for the Outfall sampling.

***ADEQ Comment No. 5:** The annual report for 2012 was not submitted to ADEQ by January 31, 2013. This is a violation of Part 3.12.b of the permit.*

**NCPS Response No. 5:** In error, NCPS did not submit the report before January 31, 2013 and submitted it late. NCPS will ensure that all future reporting is submitted within the Permit schedule requirements.

***ADEQ Comment No. 6:** The pH was not analyzed within 15 minutes of the time of the sample collection. This is a violation of Part 3.7.2.d of the permit.*



**NCPS Response No. 6:** Nabors has purchased a pH meter that will be used to measure the pH of the storm water samples within 15 minutes of sample collection.

*ADEQ Comment No. 7: The SWPPP does not contain the updated facility name and NAICS code. This is a violation of Part 4.6.1 of the permit.*

**NCPS Response No. 7:** The SWPPP has been revised to include this information. Please see Section 3.0 for the information.

*ADEQ Comment No. 8: The facility site map does not contain the size of the property in acres. This is a violation of Part 4.6.4.a of the permit.*

**NCPS Response No. 8:** The facility site map has been revised to include this information and is included as Figure 2 in the revised SWPPP. The property is approximately 5.2 acres.

*ADEQ Comment No. 9: A drainage pipe running from the concrete slab by the maintenance shop building to the property line is not shown on the site map. This is a violation of Part 4.6.4.f of the permit (Photos #5 and #6).*

**NCPS Response No. 9:** The drainage pipe has been added to the facility site map included as Figure 2 in the SWPPP. The drainage pipe is not a permitted sample outfall and will not be sampled.

*ADEQ Comment No. 10: The SWPPP does not include a section on risk identification and summary of potential pollutant sources. This is a violation of Part 4.6.5.5 of the permit.*

**NCPS Response No. 10:** Section 5.3 in the revised SWPPP includes this information.

*ADEQ Comment No. 11: The SWPPP does not include a description of the BMPs that are used by the facility to eliminate or reduce the potential to contaminate storm water. This is a violation of Part 4.6.6.1 of the permit.*

**NCPS Response No. 11:** The SWPPP has been revised to include this information. Please see Section 6.1.1.



***ADEQ Comment No. 12:** The SWPPP does not include a discussion on minimizing exposure. This is a violation of Part 4.6.6.2 of the permit.*

**NCPS Response No. 12:** The SWPPP has been revised to include this information. Please see Section 6.0.

***ADEQ Comment No. 13:** Evidence of past spills was observed on the south side of the property along the fence line. This area had not been cleaned. This is a violation of Part 4.6.6.5 of the permit (Photos #5 and #6)*

**NCPS Response No. 13:** This area has been cleaned by NCPS and will not affect future storm water discharge. NCPS contracted Hubbs Construction (Hubbs) to excavate an area of oil-stained gravel on April 22, 2013. Hubbs removed stained gravel to a depth ranging from approximately 0.2 to 0.7 feet below existing grade. One composite sample was collected for disposal characterization using Toxicity Characteristic Leaching Procedures (TCLP). The TCLP results indicated the sample was non-hazardous and the gravel/soil was disposed of off-Site at a licensed disposal facility. The analytical results are included as Attachment A. The area was backfilled with clean gravel. Photographic documentation is included as Attachment B.

***ADEQ Comment No. 14:** The SWPPP does not contain a narrative on the management of run-on and runoff. This is a violation of Part 4.6.6.8 of the permit.*

**NCPS Response No. 14:** The SWPPP has been revised to include this information. Please see Section 7.2.

***ADEQ Comment No. 15:** A comprehensive site compliance evaluation was not completed for 2012. This is a violation of Part 4.6.10.2 of the permit.*

**NCPS Response No. 15:** A comprehensive site compliance evaluation will be completed for 2013 and each subsequent year in accordance with the Permit. NCPS personnel will be re-trained in procedures for completing the compliance evaluation.





**CONESTOGA-ROVERS  
& ASSOCIATES**

May 31, 2013

5

Reference No. 075095

**CLOSING**

A copy of the revised SWPPP has been included with this letter and addresses the violations noted in the April 5, 2013 inspection.

We trust that the aforementioned responses and revised SWPPP address ADEQ's concerns and the violations reported in the April 30, 2013 letter. If you have any questions or require additional information, please contact me at (412) 963-7313.

Respectfully submitted,

Daniel P. Cusick, P.G. <sup>(1)</sup>

<sup>1)</sup> Licensed in PA, S.C., MO, and IN

DPC/ro/01

Encl.

c.c. Mr. Patrick Kellam - NCPS (electronic copy)  
Mr. Heath Davis - NCPS (electronic copy)

ATTACHMENT A  
ANALYTICAL RESULTS

May 7, 2013

Nabors  
Daniel Roberson  
28<sup>th</sup> Street  
Van Buren, AR 72956

Gravel Lot Cleanup

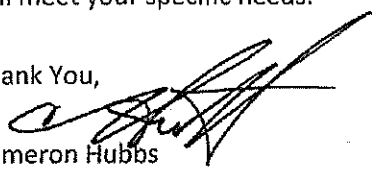
#### Scope of Work

After taking soil samples of affected areas of gravel lot and receiving tests results showing material to be at acceptable limits for disposal/use (see attached), we propose the following as a course of action for clean-up/grading of gravel lot.

1. Excavate affected areas to a depth required for removal of "soiled" gravel (2"-8")
2. Haul-off and disposal of excavated materials (local dumping)
3. Placement of new 3.5"-5.5" rock base in excavated areas to bring to proper grade
4. Placement of gravel base over top of areas to tie in existing lot areas for proper drainage.

If this course of action is not acceptable for our needs, please let us know and we can discuss other methods that will meet your specific needs.

Thank You,

  
Cameron Hubbs  
President, Cameron Hubbs Const. inc.



May 1, 2013  
Control No. 166884  
Page 1 of 5

Data Testing, Inc.  
ATTN: Ms. Dolores Shelby  
Post Office Box 1507  
Fort Smith, AR 72902

This report contains the analytical results and supporting information for the sample submitted on April 25, 2013. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Laboratory Director or a qualified designee.

A handwritten signature in cursive script that reads 'Steve Bradford'. The signature is written in black ink and is positioned above a horizontal line.

Steve Bradford  
Deputy Laboratory Director

This document has been distributed to the following:

PDF cc: Data Testing, Inc.  
ATTN: Ms. Dolores Shelby  
testing@mwc-engr.com



May 1, 2013  
Control No. 166884  
Page 2 of 5

Data Testing, Inc.  
Post Office Box 1507  
Fort Smith, AR 72902

**SAMPLE INFORMATION**

**Project Description:**

One (1) soil sample(s) received on April 25, 2013

**Receipt Details:**

A Chain of Custody was provided. The samples were delivered in one (1) ice chest. Ice chest #1 was delivered with shipping documentation.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

**Sample Identification:**

Laboratory ID	Client Sample ID	Sampled Date/Time	Notes
166884-1	Cameron Hubbs Construction 4-22 0930	22-Apr-2013 0930	1

**Notes:**

1. Sample container did not meet regulatory requirement

**Qualifiers:**

- Result is from a secondary dilution factor

**Case Narrative:**

Analysis of soils/sludges are reported on a dry-weight basis unless otherwise specified.

**References:**

- "Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
- "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
- "Standard Methods for the Examination of Water and Wastewaters", 21st edition.
- "American Society for Testing and Materials" (ASTM).
- "Association of Analytical Chemists" (AOAC).



May 1, 2013  
 Control No. 166884  
 Page 3 of 5

Data Testing, Inc.  
 Post Office Box 1507  
 Fort Smith, AR 72902

**ANALYTICAL RESULTS**

AIC No. 166884-1  
 Sample Identification: Cameron Hubbs Construction 4-22 0930

Analyte	Result	RL	Units	Qualifier
<b>Total Solids</b> SM 2540 G	90	0.01	%	
Prep: 26-Apr-2013 1026 by 302	Analyzed: 30-Apr-2013 0858 by 302		Batch: W43368	
<b>TCLP: Solids</b> EPA 1311	100	0.5	%	
	Analyzed: 26-Apr-2013 1630 by 100		Batch: S34384	
<b>TCLP: Arsenic</b> EPA 3010A, 6010C	< 0.3	0.3	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Barium</b> EPA 3010A, 6010C	0.51	0.01	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Cadmium</b> EPA 3010A, 6010C	< 0.02	0.02	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Chromium</b> EPA 3010A, 6010C	< 0.04	0.04	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Lead</b> EPA 3010A, 6010C	< 0.2	0.2	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Selenium</b> EPA 3010A, 6010C	< 0.4	0.4	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Silver</b> EPA 3010A, 6010C	< 0.04	0.04	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Mercury</b> EPA 7470A	< 0.008	0.008	mg/l	D
Prep: 26-Apr-2013 1208 by 270	Analyzed: 30-Apr-2013 1806 by 271		Batch: S34518	Dil: 40
<b>Total Petroleum Hydrocarbons</b> AR TPH	210	36	mg/Kg	
	Analyzed: 30-Apr-2013 0814 by 295		Batch: B8312	



May 1, 2013  
 Control No. 166884  
 Page 4 of 5

Data Testing, Inc.  
 Post Office Box 1507  
 Fort Smith, AR 72902

**DUPLICATE RESULTS**

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Total Petroleum Hydrocarbons	166884-1	210 mg/Kg				30Apr13 0814 by 285		
	Batch: B8312 Duplicate	240 mg/Kg	13.6	34.0		30Apr13 0814 by 285		
Total Solids	166903-1	1.3 %			28Apr13 1028 by 302	30Apr13 0858 by 302		
	Batch: W43358 Duplicate	1.3 %	0.613	10.0	28Apr13 1027 by 302	30Apr13 0858 by 302		

**LABORATORY CONTROL SAMPLE RESULTS**

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	5 mg/l	108	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Barium	0.5 mg/l	105	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Cadmium	5 mg/l	102	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Chromium	0.5 mg/l	101	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Lead	5 mg/l	101	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Selenium	5 mg/l	105	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Silver	0.1 mg/l	92.8	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Mercury	0.0025 mg/l	86.2	85.0-115			S34515	28Apr13 1208 by 270	30Apr13 1743 by 271		
Total Petroleum Hydrocarbons	400 mg/Kg	98.0	91.3-104			B8312		30Apr13 0814 by 285		
	400 mg/Kg	98.0	91.3-104	0.00	20.0	B8312		30Apr13 0814 by 285		



May 1, 2013  
 Control No. 166884  
 Page 5 of 5

Data Testing, Inc.  
 Post Office Box 1507  
 Fort Smith, AR 72902

**MATRIX SPIKE SAMPLE RESULTS**

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	166884-1	5 mg/l	106	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	106	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.129	20.0	S34515				
TCLP: Barium	166884-1	0.5 mg/l	101	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	0.5 mg/l	100	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.523	20.0	S34515				
TCLP: Cadmium	166884-1	5 mg/l	95.6	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	95.8	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.193	20.0	S34515				
TCLP: Chromium	166884-1	0.5 mg/l	99.9	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	0.5 mg/l	99.7	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.205	20.0	S34515				
TCLP: Lead	166884-1	5 mg/l	97.4	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	97.6	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.217	20.0	S34515				
TCLP: Selenium	166884-1	5 mg/l	106	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	107	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.281	20.0	S34515				
TCLP: Silver	166884-1	0.1 mg/l	89.4	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	0.1 mg/l	89.6	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.306	20.0	S34515				
TCLP: Mercury	166884-1	0.0025 mg/l	85.5	70.0-130	S34515	28Apr13 1208 by 270	30Apr13 1748 by 271	40	D
	166884-1	0.0025 mg/l	89.6	70.0-130	S34515	28Apr13 1208 by 270	30Apr13 1753 by 271	40	D
	Relative Percent Difference:		3.52	20.0	S34515				

**LABORATORY BLANK RESULTS**

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Total Solids	< 0.01 %	0.01	0.01	W43368-1	28Apr13 1027 by 302	30Apr13 0858 by 302	
TCLP: Arsenic	< 0.05 mg/l	0.05	0.05	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Barium	< 0.002 mg/l	0.002	0.002	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Cadmium	< 0.004 mg/l	0.004	0.004	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Chromium	< 0.007 mg/l	0.007	0.007	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Lead	< 0.04 mg/l	0.04	0.04	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Selenium	< 0.07 mg/l	0.07	0.07	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Silver	< 0.007 mg/l	0.007	0.007	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Mercury	< 0.0002 mg/l	0.0002	0.0002	S34515-1	28Apr13 1208 by 270	30Apr13 1739 by 271	
Total Petroleum Hydrocarbons	< 32 mg/Kg	32	32	B8312-1		30Apr13 0814 by 295	





ATTACHMENT B  
PHOTOGRAPHS



Photo 1: View of remediation conducted for oil-stained gravel in Southern portion of Facility. Backfilled after excavated (Note: ADEQ, Item No. 13).



Photo 2: View of final grade and backfill for excavated oil-stained gravel in Southern portion of Facility (Note: ADEQ Item No. 13).

## SITE PHOTOGRAPHS





Photo 3: View looking west for remediation conducted in Southern portion of the Facility.



Photo 4: Catch basin with 4-inch diameter pipe at the end of the concrete driveway for the Maintenance Shop Building.

## SITE PHOTOGRAPHS





Photo 5: Fill and grading to control storm water flow at the end of the driveway for the Maintenance Shop Building.

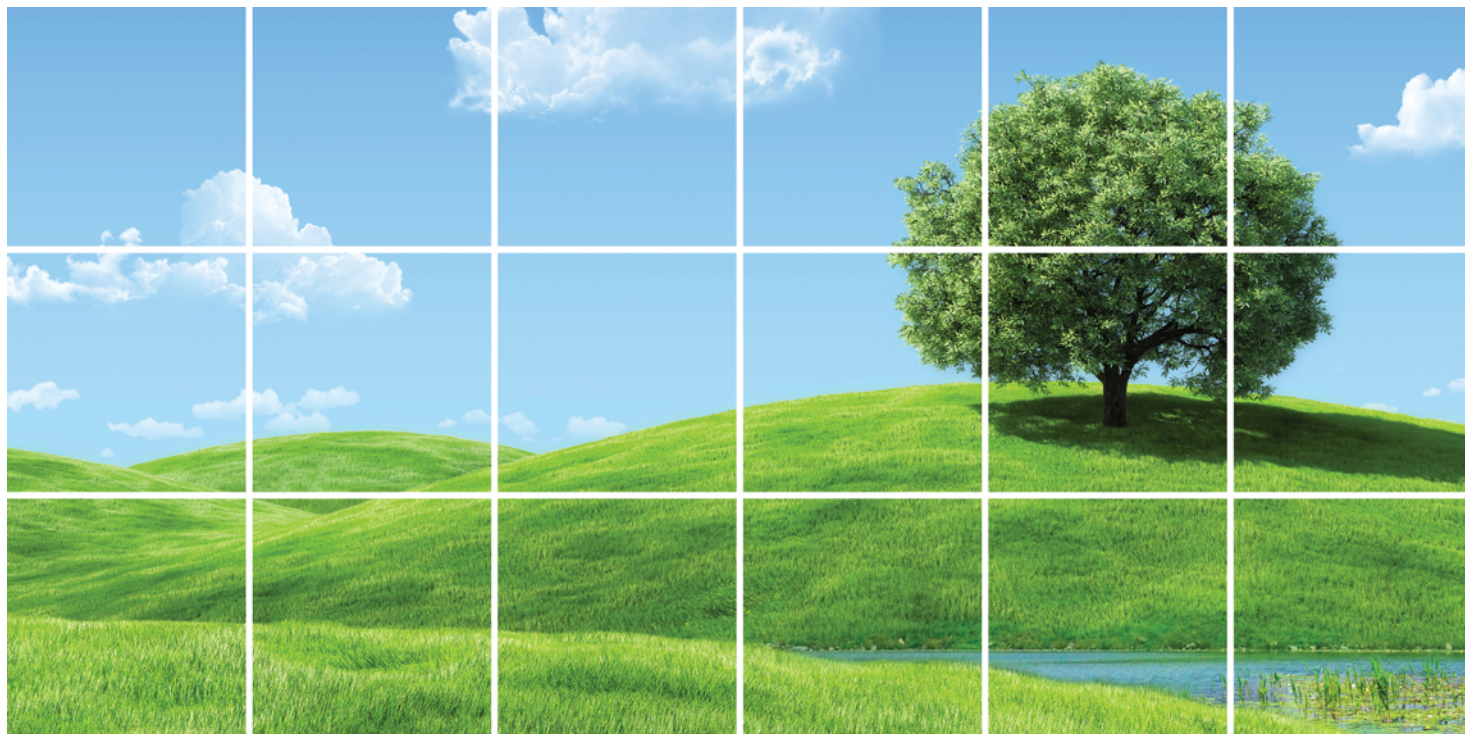


Photo 6: Fill and grade in center of the Property to influence proper drainage.

## SITE PHOTOGRAPHS



[www.CRAworld.com](http://www.CRAworld.com)



REPORT

## Storm Water Pollution Prevention Plan

Prepared for: Nabors Completion & Production  
Services, Inc.

**Conestoga-Rovers & Associates**  
103 Gamma Drive Ext., Suite 110  
Pittsburgh, Pennsylvania 15238

May 2013 • #075095-Rev. 1  
Report Number:1



**CONESTOGA-ROVERS  
& ASSOCIATES**

**STORM WATER POLLUTION PREVENTION PLAN  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

**PERMIT NO. ARR000000  
PERMIT TRACKING NO. ARR000825**

**Prepared For:  
Nabors Completion and Production Services Co.  
Houston, Texas**

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FIGURE 1	SITE LOCATION MAP
FIGURE 2	SITE PLAN

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APPENDIX A	CERTIFICATIONS <ul style="list-style-type: none"><li>• CERTIFICATION OF STORM WATER POLLUTION PREVENTION PLAN</li><li>• CERTIFICATION OF NON-STORM WATER DISCHARGES</li></ul>
APPENDIX B	FORMS <ul style="list-style-type: none"><li>• RECORD OF REVIEWS AND AMENDMENTS</li><li>• COMPREHENSIVE SITE COMPLIANCE EVALUATION REPORT</li><li>• STORM WATER INSPECTION REPORT</li><li>• RELEASE NOTIFICATION FORM</li></ul>
APPENDIX C	CHEMICAL INVENTORY LIST
APPENDIX D	BENCHMARK ANALYTICAL DATA

## 1.0 INTRODUCTION

This document constitutes the Storm Water Pollution Prevention Plan (SWPPP or Plan) for the Nabors Completion and Production Services Co. (NCPS) facility located at 2802 Kibler Road, Van Buren, Arkansas. The SWPPP has been prepared in accordance with the requirements listed in Part 4 in the Arkansas Department of Environmental Quality (ADEQ) Industrial Stormwater General Permit (IGP) for authorization to discharge under the NPDES (NPDES Permit No. ARR000000) (herein referred to as the Permit), with a ADEQ Permit Tracking Number of ARR000825. The Permit is effective through June 30, 2014.

For purposes of this Plan, the parcels and features within NCPS's property boundary will be referred to as the "Facility" or "Site". Figure 1 depicts the location of the Site.

A copy of this Plan will be maintained at the Facility, and will be made available for review by the ADEQ upon request. This SWPPP has been signed as required under the Permit (see Certification of SWPPP in Appendix A to this Plan). It should be noted that the SWPPP itself is designed to complement other existing environmental regulatory requirements, and compliance with the SWPPP is not a substitute for the fulfillment of other environmental regulatory requirements. NCPS does have an additional spill contingency to cover oil-related chemicals and fluids in compliance with 40 Code of Federal Regulations (CFR) 112. This document is entitled the Spill Prevention, Control, and Countermeasure Plan (SPCC Plan). The SPCC Plan is available for review by ADEQ and maintained at the Facility.

### 1.1 OBJECTIVES OF THIS PLAN

The objectives of this SWPPP are:

- Identify potential sources of pollution, which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. Storm water associated with industrial activity (defined in CFR 122.26(b)(14) includes, but is not limited to, the discharge from any conveyance which is used for collection and conveying storm water and which is directly related to manufacturing, processing or materials storage areas at an industrial plant.
- Describe practices and measures to be used in reducing the potential for pollutants to be exposed to storm water.
- Assure compliance with the terms and conditions of the Permit.

## 1.2 AMENDING THIS SWPPP

This SWPPP will be reviewed and amended as necessary:

- Whenever there is a change at the Facility, such as a change in design, operation, or maintenance that could increase the exposure of significant materials to storm water.
- Whenever an inspection or compliance evaluation determines a deficiency in the non-structural control measures.
- Whenever an official determines that a modification to the SWPPP is necessary.
- Whenever there is a spill, leak, release, or unauthorized discharge from the Facility.

A record of each review and amendment will be kept using the Record of Reviews and Amendments Form in Appendix B. The SWPPP has been amended after a compliance inspection by the ADEQ on April 5, 2013.

Any revision to the SWPPP required as a result of the Comprehensive Site Compliance Evaluation (see Section 9.0) will be completed within no more than 12 weeks of the completion of the inspection.

A copy of this Plan and of all associated reports, monitoring data, and certifications will be retained by the Facility for a minimum of 3 years.

## 2.0 IMPLEMENTATION OF ACTIVITIES REQUIRED UNDER THIS PLAN

The following activities related to the Plan will be implemented in order for the Plan to be considered complete:

<i>Activity</i>	<i>Referenced In:</i>
A duly authorized representative will sign the Plan	Appendix A
A duly authorized representative will complete and sign the Certification of Non-Storm Water Discharges	Appendix B

In addition to the actions above, the following inspection, monitoring, and certification records must be kept with this Plan:

- A copy of the Notice of Intent (NOI) submitted to the ADEQ and acknowledgment letter from ADEQ, if available.
- A copy of the Permit, Discharge Monitoring Reports (DMR) submitted to ADEQ, and analytical data provided by the laboratory.
- Descriptions of all leaks/spills or other releases that resulted in discharges of pollutants to surface waters through storm water or otherwise, the circumstances leading to the release and actions taken in response to the release, and measures taken to prevent the recurrence of such releases.
- Records of employee training on the SWPPP.
- Documentation of maintenance and repairs of control measures, including the dates(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, date(s) of actual repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules.
- All inspection reports, including the Routine Facility Inspection, the Visual Assessment Reports, and the Comprehensive Site Inspection Reports.
- Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations.
- Description of any corrective action taken at the Site, including triggering event and dates when problems were discovered and modifications occurred.

### 3.0 FACILITY INFORMATION

#### 3.1 SITE DESCRIPTION

The Site is located at 2802 Kibler Road, Van Buren, Arkansas. The latitude and longitude for the center of the Site is approximately 35.345693 and -94.328012, respectively. The Facility consists of approximately 5.2 acres and includes several buildings, silos, and above ground storage tanks (AST). NCPS operates an oil field service company from the Facility. The Standard Industrial Classification (SIC) code for the Facility is 1389. The North American Industry Classification System (NAICS) code for the Facility is 213112. Operation hours are 24 hours, seven days a week. NCPS provides well stimulation (hydraulic fracturing), well-logging and cementing services associated with oil and natural gas production. NCPS also operates an elaborate fleet vehicle maintenance and fabrication program. Activities involved with oil field services are dynamic and continuously changing, as does the equipment necessitated to accommodate these changes.

The primary structures on Site include:

- Maintenance Shop building
- Storage trailers and sheds
- Chemical Storage building
- Bulk Plant Mixing building
- Silos containing cement, sand and fly ash
- ASTs (dilute hydrochloric acid, new and used oil, antifreeze and nitrogen)

Within the Maintenance Shop building there are five ASTs that contain oil and one AST that contains antifreeze. Located directly outside of the Maintenance Shop are one 330-gallon AST for storage of used oil and one 330-gallon AST for storage of used antifreeze. There are also offices located in the Maintenance Shop building.

The Chemical Storage building was constructed and completed in September 2011. The building is over 6,000 square feet and is capable of having tractor trailers load and unload chemicals within its secondary containment. The entire building is surrounded by a secondary-containment berm and has a dead-end sump located within. The new building allows all chemicals at the Facility to be stored under cover within secondary containment. Chemicals are stored primarily in sacks or 220 gallon totes. Empty drums and totes are stored on the east side of the yard and picked up by the respective vendors.

Dilute hydrochloric acid (HCl) is stored in a double-walled 4,600-gallon poly AST. The HCl AST is located on the eastern side of the Maintenance Shop within a cement block wall. A nitrogen gas AST is located south of the Bulk Plant Mixing building.

Figure 2 provides a Site Plan which identifies the primary Site features.

### **3.2 SITE DRAINAGE AND OUTFALLS**

Topographic contours across the Site are relatively flat with a gradual slope toward the south/southeast. The majority of the Site is covered with permeable material (gravel, cinders, and soil) that allows precipitation to infiltrate, and only a small percentage of the ground is covered with non permeable material (i.e., asphalt or concrete).

During extremely heavy storm events, sheet flow across the Site flows toward the south and southeast. There is one catch basin located at the end of the concrete driveway from the Maintenance Building in which a 4-inch diameter pipe is present. There are not any drains inside the Chemical Storage building where the majority of materials and chemicals are stored under roof cover.

There are two drainage swales along the southern and eastern property that intercept storm water flow. Kibler Road (Arkansas State Highway 162) is immediately north of the Facility, and South 28<sup>th</sup> Street is on the west side of the Facility. There is minimal storm water run-on flow to the Facility due to the drainage swales and roads.

One storm water outfall was originally identified for the Facility and included in the NOI. During an inspection by the ADEQ on April 5, 2013, four additional outfalls were identified. The five Outfalls are shown on Figure 2 and are as follows:

- Outfall 001 – farthest downgradient, south (lat. 35.43476/long. -94.32797)
- Outfall 002 – at property boundary, south of Maintenance Shop  
(lat. 35.43550/long. -94.32872)
- Outfall 003 – south and upgradient of Outfall 001 (lat. 35.43489/long. -94.32767)
- Outfall 004 – eastern drainage swale (lat. 35.43567/long. -94.32714)
- Outfall 005 – eastern drainage swale and east of Chemical Building  
(lat. 35.43592/long. -94.32713)

Four of the Outfalls (Outfall 001, 003 through 005) are located along the drainage swale at the south and east property boundaries. Outfall 002 is located south of the Maintenance Shop building.

The closest surface water body is Flat Rock Creek which is located approximately 300 feet to the south of the Site's property boundary. As determined by Site reconnaissance conducted by NCPs, the drainage swales do not directly connect with Flat Rock Creek.

#### 4.0 POLLUTION PREVENTION TEAM

The individuals comprising the pollution prevention team and their respective responsibilities are shown in the following table. The pollution prevention team is responsible for assisting the Operations Manager in developing and revising the Facility's SWPPP (detailed in Section 1.2) as well as maintaining control measures and taking corrective actions where required. Each member of the pollution prevention team shall have ready access to applicable portions of the Permit and this Plan.

#### **POLLUTION PREVENTION TEAM MEMBERS AND RESPONSIBILITIES**

<i>Name or Title of Team Member</i>	<i>Office/Mobile Phone Number</i>	<i>Responsibility</i>
Fran Hoffman Operations Manager	(479) 471-7467 office (479) 806-0901 mobile	<ul style="list-style-type: none"><li>• Update and revise the SWPPP as required by the Permit</li><li>• Implement the employee training program as described in Part 4 of the Permit</li><li>• Update the record of spills and releases from the Facility</li></ul>
David Rose Materials Manager	(479) 471-7467 office (610)-466-2389 mobile	<ul style="list-style-type: none"><li>• Conduct the Comprehensive Site Compliance Evaluation as described in Part 4.6.10.2 of the Permit.</li><li>• Implement the preventative maintenance program in accordance with Best Management Practices (BMPs)</li></ul>



## 5.0 POTENTIAL SOURCES OF POLLUTION

### 5.1 INDUSTRIAL ACTIVITIES

Industrial activities are primarily conducted within and around the following Site features:

- Maintenance Shop building
- Storage trailers and sheds
- Chemical Storage building
- Bulk Plant Mixing building
- Silos containing cement, sand and fly ash
- ASTs (dilute HCl, new and used oil, antifreeze and nitrogen)
- Fleet vehicle and equipment parking

Maintenance Shop - within the Maintenance Shop building there are five ASTs that contain oil and one AST that contains antifreeze. Located directly outside of the Maintenance Shop are one 330-gallon AST for storage of used oil and one 330-gallon AST for storage of used antifreeze. Loading and unloading of fuels and liquids is conducted inside and outside of the Maintenance Shop.

Storage Trailers and Shed - Various materials and equipment are stored in on-Site trailers and sheds. NCPS personnel store and load equipment and materials into and from the trailers and sheds.

Chemical Storage building - Chemicals are stored inside this building and are not exposed to outdoor conditions or precipitation. Tractor trailers load and unload chemicals within its secondary containment. The entire building is surrounded by a secondary-containment berm and has a dead-end sump located within. Chemicals are stored primarily in sacks or 220-gallon totes. Empty drums and totes are stored on the east side of the yard and picked up by the respective vendors. NCPS personnel load and unload chemicals from the building.

Bulk Plant Mixing building and Silos - Dry materials consisting of cement, sand, and fly ash are stored in the silos west of the Mixing building. The dry materials are mixed and loaded at this location into NCPS trucks for delivery and use at the well pad sites.

HCl ASTs - Dilute HCl is stored in a double-walled 4,600-gallon poly AST. The HCl AST is located on the eastern side of the Maintenance Shop within a cement block wall.

Equipment and Vehicle Parking - NCPS's fleet of vehicles are parked on the east and south perimeters of the Site.

## **5.2 INVENTORY OF EXPOSED MATERIALS AND CHEMICALS**

Due to the construction of the Chemical Storage building, existing silos and ASTs, there are very few chemicals or materials present in outside areas that can be exposed to precipitation. Cement, sand and fly ash that spill on the surface around the silos are promptly cleaned up by NCPS. The Chemical Storage building is constructed with a perimeter berm to act as containment in the event of a spill in the building. A listing of the chemicals and materials that are typically contained on Site are included in Appendix C.

Oil and oil-related fluids are mainly stored in the Maintenance Shop building and are addressed by the Site's SPCC Plan, and therefore, are not addressed in this SWPPP.

## **5.3 RISK IDENTIFICATION AND SUMMARY OF POTENTIAL POLLUTANT SOURCES**

The materials at the Site that could be potentially exposed to storm water and their subsequent potential pollutant concerns are limited to the following:

1. Excess dry materials (cement, sand and fly-ash) adjacent to the Bulk Mixing building
  - a. Potential pollutant concern: total suspended solids (TSS)
2. HCl AST located on the east side of the Maintenance Shop
  - a. Potential pollutant concern: low pH
3. Surficial spills during loading or unloading of materials
  - a. Potential pollutant concern: dependent on material; TSS, low pH

## **5.4 SPILLS AND LEAKS**

The ADEQ responded on May 11, 2011 to a complaint that NCPS was washing equipment on the Site without containment, and allowing wash water to drain across the Site to a nearby ditch. NCPS informed ADEQ that this practice was no longer being

conducted, and waste water is no longer generated on Site. There were no signs of a spill or release.

During an April 5, 2013 inspection, ADEQ noted evidence of a past spill on the south side along the fence line of the Facility, which is reported as a violation of Part 4.6.6.5 of the Permit. NCPS contracted Hubbs Construction (Hubbs) to excavate an area of oil-stained gravel on April 22, 2013. Hubbs removed stained gravel to a depth in which no further visible staining was observed and ranged from approximately 0.2 to 0.7 feet below existing grade. One composite sample was collected for disposal characterization using Toxicity Characteristic Leaching Procedures (TCLP). The TCLP results indicated the sample was non-hazardous and the gravel/soil was disposed of off Site at a licensed disposal facility. The area was backfilled with clean gravel.

There have not been any other reportable spills other than as noted above.

In the event of a reportable spill, the information regarding to the spill will be kept with the version of this Plan that is maintained by the Pollution Prevention Team (see Section 4.0).

## **5.5 SUMMARY OF SAMPLING DATA**

Effluent water samples have been collected from Outfall 001 near the southern drainage swale for the parameters required in the Permit. Samples were collected on the following dates:

- October 27, 2011 (before the Permit was issued)
- October 10, 2012

The reporting period of January through June 2012 was missed in error and reported as a violation in the ADEQ's April 2013 inspection.

Copies of the Discharge Monitoring Reports (DMR) and the laboratory analytical reports are included in Appendix D. The data was compared to the recommended Benchmark Values per the Permit.

The analytical result for TSS was reported at a concentration (226 milligrams per liter) slightly above the benchmark value during the October 2011 sampling. TSS in the outfall sample is likely due to the surficial cover at the Site consisting of gravel, soil, and cinders, and the sample was turbid at the time of collection. Since the pH has been

within the range of 6.0 to 9.0 standard units, it does not appear the TSS elevated concentration is due to cement entering the storm water.

As a corrective action for the TSS exceedance, NCPS has installed sediment/silt barriers along the eastern property boundary in an effort to reduce fines and solids in run-off. The silt barriers will be adjusted as needed based on the analytical results for the Outfall sampling. If this corrective action does not resolve the issue, NCPS will evaluate further corrective actions.

Outfalls 001 through 005 will be sampled in accordance with the Permit parameters and frequency.

## **6.0 MEASURES AND CONTROLS**

### **6.1 BEST MANAGEMENT PRACTICES - NON-STRUCTURAL CONTROL MEASURES**

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#### **6.1.1 GOOD HOUSEKEEPING**

The good housekeeping program is an ongoing program implemented to ensure a clean, orderly Facility. Additional BMPs for the Facility are included in the SPCC Plan for oil and oil-related products. The storm water good housekeeping program is part of the Facility-wide program, and is in accordance with Section 4.6.6.3 in the Permit. The equipment and the areas to be inspected under the storm water good housekeeping program, and the frequencies of the inspections, are included in Appendix B. The observations made under the program are recorded by the Facility on the Storm Water Inspection Report (see Appendix B).

To control excess, unused, dry materials in the bulk mixing area and silos from entering storm water, NCPS implements routine inspections and cleaning of these areas. NCPS has also installed silt barriers along the eastern property boundary in an effort to reduce fines and solids from run-off. As previously stated, it does not appear that cement is entering the storm water and creating an elevation in TSS concentrations.

Any deficiencies identified under the program will be corrected as quickly as reasonably possible.

#### **6.1.2 PREVENTATIVE MAINTENANCE**

The equipment and sources are inspected in accordance with the Facility's SPCC Plan BMPs, and this Plan. The observations made under the program are also recorded in the Facility's Storm Water Inspection Report.

Any deficiencies identified under the program will be corrected as quickly and reasonably as possible.

#### **6.1.3 SPILL PREVENTION AND RESPONSE PROCEDURES**

The areas where potential spills can occur are described in Section 5.2. Additional spill response procedures are included in the SPCC Plan for the Facility. The procedures for responding to and cleaning up spills are as follows:

Any employee discovering a spill will:

- i) Notify their supervisor and/or the Facility Manager. Once the employee notifies the supervisor, the supervisor will notify the Facility Manager.
- ii) Contain the spill, to the extent possible to do safely, using the equipment located in one of the Facility's spill kits.

In the event of a potential release of chemicals or substances from the Site, the Facility Manager is responsible for:

- i) Evaluating the situation and the potential for the emergency to intensify.
- ii) Identifying the type, quantity, and source of the spill.
- iii) Activating personnel to contain and clean up the spill, and to prevent any additional spillage.
- iv) Estimating the volume discharged from the Site as a result of the spill, and making all appropriate emergency notifications (see below).
- v) Arranging for all spilled material to be adsorbed in granular absorbent or manually removed and placed in drums. The waste generated will be characterized and properly disposed of or reclaimed at an approved facility.

If a release of a materials or chemicals from the Facility is greater than the reportable quantity (RQ), or results in a sheen on the waters of the State, the Facility Manager will enter the information required in the Release Notification Form in Appendix B and use that information when notifying:

- |    |                                                  |                      |
|----|--------------------------------------------------|----------------------|
| 1. | National Response Center (NRC)                   | 1-800-424-8802       |
| 2. | Crawford County Department of Emergency Response | (479) 471-3260       |
| 3. | Arkansas Department of Emergency Management      | 1-800-322-4012       |
| 4. | Van Buren Fire Department                        | (479) 471-5031 / 911 |

For cleanup of spilled material after mitigation of spill, call HMER One, Inc. at (972) 775-6894 or Northwest Hazmat, Inc. at 1-800-597-1323. All spills which enter or threaten to enter the wastewater municipal sewer system must be reported to Van Buren Municipal Utilities at (479) 474-5067.



#### **6.1.4 EMPLOYEE TRAINING**

Appropriate personnel at all levels of responsibility in the Facility will be trained annually on the objectives and components of the Plan. The training will include emphasis on:

- The contents of this SWPPP
- The spill prevention and response procedures described in Section 6.1.3 above

#### **6.2 BEST MANAGEMENT PRACTICES - STRUCTURAL CONTROL MEASURES**

As previously described in Section 5.2., the only foreseeable significant source of potential pollution to storm water would be from a release of a surficial spill during loading or unloading of materials, from excess, unused cement, sand and fly ash around silos and the mixing building, or from the HCl AST. All other potential sources are housed indoors and under cover with secondary containment measures to ensure that they do not contribute to storm water pollution.

NCPS has spill control equipment and materials, such as absorbent socks and absorbent pads, granular oil dry material, and shovels in the immediate vicinity of the loading and unloading areas, the Chemical Storage building, and the HCl AST.

The 4,600-gallon double-walled AST containing dilute HCl is and enclosed within a concrete block containment wall located on a cement pad. Precipitation and storm water do not typically accumulate within the secondary containment structure. NCPS checks the AST on a routine basis in accordance with the requirements in this Plan. Spill pans are used during loading and unloading of acid from the AST. In addition, NCPS personnel are present during product loading and unloading from this AST.

BMPs consisting of good housekeeping are implemented for the silos and mixing building to prevent materials from entering storm water.

TSS concentrations have exceeded the Permit benchmark levels in Outfall 001 sampling. Therefore, NCPS has implemented sediment/silt barrier controls (silt fence and silt socks) to mitigate fines and solids from the gravel across the Site from entering the surface water through run off.

## 7.0 NON-STORM WATER DISCHARGES

There are no discharges at the Facility of the authorized non-storm waters as described in Part 4.6.7 of the Permit.

### 7.1 EVALUATION OF NON-STORM WATER DISCHARGES

See the Certification of Non-Storm water Discharges in Appendix A which certifies that all discharges have been tested or evaluated for the presence of any non-storm water discharge which is not authorized under the Permit.

To check for non-storm water discharges, one or more of the following methods were used at each storm water outfall.

#### Visual Inspection

Inspect each discharge point during dry weather on three separate occasions. As a rule, the discharge point should be dry during a period of extended dry weather since a storm water collection system should only collect storm water. To be sure about the source of any flow during dry weather, one of the additional tests described below may be performed.

#### Sewer Map

A review of a sewer map or plant schematic is another way to determine if there are any interconnections into the Facility's storm water collection system. A sewer map or plant schematic is a map of pipes and drainage systems used to carry process wastewater, non-contact cooling water, air conditioner condensate, and sanitary wastes (bathroom, sinks, etc.). If an accurate and reliable plant schematic exists, the pathways of the different water circuits may be examined. Also, floor drain discharges should be investigated since these may not drain into the storm water system.

#### Dye Testing

Another method for detecting improper connections to the storm water collection system is dye testing. Dye testing can be performed by simply releasing a dye into either the sanitary or process wastewater system and examining the discharge points from the storm water collection system for discoloration.

## 7.2 **SEDIMENT AND EROSION CONTROL AND MANAGEMENT OF RUN-ON AND RUNOFF**

The topography of the Site is generally flat around the buildings, and is graded so that runoff is contained on the Site. There is minimal storm water run-on flow to the Facility due to the drainage swales and roads. The Site is primarily covered with gravel, cinders, soil, or vegetation. Storm water in the flat areas either percolates into the ground or flows slowly as sheet flow and remains on Site as shown on Figure 2. As a result, there are limited areas with a high potential for soil erosion.

However, TSS concentrations have exceeded the Permit benchmark levels in Outfall 001 sampling. Therefore, NCPS has implemented sediment/silt barrier controls (silt fence and/or silt socks) along the east property boundary to mitigate fines and solids from the surficial materials across the Site from entering the storm water flow and discharging through outfalls.

## 8.0 SAMPLING AND MONITORING

NCPS will comply with the sampling and monitoring for Outfalls 001 through 005 as required by the Permit. Part 3 of the Permit describes the monitoring, parameters, and frequency requirements. The samples will be collected at a point representative of each Outfall (if not dry) discharge, but prior to entry into the drainage swale.

## 9.0 COMPREHENSIVE SITE COMPLIANCE EVALUATION

A Comprehensive Site Compliance Evaluation will be performed at least once per year by the Operations Manager to confirm the accuracy of the description of potential pollution sources contained in the Plan, determine the effectiveness of the Plan, and assess compliance with the Permit. This evaluation shall provide:

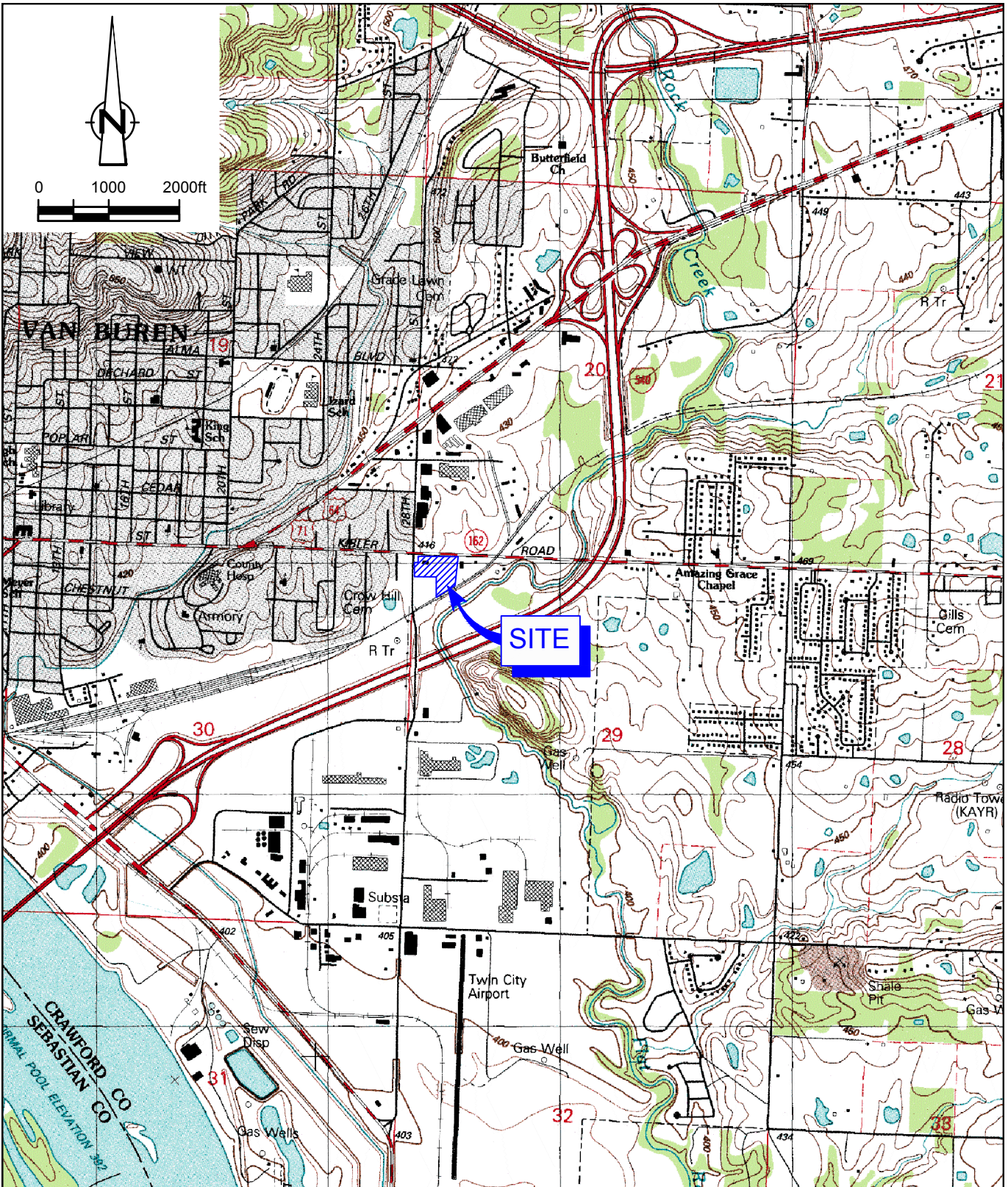
- 1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the Permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the Plan, such as spill response equipment shall be made.
- 2) Based on the results of the evaluation, the description of potential pollutant sources identified in the Plan (Section 5.2, in accordance with Part 4.6.5 of the Permit) and pollution prevention measures and controls identified in the Plan shall be revised as appropriate within the timeframes contained in the Permit.
- 3) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the Plan, and actions taken in accordance with the above paragraph must be documented and either contained in, or have on-Site record keeping location referenced in, the Plan at least 3 years after the date of the evaluation.
- 4) Where compliance evaluation schedules overlap the routine quarterly inspections required in the Permit, the compliance evaluation may be conducted in place of one such inspection.

The results will be recorded on the Comprehensive Site Compliance Evaluation report presented in Appendix B. The report will be signed by a duly authorized signatory and retained with this SWPPP for 3 years.

## 10.0 SECTION 303 CHEMICALS AND TOTAL MAXIMUM DAILY LOAD

Storm water discharges from the Facility does not enter a water body that is on the most recent 303 (d) list, or with an approved Total Maximum Daily Load (TMDL). As previously noted, the closest major surface water body is Flat Rock Creek, which is located approximately 300 feet south of the Site's property boundary, and storm water enters a drainage swale on Site but it does not drain to this creek.





SOURCE: USGS □ UADRANGLE MAP: VAN BUREN, AR.

figure 1

SITE LOCATION MAP  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 Van Buren, Arkansas





ARKANSAS STATE HIGHWAY 162 (KIBLER ROAD) R/W VARIES

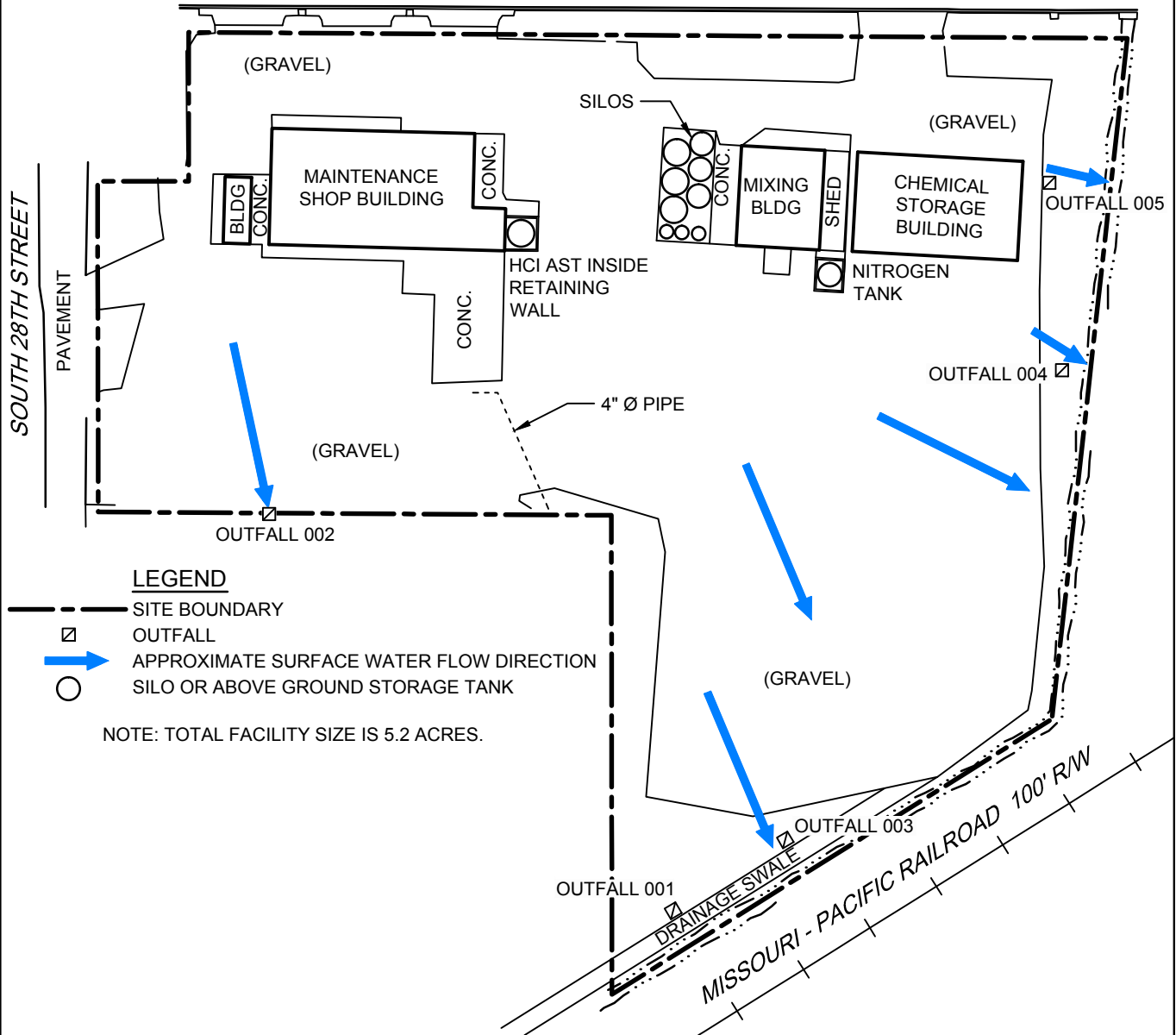


figure 2

SITE PLAN  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 Van Buren, Arkansas



SOURCE: SATTERFIELD LAND SURVEYORS P.A., NW 1/4 NW 1/4, SECTION 29, T-9-N, R-31-W, DATED 7-7-11.

APPENDIX A  
CERTIFICATIONS

**CERTIFICATION OF THIS STORM WATER POLLUTION PREVENTION PLAN  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative:

Signature: Pat Kellam

Name: Patrick Kellam

Title: Environmental Manager

Date: May 30, 2013

**CERTIFICATION OF NON-STORM WATER DISCHARGES**

Facility: **NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD, VAN BUREN, ARKANSAS**

Date of testing and/or evaluation: May 10, 2013

Description of any potential significant sources of non-storm water:

No potential significant sources of non-storm water were identified.

Description of the results of any test and/or evaluation of each potential source for the presence of non-storm water discharges:

Not applicable - no potential sources identified.

Description of the evaluation criteria or testing method used:

Visual and review of existing Site facility drawings.

List of the outfalls and on-Site drainage points that were directly observed during the test:

The entire perimeter of the Site was observed, including Outfalls 001 through 005.

Certification: I hereby certify that all discharges (i.e., Outfalls 001 through 005) have been tested or evaluated for the presence of non-storm water.

Signature: *Pat Kellam*

Print name: Patrick Kellam

Date: May 10, 2013

APPENDIX B

FORMS



## RECORD OF REVIEWS AND AMENDMENTS

**RECORD OF REVIEWS AND AMENDMENTS  
STORM WATER POLLUTION PREVENTION PLAN  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

INSTRUCTIONS FOR COMPLETING THE RECORD BELOW

For the review of the Storm Water Pollution Prevention Plan (Plan):

1. Insert the date of completion of the review of the Plan
2. Circle whichever of the words "does" or "does not" is applicable, and delete whichever is not applicable
3. Sign the record

If the Plan requires amendment as a result of the review:

1. Insert the date of completion of the amendment(s) to the Plan
2. Circle whichever of the words "did" or "did not" is applicable, and delete whichever is not applicable
3. Sign the record

This Plan was reviewed on May 15, 2013, and does/ does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

Patrick Kellam

*Pat Kellam*

If the Plan required amendment, the amendment was completed on May 30, 2013.

Name of Person making Amendments:

Signature of Person making Amendments:

Daniel P. Cusick

*D.P. Cusick*

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

**RECORD OF REVIEWS AND AMENDMENTS  
(CONTINUED)**

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

COMPREHENSIVE SITE COMPLIANCE  
EVALUATION REPORT

**COMPREHENSIVE SITE COMPLIANCE EVALUATION REPORT  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 VAN BUREN, ARKANSAS**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Inspected by (print name): \_\_\_\_\_

Signature: \_\_\_\_\_

<i>Areas Inspected*</i>	<i>Observations</i>	<i>Actions Taken</i>
Drainage swales and Outfalls are clear of debris		
Silt Fencing and Silt Socks are installed and in good shape		
HCl AST and containment		
Cement, Sand and Fly-Ash Silos (outside only)		
Empty drums, totes and debris		
Oil Storage inside Maintenance Shop Building		
Loading/Unloading areas		

\* = The areas identified in the above table must be inspected for:

- Industrial materials, residue, or trash that could be carried into a storm sewer
- Leaks or spills
- Unauthorized storm water discharges
- Off-Site tracking of industrial materials
- Tracking or blowing of raw, final, or waste materials from areas of no exposure (e.g., inside the building) to exposed areas (e.g., outside the building)
- Evidence of, or the potential of, pollutants entering the storm sewer

All the observations of non-compliance in the above table must be addressed prior to the next storm, if practicable, but no more than 12 weeks after the date of the inspection.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

---

Signature of duly authorized representative of  
NABORS COMPLETION AND PRODUCTION SERVICES CO.

---

Printed name of duly authorized representative of  
NABORS COMPLETION AND PRODUCTION SERVICES CO.

## STORM WATER INSPECTION REPORT



**STORM WATER INSPECTION REPORT  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 VAN BUREN, ARKANSAS**

Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

Answer the questions below with "Y" (= Yes) or "N" (= No). If your answer is No, take corrective action

Inspection Items	HCl AST	Silos and Mixing Bldg				
Item/Device/Area is in good condition?						
Free of leaks?						
Foundation for containment in good condition?						
Water removed from dike or area if applicable?						
Piping all leak-free?						

<b>Inspection of spill control equipment and materials at loading and unloading areas</b>	
Are the following equipment/materials present and in good condition?	
<ul style="list-style-type: none"> <li>• Booms, absorbent pads, shovel, and oil dry</li> <li>• Sediment control Silt fence and Silt Socks installed and in good shape</li> </ul>	

<b>Inspection of Discharge in Storm water from Outfalls 001 through 005</b>	
Drain and discharge free of sheen or of any unusual discharge?	

Corrective actions: \_\_\_\_\_

\_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

RELEASE NOTIFICATION FORM

**RELEASE NOTIFICATION FORM  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

Name of person making notification: \_\_\_\_\_

Phone number of person making notification: \_\_\_\_\_

Facility Information:

Facility name and address: **Nabors Completion and Production Services Co.  
2802 Kibler Road, Van Buren, Arkansas**

Facility ID #:

- Latitude and longitude: **35.435693°, -94.328012°**

Date and time of the release: \_\_\_\_\_

Source and cause of the release: \_\_\_\_\_

Type of material released: \_\_\_\_\_

Estimated quantity of material released: \_\_\_\_\_

Streams/rivers/bodies of water, which have been or may be affected by the release (circle one):

**Flat Rock Creek**

Injuries caused by the release: \_\_\_\_\_

Damage caused by the release: \_\_\_\_\_

Whether evacuation was/will be necessary (circle one):                      **Yes**                      **No**

Steps being taken or proposed to contain and clean up the release: \_\_\_\_\_

Estimated quantity and disposition of any recovered materials: \_\_\_\_\_

Names of authorities who have also been/will also be contacted if the release is reportable:

- National Response Center: 1-800-424-8802
- Arkansas Department of Emergency Management: 1-800-322-4012

APPENDIX C

CHEMICAL INVENTORY LIST

<b>Product Name</b>	<b>CAS Number</b>	<b>Chemical</b>
Class A cement	12168-85-3	Tri-calcium silicate
Class H Cement	65997-15-1	Portland cement clinker
Silica Flour	014808-60-7	Quartz silicon dioxide
Fly Ash	7631-86-9	Ampohous silica hydrated
IC-100	77-92-9	2-hydroxl-1,2,3 Propanetricarboxic acid
Methanol	67-56-1	Methanol
No Foam 3	64742-54-7	Distillates (petroleum)
OB-Fe	57-55-6 7782-63-0	Propylene glycol Ferrous sulfate, heptahydrate
Propane	98-6	Propane
Sand	14808-60-7	Silica quartz
SAS-2	64742-47-8 8052-41-3 57-55-6 68551-12-2	Hydrotreated light distillates Mineral spirits Propylene glycol Ethoxylated alcohols
Super NE-100	67-63-0 111-76-2	Isopropyl alcohol Glycol ethers
SAS-2 Breaker	7782-63-0 77-92-9	Ferrous sulfate heptahydrate Citrus acid
Super Max	67-63-0 111-76-2 104-76-7	Isopropyl alcohol Glycol ethers Ethylhexanol
Super Penn 2000	104-76-7	Ethylhexanol
AI-2 Inhibitor	111-76-2 107-19-7 67-63-0	Glycol ether Propargyl alcohol Isopropyl alcohol

<b>Product Name</b>	<b>CAS Number</b>	<b>Chemical</b>
OW-3	67-63-0	Isopropyl alcohol
pH-15L	1310-73-2	Sodium hydroxide
	7647-14-5	Sodium chloride
Motor oil, packing oil, hydraulic oil.	64742-54-7	Lubricating oil base stock
Gear oil	64741-88-4	Lubricating oil base stock
Anti freeze	107-21-1	Ethylene glycol
Parts cleaners / paint thinners	8052-41-3	Petroleum distillates mineral spirits
Misc automotive maintenance chemicals	108-88-3	Possible Toluene
	1330-20-7	
pH-14	497-41-8	Sodium carbonate
pH-4	110-17-8	Fumaric acid
Wfr3-b	64742-47-8	Hydrotreated Light Distillate
Super Sil SP	1344-09-8	Sodium Silicate

APPENDIX D

DISCHARGE MONITORING REPORTS AND ANALYTICAL DATA





# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Nashville  
2960 Foster Creighton Road  
Nashville, TN 37204  
Tel: 800-765-0980

TestAmerica Job ID: NUJ3719

Client Project/Site: 075095

Client Project Description: SWSI - Van Buren, AR Storm Water

For:

Conestoga Rovers Associates - Niagara Falls (8571)  
2055 Niagara Falls Boulevard Ste#3  
Niagara Falls, NY 14304

Attn: Paul McMahon



Authorized for release by:  
11/4/2011 3:01:49 PM

Ryan Fitzwater  
Project Manager  
[Ryan.Fitzwater@testamericainc.com](mailto:Ryan.Fitzwater@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUJ3719-01	001	Water	10/27/11 10:14	10/28/11 08:40

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## Case Narrative

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

---

**Job ID: NUJ3719**

---

**Laboratory: TestAmerica Nashville**

### Narrative

---

All samples were received in good condition, properly preserved, and properly labeled. All analyses were completed within holding times. There were no relevant protocol specific QC and/or performance standard non-conformances to report with the following exceptions:

No COD EPA 410.4 matrix spike or matrix spike duplicate data reported for batch 11J7239. The source sample required a dilution which diluted the compounds below the detection limit. See blank spike.

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# Definitions/Glossary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Qualifiers

### WetChem

Qualifier	Qualifier Description
MNR	No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.

### TCLP

Qualifier	Qualifier Description
HTI	The holding time for this test is immediate. The laboratory measurement, therefore, may not be suitable for compliance purposes.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

**Client Sample ID: 001**  
**Date Collected: 10/27/11 10:14**  
**Date Received: 10/28/11 08:40**

**Lab Sample ID: NUJ3719-01**  
**Matrix: Water**

**Method: EPA 410.4 - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	46.3		10.0	2.00	mg/L		10/31/11 14:23	11/02/11 09:19	1.00

**Method: SM2540 D - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	226		10.0	5.00	mg/L		11/01/11 15:34	11/01/11 15:34	10.0

**Method: EPA 1664A - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease HEM	ND		6.10	1.59	mg/L		10/31/11 11:30	10/31/11 15:24	1.00

**Method: EPA 170.1 - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature of pH determination	21.0	HTI	0.00		Deg C		10/28/11 17:15	10/29/11 17:15	1.00

**Method: SW846 9040C - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.00	HTI	0.100	0.100	pH Units		10/28/11 17:15	10/29/11 17:15	1.00





# QC Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Method: EPA 410.4 - General Chemistry Parameters

**Lab Sample ID: 11J7239-BLK1**  
**Matrix: Water**  
**Analysis Batch: 11J7239**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 11J7239\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	2.00	mg/L		10/31/11 14:23	11/02/11 09:19	1.00

**Lab Sample ID: 11J7239-BS1**  
**Matrix: Water**  
**Analysis Batch: 11J7239**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 11J7239\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	20.0	19.5	MNR	mg/L		98	90 - 110

**Lab Sample ID: 11J7239-DUP1**  
**Matrix: Water**  
**Analysis Batch: 11J7239**

**Client Sample ID: 001**  
**Prep Type: Total**  
**Prep Batch: 11J7239\_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	46.3		45.3		mg/L		2	10

## Method: SM2540 D - General Chemistry Parameters

**Lab Sample ID: 11J7120-BLK1**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.00	0.500	mg/L		11/01/11 15:34	11/01/11 15:34	1.00

**Lab Sample ID: 11J7120-BS1**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	98.6		mg/L		99	90 - 110

**Lab Sample ID: 11J7120-DUP1**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Duplicate**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L			5

**Lab Sample ID: 11J7120-DUP2**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Duplicate**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	0.900		ND		mg/L			5

# QC Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Method: EPA 1664A - General Chemistry Parameters

**Lab Sample ID: 11J7059-BLK1**  
**Matrix: Water**  
**Analysis Batch: 11J7059**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 11J7059\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease HEM	ND		5.21	1.35	mg/L		10/31/11 11:30	10/31/11 15:24	1.00

**Lab Sample ID: 11J7059-BS1**  
**Matrix: Water**  
**Analysis Batch: 11J7059**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 11J7059\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease HEM	40.0	36.6		mg/L		91	78 - 114

**Lab Sample ID: 11J7059-BSD1**  
**Matrix: Water**  
**Analysis Batch: 11J7059**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total**  
**Prep Batch: 11J7059\_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease HEM	40.0	37.5		mg/L		94	78 - 114	3	18

**Lab Sample ID: 11J7059-MS1**  
**Matrix: Water**  
**Analysis Batch: 11J7059**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total**  
**Prep Batch: 11J7059\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease HEM	0.238		40.0	41.5		mg/L		103	78 - 114

## Method: EPA 170.1 - General Chemistry Parameters

**Lab Sample ID: 11J6896-DUP1**  
**Matrix: Water**  
**Analysis Batch: 11J6896**

**Client Sample ID: Duplicate**  
**Prep Type: Total**  
**Prep Batch: 11J6896\_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Temperature of pH determination	21.0		21.0		Deg C		0	200

## Method: SW846 9040C - General Chemistry Parameters

**Lab Sample ID: 11J6896-BS1**  
**Matrix: Water**  
**Analysis Batch: 11J6896**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 11J6896\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.03		pH Units		100	95 - 105

**Lab Sample ID: 11J6896-BSD1**  
**Matrix: Water**  
**Analysis Batch: 11J6896**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total**  
**Prep Batch: 11J6896\_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
pH	7.00	7.05		pH Units		101	95 - 105	0.3	10

# QC Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Method: SW846 9040C - General Chemistry Parameters (Continued)

Lab Sample ID: 11J6896-DUP1  
Matrix: Water  
Analysis Batch: 11J6896

Client Sample ID: Duplicate  
Prep Type: Total  
Prep Batch: 11J6896\_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
pH	7.40		7.40		pH Units		0	10

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- 2
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# QC Association Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

## WetChem

### Analysis Batch: 11J7120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7120-BLK1	Method Blank	Total	Water	SM2540 D	11J7120_P
11J7120-BS1	Lab Control Sample	Total	Water	SM2540 D	11J7120_P
11J7120-DUP1	Duplicate	Total	Water	SM2540 D	11J7120_P
11J7120-DUP2	Duplicate	Total	Water	SM2540 D	11J7120_P
NUJ3719-01	001	Total	Water	SM2540 D	11J7120_P

### Analysis Batch: 11J7239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7239-BLK1	Method Blank	Total	Water	EPA 410.4	11J7239_P
11J7239-BS1	Lab Control Sample	Total	Water	EPA 410.4	11J7239_P
11J7239-DUP1	001	Total	Water	EPA 410.4	11J7239_P
NUJ3719-01	001	Total	Water	EPA 410.4	11J7239_P

### Prep Batch: 11J7120\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7120-BLK1	Method Blank	Total	Water	SOLIDS	
11J7120-BS1	Lab Control Sample	Total	Water	SOLIDS	
11J7120-DUP1	Duplicate	Total	Water	SOLIDS	
11J7120-DUP2	Duplicate	Total	Water	SOLIDS	
NUJ3719-01	001	Total	Water	SOLIDS	

### Prep Batch: 11J7239\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7239-BLK1	Method Blank	Total	Water	NO PREP	
11J7239-BS1	Lab Control Sample	Total	Water	NO PREP	
11J7239-DUP1	001	Total	Water	NO PREP	
NUJ3719-01	001	Total	Water	NO PREP	

## Extractions

### Analysis Batch: 11J7059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7059-BLK1	Method Blank	Total	Water	EPA 1664A	11J7059_P
11J7059-BS1	Lab Control Sample	Total	Water	EPA 1664A	11J7059_P
11J7059-BSD1	Lab Control Sample Dup	Total	Water	EPA 1664A	11J7059_P
11J7059-MS1	Matrix Spike	Total	Water	EPA 1664A	11J7059_P
NUJ3719-01	001	Total	Water	EPA 1664A	11J7059_P

### Prep Batch: 11J7059\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7059-BLK1	Method Blank	Total	Water	1664 HEM/SGTHEM	
11J7059-BS1	Lab Control Sample	Total	Water	1664 HEM/SGTHEM	
11J7059-BSD1	Lab Control Sample Dup	Total	Water	1664 HEM/SGTHEM	
11J7059-MS1	Matrix Spike	Total	Water	1664 HEM/SGTHEM	
NUJ3719-01	001	Total	Water	1664 HEM/SGTHEM	

# QC Association Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

## TCLP

### Analysis Batch: 11J6896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J6896-BS1	Lab Control Sample	Total	Water	SW846 9040C	11J6896_P
11J6896-BSD1	Lab Control Sample Dup	Total	Water	SW846 9040C	11J6896_P
11J6896-DUP1	Duplicate	Total	Water	SW846 9040C	11J6896_P
11J6896-DUP1	Duplicate	Total	Water	EPA 170.1	11J6896_P
NUJ3719-01	001	Total	Water	SW846 9040C	11J6896_P
NUJ3719-01	001	Total	Water	EPA 170.1	11J6896_P

### Prep Batch: 11J6896\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J6896-BS1	Lab Control Sample	Total	Water	METHOD PREP	
11J6896-BSD1	Lab Control Sample Dup	Total	Water	METHOD PREP	
11J6896-DUP1	Duplicate	Total	Water	METHOD PREP	
NUJ3719-01	001	Total	Water	METHOD PREP	

# Lab Chronicle

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

**Client Sample ID: 001**

**Lab Sample ID: NUJ3719-01**

**Date Collected: 10/27/11 10:14**

**Matrix: Water**

**Date Received: 10/28/11 08:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	NO PREP		1.00	11J7239_P	10/31/11 14:23	AMB	TAL NSH
Total	Analysis	EPA 410.4		1.00	11J7239	11/02/11 09:19	MSJ	TAL NSH
Total	Analysis	SM2540 D		10.0	11J7120	11/01/11 15:34	DRM	TAL NSH
Total	Prep	SOLIDS		10.0	11J7120_P	11/01/11 15:34	JRM	TAL NSH
Total	Prep	1664 HEM/SGTHEM		1.00	11J7059_P	10/31/11 11:30	CEC	TAL NSH
Total	Analysis	EPA 1664A		1.00	11J7059	10/31/11 15:24	JJR	TAL NSH
Total	Prep	METHOD PREP		1.00	11J6896_P	10/28/11 17:15	SJM	TAL NSH
Total	Analysis	SW846 9040C		1.00	11J6896	10/29/11 17:15	SJM	TAL NSH
Total	Analysis	EPA 170.1		1.00	11J6896	10/29/11 17:15	SJM	TAL NSH

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

# Method Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

Method	Method Description	Protocol	Laboratory
EPA 1664A	General Chemistry Parameters		TAL NSH
EPA 170.1	General Chemistry Parameters		TAL NSH
SW846 9040C	General Chemistry Parameters		TAL NSH
EPA 410.4	General Chemistry Parameters		TAL NSH
SM2540 D	General Chemistry Parameters		TAL NSH

**Protocol References:**

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980



# Certification Summary

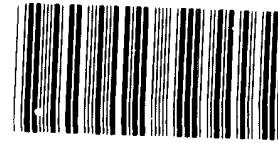
Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA - LAP	IHLAP		100790
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas	State Program	6	88-0737
TestAmerica Nashville	CALA	CALA		3744
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	Illinois	NELAC	5	200010
TestAmerica Nashville	Iowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	Kentucky UST	4	19
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA100011
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Minnesota	NELAC	5	047-999-345
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana	MT DEQ UST	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina	North Carolina DENR	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio	OVAP	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	USDA		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.





NUJ3719

Cooler Received/Opened On 10/28/2011 @ 08:40

1. Tracking # 7680 (last 4 digits, FedEx)

Courier: FEDEX IR Gun ID 95610068

2. Temperature of rep. sample or temp blank when opened: 3.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES  NO  NA

4. Were custody seals on outside of cooler? YES  NO  NA

If yes, how many and where: 1 - Front

5. Were the seals intact, signed, and dated correctly? YES  NO  NA

6. Were custody papers inside cooler? YES  NO  NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.H.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # \_\_\_\_\_

I certify that I unloaded the cooler and answered questions 7-14 (initial) \_\_\_\_\_

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) \_\_\_\_\_

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) \_\_\_\_\_

I certify that I attached a label with the unique LIMS number to each container (initial) \_\_\_\_\_

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...# \_\_\_\_\_



**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
STORMWATER DISCHARGE MONITORING REPORT  
(DMR)**

PERMIT NUMBER: ARR000825 PERMITTEE NAME: Nabors Completion & Production Services Company (NCPS)  
 FACILITY NAME: NCPS Van Buren FACILITY PHYSICAL ADDRESS: 2802 Kibler Highway  
Van Buren, AR

INDUSTRIAL SECTOR: 11 OUTFALL NO: 001 REPORTING YEAR: 2012

PARAMETER	Benchmark Value	QUALITY OR CONCENTRATION		UNITS
		JANUARY-JUNE	JULY-DECEMBER	
Chemical Oxygen Demand (COD)	120		<10.0	mg/L
Total Suspended Solids (TSS)	100		7.08	mg/L
Oil and Grease (O&G)	15		<4.57	mg/L
pH	6.0-9.0		7.40	S.U.

Sampling Period:	JANUARY-JUNE	JULY-DECEMBER
Date of Storm Event Sampled:		10/10/2012
Duration of Event:		24 hours
Estimate of Rainfall Event:		0.13 inches
Time Since Last Measurable Event:		3 days
Estimate of Total Discharged Volume:		17,023 gallons

Comments: \_\_\_\_\_

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

\_\_\_\_\_  
Signature & Date

Patrick Kellam, Environmental Manager  
\_\_\_\_\_  
Printed Name & Title of Official

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Nashville  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Tel: (615)726-0177

TestAmerica Job ID: 490-8918-1  
Client Project/Site: Van Buren, AR Stormwater

For:  
Conestoga-Rovers & Associates, Inc.  
2055 Niagara Falls Blvd., Suite 3  
Niagara Falls, New York 14304

Attn: Mr. Paul McMahon



Authorized for release by:  
10/19/2012 4:17:39 PM

Ryan Fitzwater  
Senior Project Manager  
[ryan.fitzwater@testamericainc.com](mailto:ryan.fitzwater@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-8918-1	NCPS #1	Water	10/10/12 08:30	10/11/12 08:15
490-8918-2	NCPS #2	Water	10/10/12 08:35	10/11/12 08:15
490-8918-3	NCPS #3	Water	10/10/12 08:40	10/11/12 08:15
490-8918-4	NCPS #4	Water	10/10/12 08:45	10/11/12 08:15
490-8918-5	NCPS #5	Water	10/10/12 08:50	10/11/12 08:15
490-8918-6	NCPS #6	Water	10/10/12 08:55	10/11/12 08:15
490-8918-7	NCPS #7	Water	10/10/12 09:00	10/11/12 08:15
490-8918-8	NCPS #8	Water	10/10/12 09:05	10/11/12 08:15
490-8918-9	NCPS #9	Water	10/10/12 09:10	10/11/12 08:15
490-8918-10	NCPS #10	Water	10/10/12 09:15	10/11/12 08:15
490-8918-11	NCPS #11	Water	10/10/12 09:20	10/11/12 08:15
490-8918-12	NCPS #12	Water	10/10/12 09:25	10/11/12 08:15



## Case Narrative

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

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**Job ID: 490-8918-1**

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**Laboratory: TestAmerica Nashville**

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### Narrative

**Job Narrative**  
**490-8918-1**

### Comments

No additional comments.

### Receipt

The samples were received on 10/11/2012 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

Except:

The Chain of Custody was received without listing a date or a time of sample collection.

### General Chemistry

No analytical or quality issues were noted.

### Organic Prep

No analytical or quality issues were noted.

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# Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #1**

**Lab Sample ID: 490-8918-1**

**Date Collected: 10/10/12 08:30**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #2**

**Lab Sample ID: 490-8918-2**

**Date Collected: 10/10/12 08:35**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

1

2

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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #3**

**Lab Sample ID: 490-8918-3**

**Date Collected: 10/10/12 08:40**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

1

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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #4**

**Lab Sample ID: 490-8918-4**

**Date Collected: 10/10/12 08:45**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.57		mg/L		10/16/12 10:07	10/16/12 10:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
- 11
- 12
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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #5**

**Lab Sample ID: 490-8918-5**

**Date Collected: 10/10/12 08:50**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.74		mg/L		10/16/12 10:07	10/16/12 10:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #6**

**Lab Sample ID: 490-8918-6**

**Date Collected: 10/10/12 08:55**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.63		mg/L		10/16/12 10:07	10/16/12 10:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
- 11
- 12
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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #7**

**Lab Sample ID: 490-8918-7**

**Date Collected: 10/10/12 09:00**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	7.08		1.04		mg/L			10/13/12 13:26	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #8**

**Lab Sample ID: 490-8918-8**

**Date Collected: 10/10/12 09:05**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	7.58		1.05		mg/L			10/13/12 13:26	1

1

2

3

4

5

6

7

8

9

10

11

12

13



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #9**

**Lab Sample ID: 490-8918-9**

**Date Collected: 10/10/12 09:10**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	7.39		1.09		mg/L			10/13/12 13:26	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #10**

**Lab Sample ID: 490-8918-10**

**Date Collected: 10/10/12 09:15**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.20	HF	0.100		SU			10/13/12 11:07	1
Temperature	21.5	HF	0.100		Degrees C			10/13/12 11:07	1

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #11**

**Lab Sample ID: 490-8918-11**

**Date Collected: 10/10/12 09:20**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.40	HF	0.100		SU			10/13/12 11:07	1
Temperature	21.5	HF	0.100		Degrees C			10/13/12 11:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #12**

**Lab Sample ID: 490-8918-12**

**Date Collected: 10/10/12 09:25**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.40	HF	0.100		SU			10/13/12 11:07	1
Temperature	21.5	HF	0.100		Degrees C			10/13/12 11:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 490-28397/1-A**  
**Matrix: Water**  
**Analysis Batch: 28402**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 28397**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.00		mg/L		10/16/12 10:07	10/16/12 10:07	1

**Lab Sample ID: LCS 490-28397/2-A**  
**Matrix: Water**  
**Analysis Batch: 28402**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 28397**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	41.7	36.46		mg/L		87	78 - 114

**Lab Sample ID: 490-8859-M-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 28402**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 28397**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	ND		50.6	45.95		mg/L		91	78 - 114

## Method: 410.4 - COD

**Lab Sample ID: MB 490-28895/1**  
**Matrix: Water**  
**Analysis Batch: 28895**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

**Lab Sample ID: LCS 490-28895/4**  
**Matrix: Water**  
**Analysis Batch: 28895**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	20.0	21.13		mg/L		106	90 - 110

**Lab Sample ID: LCSD 490-28895/5**  
**Matrix: Water**  
**Analysis Batch: 28895**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	20.0	20.94		mg/L		105	90 - 110	1	20

**Lab Sample ID: 490-8918-1 MS**  
**Matrix: Water**  
**Analysis Batch: 28895**

**Client Sample ID: NCPS #1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		50.0	56.63		mg/L		95	90 - 110

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Method: 410.4 - COD (Continued)

Lab Sample ID: 490-8974-B-1 DU  
 Matrix: Water  
 Analysis Batch: 28895

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chemical Oxygen Demand	ND		ND		mg/L		NC	20

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 490-27802/1  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Method Blank  
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.00		mg/L			10/13/12 13:26	1

Lab Sample ID: LCS 490-27802/2  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	97.80		mg/L		98	90 - 110

Lab Sample ID: 490-8973-J-1 DU  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	ND		ND		mg/L		NC	20

Lab Sample ID: 490-9016-I-1 DU  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	ND		1.200		mg/L		NC	20

## Method: SM 4500 H+ B - pH

Lab Sample ID: 490-8918-10 DU  
 Matrix: Water  
 Analysis Batch: 27899

Client Sample ID: NCPS #10  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.20	HF	7.200		SU		0	20
Temperature	21.5	HF	21.50		Degrees C		0	20

# QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## General Chemistry

### Analysis Batch: 27802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8918-7	NCPS #7	Total/NA	Water	SM 2540D	
490-8918-8	NCPS #8	Total/NA	Water	SM 2540D	
490-8918-9	NCPS #9	Total/NA	Water	SM 2540D	
490-8973-J-1 DU	Duplicate	Total/NA	Water	SM 2540D	
490-9016-I-1 DU	Duplicate	Total/NA	Water	SM 2540D	
LCS 490-27802/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 490-27802/1	Method Blank	Total/NA	Water	SM 2540D	

### Analysis Batch: 27899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8918-10	NCPS #10	Total/NA	Water	SM 4500 H+ B	
490-8918-10 DU	NCPS #10	Total/NA	Water	SM 4500 H+ B	
490-8918-11	NCPS #11	Total/NA	Water	SM 4500 H+ B	
490-8918-12	NCPS #12	Total/NA	Water	SM 4500 H+ B	
LCS 490-27899/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 28397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8859-M-1-A MS	Matrix Spike	Total/NA	Water	1664A	
490-8918-4	NCPS #4	Total/NA	Water	1664A	
490-8918-5	NCPS #5	Total/NA	Water	1664A	
490-8918-6	NCPS #6	Total/NA	Water	1664A	
LCS 490-28397/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 490-28397/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 28402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8859-M-1-A MS	Matrix Spike	Total/NA	Water	1664A	28397
490-8918-4	NCPS #4	Total/NA	Water	1664A	28397
490-8918-5	NCPS #5	Total/NA	Water	1664A	28397
490-8918-6	NCPS #6	Total/NA	Water	1664A	28397
LCS 490-28397/2-A	Lab Control Sample	Total/NA	Water	1664A	28397
MB 490-28397/1-A	Method Blank	Total/NA	Water	1664A	28397

### Analysis Batch: 28895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8918-1	NCPS #1	Total/NA	Water	410.4	
490-8918-1 MS	NCPS #1	Total/NA	Water	410.4	
490-8918-2	NCPS #2	Total/NA	Water	410.4	
490-8918-3	NCPS #3	Total/NA	Water	410.4	
490-8974-B-1 DU	Duplicate	Total/NA	Water	410.4	
LCS 490-28895/4	Lab Control Sample	Total/NA	Water	410.4	
LCSD 490-28895/5	Lab Control Sample Dup	Total/NA	Water	410.4	
MB 490-28895/1	Method Blank	Total/NA	Water	410.4	

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Client Sample ID: NCPS #1

Date Collected: 10/10/12 08:30

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	28895	10/18/12 13:24	MJ	TAL NSH

## Client Sample ID: NCPS #2

Date Collected: 10/10/12 08:35

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	28895	10/18/12 13:24	MJ	TAL NSH

## Client Sample ID: NCPS #3

Date Collected: 10/10/12 08:40

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	28895	10/18/12 13:24	MJ	TAL NSH

## Client Sample ID: NCPS #4

Date Collected: 10/10/12 08:45

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	28402	10/16/12 10:07	CC	TAL NSH
Total/NA	Prep	1664A			28397	10/16/12 10:07	CC	TAL NSH

## Client Sample ID: NCPS #5

Date Collected: 10/10/12 08:50

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	28402	10/16/12 10:07	CC	TAL NSH
Total/NA	Prep	1664A			28397	10/16/12 10:07	CC	TAL NSH

## Client Sample ID: NCPS #6

Date Collected: 10/10/12 08:55

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	28402	10/16/12 10:07	CC	TAL NSH
Total/NA	Prep	1664A			28397	10/16/12 10:07	CC	TAL NSH



# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Client Sample ID: NCPS #7

Lab Sample ID: 490-8918-7

Date Collected: 10/10/12 09:00

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	27802	10/13/12 13:26	DM	TAL NSH

## Client Sample ID: NCPS #8

Lab Sample ID: 490-8918-8

Date Collected: 10/10/12 09:05

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	27802	10/13/12 13:26	DM	TAL NSH

## Client Sample ID: NCPS #9

Lab Sample ID: 490-8918-9

Date Collected: 10/10/12 09:10

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	27802	10/13/12 13:26	DM	TAL NSH

## Client Sample ID: NCPS #10

Lab Sample ID: 490-8918-10

Date Collected: 10/10/12 09:15

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 H+ B		1	27899	10/13/12 11:07	BG	TAL NSH

## Client Sample ID: NCPS #11

Lab Sample ID: 490-8918-11

Date Collected: 10/10/12 09:20

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 H+ B		1	27899	10/13/12 11:07	BG	TAL NSH

## Client Sample ID: NCPS #12

Lab Sample ID: 490-8918-12

Date Collected: 10/10/12 09:25

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 H+ B		1	27899	10/13/12 11:07	BG	TAL NSH

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Method Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	TAL NSH
410.4	COD	MCAWW	TAL NSH
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL NSH
SM 4500 H+ B	pH	SM	TAL NSH

**Protocol References:**

1664A = EPA-821-98-002

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



# Certification Summary

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-12
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAC	9	1168CA	10-31-12
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Colorado	State Program	8	N/A	02-28-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAC	4	E87358	06-30-13
Illinois	NELAC	5	200010	12-09-12
Iowa	State Program	7	131	05-01-14
Kansas	NELAC	7	E-10229	10-31-12
Kentucky	State Program	4	90038	12-31-12
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAC	6	LA110014	12-31-12
Louisiana	NELAC	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAC	5	047-999-345	12-31-12
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAC	1	2963	10-09-13
New Jersey	NELAC	2	TN965	06-30-13
New York	NELAC	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-12
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAC	10	TN200001	04-30-13
Pennsylvania	NELAC	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-12
South Carolina	State Program	4	84009 (001)	02-28-13
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAC	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAC	8	TAN	06-30-13
Virginia	NELAC	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-13
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

## COOLER RECEIPT FORM



490-8918 Chain of

Cooler Received/Opened On 10/11/2012 @ 0815

1. Tracking # 0381 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 14740456

2. Temperature of rep. sample or temp blank when opened: 1.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EF

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES NO..NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) EF

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA EF 10-11-12

16. Was residual chlorine present? YES NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) EF

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) EF

I certify that I attached a label with the unique LIMS number to each container (initial) EF

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#

EF  
10-11-12

**TestAmerica Nashville**  
 2960 Foster Creighton Drive  
 Nashville, TN 37204  
 Phone (615) 726-0177 Fax (615) 726-0954

**Chain of Custody Record**



THE LEADER IN ENVIRONMENTAL TESTING

**Client Information**

Client Contact: Mr. Paul McMahon  
 Company: Conestoga-Rovers & Associates, Inc.  
 Address: 2055 Niagara Falls Blvd, Suite 3  
 City: Niagara Falls  
 State, Zip: NY, 14304  
 Phone: [Blank]  
 Email: pmcmahon@crworld.com  
 Project Name: Van Buren, AR Stormwater  
 Site: [Blank]

Sampler: [Blank]

Lab PM: Fitzwater, Ryan  
 E-Mail: ryan.fitzwater@testamericainc.com

Carrier Tracking No(s): [Blank]

COC No: 490-4289-1998\_1

Page: Page 1 of 1

Due Date Requested: [Blank]

TAT Requested (days): [Blank]

PO #: [Blank]

Purchase Order Requested: [Blank]

Project #: 49001692

SSOV#: [Blank]

**Analysis Requested**

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Trislu, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Preservation Codes:	Special Instructions/Note:
				Water	S	N	410.4 - Chemical Oxygen Demand		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA Other:	
				Water	S	N	SM4500_H+ - pH & Temperature		M - Hexane N - None O - AsH2O2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
				Water	S	N	1664A - HEM			
				Water	S	N	2540D - Total Suspended Solids			

Loc: 490  
8918

Possible Hazard Identification  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: [Blank]

Relinquished by: [Blank]

Relinquished by: [Blank]

Relinquished by: [Blank]

Custody Seals Intact:  Yes  No  
 Custody Seal No.: [Blank]

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 Special Instructions/OCC Requirements: [Blank]

Date: [Blank] Time: [Blank] Method of Shipment: [Blank]

Received by: [Signature] Date/Time: 12-11-12 08:15 Company: TRAV

Received by: [Signature] Date/Time: [Blank] Company: [Blank]

Received by: [Blank] Date/Time: [Blank] Company: [Blank]

Cooler Temperature(s) °C and Other Remarks: [Blank]

## Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 490-8918-1

**Login Number: 8918**

**List Source: TestAmerica Nashville**

**List Number: 1**

**Creator: Ford, Easton**

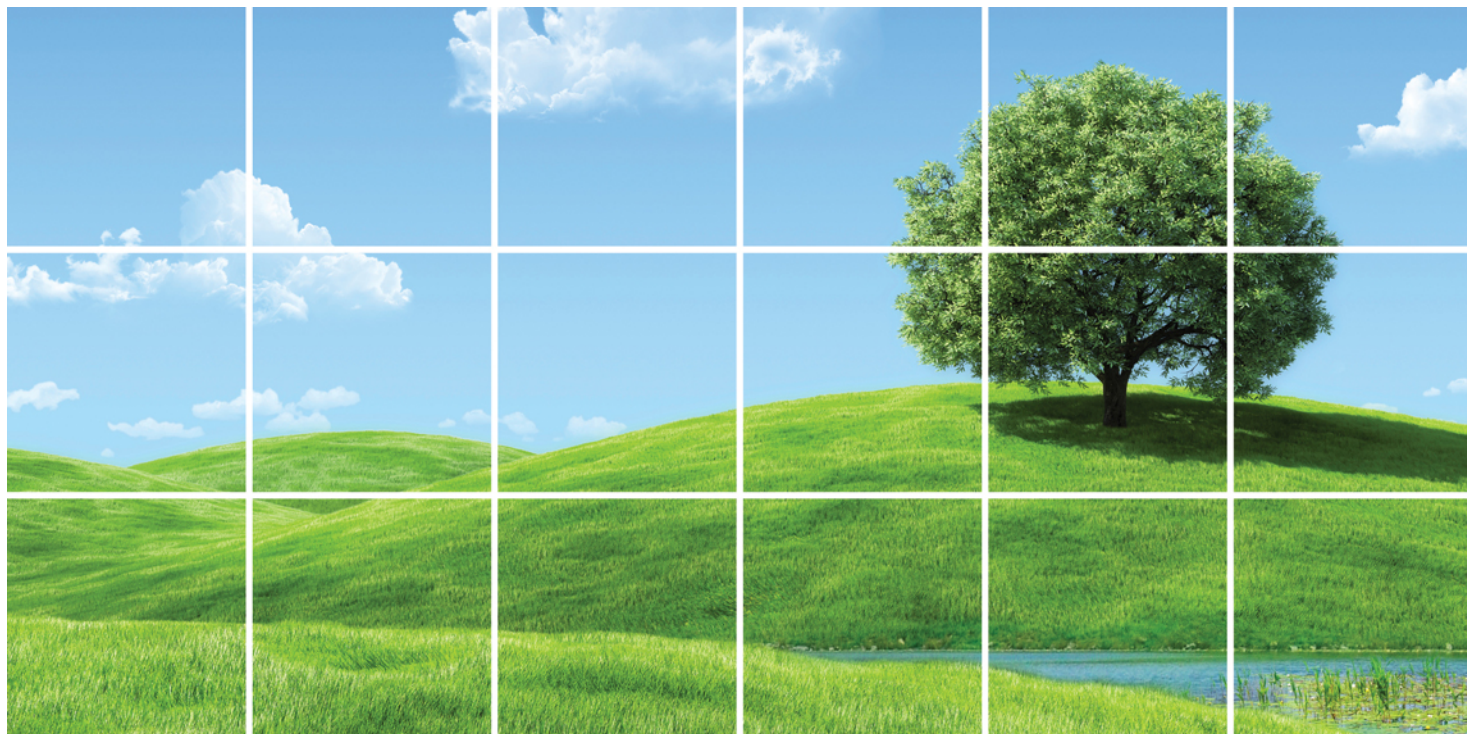
Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	







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REPORT

## Storm Water Pollution Prevention Plan

Prepared for: Nabors Completion & Production  
Services, Inc.

**Conestoga-Rovers & Associates**  
103 Gamma Drive Ext., Suite 110  
Pittsburgh, Pennsylvania 15238

May 2013 • #075095-Rev. 1  
Report Number:1



**CONESTOGA-ROVERS  
& ASSOCIATES**

**STORM WATER POLLUTION PREVENTION PLAN  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

**PERMIT NO. ARR000000  
PERMIT TRACKING NO. ARR000825**

**Prepared For:  
Nabors Completion and Production Services Co.  
Houston, Texas**

**MAY 2013  
REF. NO. 075095 (1) (Rev.1)**



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APPENDIX B	FORMS <ul style="list-style-type: none"><li>• RECORD OF REVIEWS AND AMENDMENTS</li><li>• COMPREHENSIVE SITE COMPLIANCE EVALUATION REPORT</li><li>• STORM WATER INSPECTION REPORT</li><li>• RELEASE NOTIFICATION FORM</li></ul>
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APPENDIX D	BENCHMARK ANALYTICAL DATA

## 1.0 INTRODUCTION

This document constitutes the Storm Water Pollution Prevention Plan (SWPPP or Plan) for the Nabors Completion and Production Services Co. (NCPS) facility located at 2802 Kibler Road, Van Buren, Arkansas. The SWPPP has been prepared in accordance with the requirements listed in Part 4 in the Arkansas Department of Environmental Quality (ADEQ) Industrial Stormwater General Permit (IGP) for authorization to discharge under the NPDES (NPDES Permit No. ARR000000) (herein referred to as the Permit), with a ADEQ Permit Tracking Number of ARR000825. The Permit is effective through June 30, 2014.

For purposes of this Plan, the parcels and features within NCPS's property boundary will be referred to as the "Facility" or "Site". Figure 1 depicts the location of the Site.

A copy of this Plan will be maintained at the Facility, and will be made available for review by the ADEQ upon request. This SWPPP has been signed as required under the Permit (see Certification of SWPPP in Appendix A to this Plan). It should be noted that the SWPPP itself is designed to complement other existing environmental regulatory requirements, and compliance with the SWPPP is not a substitute for the fulfillment of other environmental regulatory requirements. NCPS does have an additional spill contingency to cover oil-related chemicals and fluids in compliance with 40 Code of Federal Regulations (CFR) 112. This document is entitled the Spill Prevention, Control, and Countermeasure Plan (SPCC Plan). The SPCC Plan is available for review by ADEQ and maintained at the Facility.

### 1.1 OBJECTIVES OF THIS PLAN

The objectives of this SWPPP are:

- Identify potential sources of pollution, which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. Storm water associated with industrial activity (defined in CFR 122.26(b)(14) includes, but is not limited to, the discharge from any conveyance which is used for collection and conveying storm water and which is directly related to manufacturing, processing or materials storage areas at an industrial plant.
- Describe practices and measures to be used in reducing the potential for pollutants to be exposed to storm water.
- Assure compliance with the terms and conditions of the Permit.

## 1.2 AMENDING THIS SWPPP

This SWPPP will be reviewed and amended as necessary:

- Whenever there is a change at the Facility, such as a change in design, operation, or maintenance that could increase the exposure of significant materials to storm water.
- Whenever an inspection or compliance evaluation determines a deficiency in the non-structural control measures.
- Whenever an official determines that a modification to the SWPPP is necessary.
- Whenever there is a spill, leak, release, or unauthorized discharge from the Facility.

A record of each review and amendment will be kept using the Record of Reviews and Amendments Form in Appendix B. The SWPPP has been amended after a compliance inspection by the ADEQ on April 5, 2013.

Any revision to the SWPPP required as a result of the Comprehensive Site Compliance Evaluation (see Section 9.0) will be completed within no more than 12 weeks of the completion of the inspection.

A copy of this Plan and of all associated reports, monitoring data, and certifications will be retained by the Facility for a minimum of 3 years.

**2.0 IMPLEMENTATION OF ACTIVITIES REQUIRED UNDER THIS PLAN**

The following activities related to the Plan will be implemented in order for the Plan to be considered complete:

<i>Activity</i>	<i>Referenced In:</i>
A duly authorized representative will sign the Plan	Appendix A
A duly authorized representative will complete and sign the Certification of Non-Storm Water Discharges	Appendix B

In addition to the actions above, the following inspection, monitoring, and certification records must be kept with this Plan:

- A copy of the Notice of Intent (NOI) submitted to the ADEQ and acknowledgment letter from ADEQ, if available.
- A copy of the Permit, Discharge Monitoring Reports (DMR) submitted to ADEQ, and analytical data provided by the laboratory.
- Descriptions of all leaks/spills or other releases that resulted in discharges of pollutants to surface waters through storm water or otherwise, the circumstances leading to the release and actions taken in response to the release, and measures taken to prevent the recurrence of such releases.
- Records of employee training on the SWPPP.
- Documentation of maintenance and repairs of control measures, including the dates(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, date(s) of actual repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules.
- All inspection reports, including the Routine Facility Inspection, the Visual Assessment Reports, and the Comprehensive Site Inspection Reports.
- Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations.
- Description of any corrective action taken at the Site, including triggering event and dates when problems were discovered and modifications occurred.

### 3.0 FACILITY INFORMATION

#### 3.1 SITE DESCRIPTION

The Site is located at 2802 Kibler Road, Van Buren, Arkansas. The latitude and longitude for the center of the Site is approximately 35.345693 and -94.328012, respectively. The Facility consists of approximately 5.2 acres and includes several buildings, silos, and above ground storage tanks (AST). NCPS operates an oil field service company from the Facility. The Standard Industrial Classification (SIC) code for the Facility is 1389. The North American Industry Classification System (NAICS) code for the Facility is 213112. Operation hours are 24 hours, seven days a week. NCPS provides well stimulation (hydraulic fracturing), well-logging and cementing services associated with oil and natural gas production. NCPS also operates an elaborate fleet vehicle maintenance and fabrication program. Activities involved with oil field services are dynamic and continuously changing, as does the equipment necessitated to accommodate these changes.

The primary structures on Site include:

- Maintenance Shop building
- Storage trailers and sheds
- Chemical Storage building
- Bulk Plant Mixing building
- Silos containing cement, sand and fly ash
- ASTs (dilute hydrochloric acid, new and used oil, antifreeze and nitrogen)

Within the Maintenance Shop building there are five ASTs that contain oil and one AST that contains antifreeze. Located directly outside of the Maintenance Shop are one 330-gallon AST for storage of used oil and one 330-gallon AST for storage of used antifreeze. There are also offices located in the Maintenance Shop building.

The Chemical Storage building was constructed and completed in September 2011. The building is over 6,000 square feet and is capable of having tractor trailers load and unload chemicals within its secondary containment. The entire building is surrounded by a secondary-containment berm and has a dead-end sump located within. The new building allows all chemicals at the Facility to be stored under cover within secondary containment. Chemicals are stored primarily in sacks or 220 gallon totes. Empty drums and totes are stored on the east side of the yard and picked up by the respective vendors.

Dilute hydrochloric acid (HCl) is stored in a double-walled 4,600-gallon poly AST. The HCl AST is located on the eastern side of the Maintenance Shop within a cement block wall. A nitrogen gas AST is located south of the Bulk Plant Mixing building.

Figure 2 provides a Site Plan which identifies the primary Site features.

### **3.2 SITE DRAINAGE AND OUTFALLS**

Topographic contours across the Site are relatively flat with a gradual slope toward the south/southeast. The majority of the Site is covered with permeable material (gravel, cinders, and soil) that allows precipitation to infiltrate, and only a small percentage of the ground is covered with non permeable material (i.e., asphalt or concrete).

During extremely heavy storm events, sheet flow across the Site flows toward the south and southeast. There is one catch basin located at the end of the concrete driveway from the Maintenance Building in which a 4-inch diameter pipe is present. There are not any drains inside the Chemical Storage building where the majority of materials and chemicals are stored under roof cover.

There are two drainage swales along the southern and eastern property that intercept storm water flow. Kibler Road (Arkansas State Highway 162) is immediately north of the Facility, and South 28<sup>th</sup> Street is on the west side of the Facility. There is minimal storm water run-on flow to the Facility due to the drainage swales and roads.

One storm water outfall was originally identified for the Facility and included in the NOI. During an inspection by the ADEQ on April 5, 2013, four additional outfalls were identified. The five Outfalls are shown on Figure 2 and are as follows:

- Outfall 001 – farthest downgradient, south (lat. 35.43476/long. -94.32797)
- Outfall 002 – at property boundary, south of Maintenance Shop  
(lat. 35.43550/long. -94.32872)
- Outfall 003 – south and upgradient of Outfall 001 (lat. 35.43489/long. -94.32767)
- Outfall 004 – eastern drainage swale (lat. 35.43567/long. -94.32714)
- Outfall 005 – eastern drainage swale and east of Chemical Building  
(lat. 35.43592/long. -94.32713)

Four of the Outfalls (Outfall 001, 003 through 005) are located along the drainage swale at the south and east property boundaries. Outfall 002 is located south of the Maintenance Shop building.

The closest surface water body is Flat Rock Creek which is located approximately 300 feet to the south of the Site's property boundary. As determined by Site reconnaissance conducted by NCPs, the drainage swales do not directly connect with Flat Rock Creek.



#### 4.0 POLLUTION PREVENTION TEAM

The individuals comprising the pollution prevention team and their respective responsibilities are shown in the following table. The pollution prevention team is responsible for assisting the Operations Manager in developing and revising the Facility's SWPPP (detailed in Section 1.2) as well as maintaining control measures and taking corrective actions where required. Each member of the pollution prevention team shall have ready access to applicable portions of the Permit and this Plan.

#### **POLLUTION PREVENTION TEAM MEMBERS AND RESPONSIBILITIES**

<i>Name or Title of Team Member</i>	<i>Office/Mobile Phone Number</i>	<i>Responsibility</i>
Fran Hoffman Operations Manager	(479) 471-7467 office (479) 806-0901 mobile	<ul style="list-style-type: none"><li>• Update and revise the SWPPP as required by the Permit</li><li>• Implement the employee training program as described in Part 4 of the Permit</li><li>• Update the record of spills and releases from the Facility</li></ul>
David Rose Materials Manager	(479) 471-7467 office (610)-466-2389 mobile	<ul style="list-style-type: none"><li>• Conduct the Comprehensive Site Compliance Evaluation as described in Part 4.6.10.2 of the Permit.</li><li>• Implement the preventative maintenance program in accordance with Best Management Practices (BMPs)</li></ul>

## 5.0 POTENTIAL SOURCES OF POLLUTION

### 5.1 INDUSTRIAL ACTIVITIES

Industrial activities are primarily conducted within and around the following Site features:

- Maintenance Shop building
- Storage trailers and sheds
- Chemical Storage building
- Bulk Plant Mixing building
- Silos containing cement, sand and fly ash
- ASTs (dilute HCl, new and used oil, antifreeze and nitrogen)
- Fleet vehicle and equipment parking

Maintenance Shop - within the Maintenance Shop building there are five ASTs that contain oil and one AST that contains antifreeze. Located directly outside of the Maintenance Shop are one 330-gallon AST for storage of used oil and one 330-gallon AST for storage of used antifreeze. Loading and unloading of fuels and liquids is conducted inside and outside of the Maintenance Shop.

Storage Trailers and Shed - Various materials and equipment are stored in on-Site trailers and sheds. NCPS personnel store and load equipment and materials into and from the trailers and sheds.

Chemical Storage building - Chemicals are stored inside this building and are not exposed to outdoor conditions or precipitation. Tractor trailers load and unload chemicals within its secondary containment. The entire building is surrounded by a secondary-containment berm and has a dead-end sump located within. Chemicals are stored primarily in sacks or 220-gallon totes. Empty drums and totes are stored on the east side of the yard and picked up by the respective vendors. NCPS personnel load and unload chemicals from the building.

Bulk Plant Mixing building and Silos - Dry materials consisting of cement, sand, and fly ash are stored in the silos west of the Mixing building. The dry materials are mixed and loaded at this location into NCPS trucks for delivery and use at the well pad sites.

HCl ASTs - Dilute HCl is stored in a double-walled 4,600-gallon poly AST. The HCl AST is located on the eastern side of the Maintenance Shop within a cement block wall.

Equipment and Vehicle Parking - NCPS's fleet of vehicles are parked on the east and south perimeters of the Site.

## **5.2 INVENTORY OF EXPOSED MATERIALS AND CHEMICALS**

Due to the construction of the Chemical Storage building, existing silos and ASTs, there are very few chemicals or materials present in outside areas that can be exposed to precipitation. Cement, sand and fly ash that spill on the surface around the silos are promptly cleaned up by NCPS. The Chemical Storage building is constructed with a perimeter berm to act as containment in the event of a spill in the building. A listing of the chemicals and materials that are typically contained on Site are included in Appendix C.

Oil and oil-related fluids are mainly stored in the Maintenance Shop building and are addressed by the Site's SPCC Plan, and therefore, are not addressed in this SWPPP.

## **5.3 RISK IDENTIFICATION AND SUMMARY OF POTENTIAL POLLUTANT SOURCES**

The materials at the Site that could be potentially exposed to storm water and their subsequent potential pollutant concerns are limited to the following:

1. Excess dry materials (cement, sand and fly-ash) adjacent to the Bulk Mixing building
  - a. Potential pollutant concern: total suspended solids (TSS)
2. HCl AST located on the east side of the Maintenance Shop
  - a. Potential pollutant concern: low pH
3. Surficial spills during loading or unloading of materials
  - a. Potential pollutant concern: dependent on material; TSS, low pH

## **5.4 SPILLS AND LEAKS**

The ADEQ responded on May 11, 2011 to a complaint that NCPS was washing equipment on the Site without containment, and allowing wash water to drain across the Site to a nearby ditch. NCPS informed ADEQ that this practice was no longer being

conducted, and waste water is no longer generated on Site. There were no signs of a spill or release.

During an April 5, 2013 inspection, ADEQ noted evidence of a past spill on the south side along the fence line of the Facility, which is reported as a violation of Part 4.6.6.5 of the Permit. NCPS contracted Hubbs Construction (Hubbs) to excavate an area of oil-stained gravel on April 22, 2013. Hubbs removed stained gravel to a depth in which no further visible staining was observed and ranged from approximately 0.2 to 0.7 feet below existing grade. One composite sample was collected for disposal characterization using Toxicity Characteristic Leaching Procedures (TCLP). The TCLP results indicated the sample was non-hazardous and the gravel/soil was disposed of off Site at a licensed disposal facility. The area was backfilled with clean gravel.

There have not been any other reportable spills other than as noted above.

In the event of a reportable spill, the information regarding to the spill will be kept with the version of this Plan that is maintained by the Pollution Prevention Team (see Section 4.0).

## **5.5 SUMMARY OF SAMPLING DATA**

Effluent water samples have been collected from Outfall 001 near the southern drainage swale for the parameters required in the Permit. Samples were collected on the following dates:

- October 27, 2011 (before the Permit was issued)
- October 10, 2012

The reporting period of January through June 2012 was missed in error and reported as a violation in the ADEQ's April 2013 inspection.

Copies of the Discharge Monitoring Reports (DMR) and the laboratory analytical reports are included in Appendix D. The data was compared to the recommended Benchmark Values per the Permit.

The analytical result for TSS was reported at a concentration (226 milligrams per liter) slightly above the benchmark value during the October 2011 sampling. TSS in the outfall sample is likely due to the surficial cover at the Site consisting of gravel, soil, and cinders, and the sample was turbid at the time of collection. Since the pH has been

within the range of 6.0 to 9.0 standard units, it does not appear the TSS elevated concentration is due to cement entering the storm water.

As a corrective action for the TSS exceedance, NCPS has installed sediment/silt barriers along the eastern property boundary in an effort to reduce fines and solids in run-off. The silt barriers will be adjusted as needed based on the analytical results for the Outfall sampling. If this corrective action does not resolve the issue, NCPS will evaluate further corrective actions.

Outfalls 001 through 005 will be sampled in accordance with the Permit parameters and frequency.

## **6.0 MEASURES AND CONTROLS**

### **6.1 BEST MANAGEMENT PRACTICES - NON-STRUCTURAL CONTROL MEASURES**

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#### **6.1.1 GOOD HOUSEKEEPING**

The good housekeeping program is an ongoing program implemented to ensure a clean, orderly Facility. Additional BMPs for the Facility are included in the SPCC Plan for oil and oil-related products. The storm water good housekeeping program is part of the Facility-wide program, and is in accordance with Section 4.6.6.3 in the Permit. The equipment and the areas to be inspected under the storm water good housekeeping program, and the frequencies of the inspections, are included in Appendix B. The observations made under the program are recorded by the Facility on the Storm Water Inspection Report (see Appendix B).

To control excess, unused, dry materials in the bulk mixing area and silos from entering storm water, NCPS implements routine inspections and cleaning of these areas. NCPS has also installed silt barriers along the eastern property boundary in an effort to reduce fines and solids from run-off. As previously stated, it does not appear that cement is entering the storm water and creating an elevation in TSS concentrations.

Any deficiencies identified under the program will be corrected as quickly as reasonably possible.

#### **6.1.2 PREVENTATIVE MAINTENANCE**

The equipment and sources are inspected in accordance with the Facility's SPCC Plan BMPs, and this Plan. The observations made under the program are also recorded in the Facility's Storm Water Inspection Report.

Any deficiencies identified under the program will be corrected as quickly and reasonably as possible.

#### **6.1.3 SPILL PREVENTION AND RESPONSE PROCEDURES**

The areas where potential spills can occur are described in Section 5.2. Additional spill response procedures are included in the SPCC Plan for the Facility. The procedures for responding to and cleaning up spills are as follows:

Any employee discovering a spill will:

- i) Notify their supervisor and/or the Facility Manager. Once the employee notifies the supervisor, the supervisor will notify the Facility Manager.
- ii) Contain the spill, to the extent possible to do safely, using the equipment located in one of the Facility's spill kits.

In the event of a potential release of chemicals or substances from the Site, the Facility Manager is responsible for:

- i) Evaluating the situation and the potential for the emergency to intensify.
- ii) Identifying the type, quantity, and source of the spill.
- iii) Activating personnel to contain and clean up the spill, and to prevent any additional spillage.
- iv) Estimating the volume discharged from the Site as a result of the spill, and making all appropriate emergency notifications (see below).
- v) Arranging for all spilled material to be adsorbed in granular absorbent or manually removed and placed in drums. The waste generated will be characterized and properly disposed of or reclaimed at an approved facility.

If a release of a materials or chemicals from the Facility is greater than the reportable quantity (RQ), or results in a sheen on the waters of the State, the Facility Manager will enter the information required in the Release Notification Form in Appendix B and use that information when notifying:

- |    |                                                  |                      |
|----|--------------------------------------------------|----------------------|
| 1. | National Response Center (NRC)                   | 1-800-424-8802       |
| 2. | Crawford County Department of Emergency Response | (479) 471-3260       |
| 3. | Arkansas Department of Emergency Management      | 1-800-322-4012       |
| 4. | Van Buren Fire Department                        | (479) 471-5031 / 911 |

For cleanup of spilled material after mitigation of spill, call HMER One, Inc. at (972) 775-6894 or Northwest Hazmat, Inc. at 1-800-597-1323. All spills which enter or threaten to enter the wastewater municipal sewer system must be reported to Van Buren Municipal Utilities at (479) 474-5067.

#### **6.1.4 EMPLOYEE TRAINING**

Appropriate personnel at all levels of responsibility in the Facility will be trained annually on the objectives and components of the Plan. The training will include emphasis on:

- The contents of this SWPPP
- The spill prevention and response procedures described in Section 6.1.3 above

#### **6.2 BEST MANAGEMENT PRACTICES - STRUCTURAL CONTROL MEASURES**

As previously described in Section 5.2., the only foreseeable significant source of potential pollution to storm water would be from a release of a surficial spill during loading or unloading of materials, from excess, unused cement, sand and fly ash around silos and the mixing building, or from the HCl AST. All other potential sources are housed indoors and under cover with secondary containment measures to ensure that they do not contribute to storm water pollution.

NCPS has spill control equipment and materials, such as absorbent socks and absorbent pads, granular oil dry material, and shovels in the immediate vicinity of the loading and unloading areas, the Chemical Storage building, and the HCl AST.

The 4,600-gallon double-walled AST containing dilute HCl is and enclosed within a concrete block containment wall located on a cement pad. Precipitation and storm water do not typically accumulate within the secondary containment structure. NCPS checks the AST on a routine basis in accordance with the requirements in this Plan. Spill pans are used during loading and unloading of acid from the AST. In addition, NCPS personnel are present during product loading and unloading from this AST.

BMPs consisting of good housekeeping are implemented for the silos and mixing building to prevent materials from entering storm water.

TSS concentrations have exceeded the Permit benchmark levels in Outfall 001 sampling. Therefore, NCPS has implemented sediment/silt barrier controls (silt fence and silt socks) to mitigate fines and solids from the gravel across the Site from entering the surface water through run off.



## 7.0 NON-STORM WATER DISCHARGES

There are no discharges at the Facility of the authorized non-storm waters as described in Part 4.6.7 of the Permit.

### 7.1 EVALUATION OF NON-STORM WATER DISCHARGES

See the Certification of Non-Storm water Discharges in Appendix A which certifies that all discharges have been tested or evaluated for the presence of any non-storm water discharge which is not authorized under the Permit.

To check for non-storm water discharges, one or more of the following methods were used at each storm water outfall.

#### Visual Inspection

Inspect each discharge point during dry weather on three separate occasions. As a rule, the discharge point should be dry during a period of extended dry weather since a storm water collection system should only collect storm water. To be sure about the source of any flow during dry weather, one of the additional tests described below may be performed.

#### Sewer Map

A review of a sewer map or plant schematic is another way to determine if there are any interconnections into the Facility's storm water collection system. A sewer map or plant schematic is a map of pipes and drainage systems used to carry process wastewater, non-contact cooling water, air conditioner condensate, and sanitary wastes (bathroom, sinks, etc.). If an accurate and reliable plant schematic exists, the pathways of the different water circuits may be examined. Also, floor drain discharges should be investigated since these may not drain into the storm water system.

#### Dye Testing

Another method for detecting improper connections to the storm water collection system is dye testing. Dye testing can be performed by simply releasing a dye into either the sanitary or process wastewater system and examining the discharge points from the storm water collection system for discoloration.

## 7.2 **SEDIMENT AND EROSION CONTROL AND MANAGEMENT OF RUN-ON AND RUNOFF**

The topography of the Site is generally flat around the buildings, and is graded so that runoff is contained on the Site. There is minimal storm water run-on flow to the Facility due to the drainage swales and roads. The Site is primarily covered with gravel, cinders, soil, or vegetation. Storm water in the flat areas either percolates into the ground or flows slowly as sheet flow and remains on Site as shown on Figure 2. As a result, there are limited areas with a high potential for soil erosion.

However, TSS concentrations have exceeded the Permit benchmark levels in Outfall 001 sampling. Therefore, NCPS has implemented sediment/silt barrier controls (silt fence and/or silt socks) along the east property boundary to mitigate fines and solids from the surficial materials across the Site from entering the storm water flow and discharging through outfalls.

## 8.0 SAMPLING AND MONITORING

NCPS will comply with the sampling and monitoring for Outfalls 001 through 005 as required by the Permit. Part 3 of the Permit describes the monitoring, parameters, and frequency requirements. The samples will be collected at a point representative of each Outfall (if not dry) discharge, but prior to entry into the drainage swale.

## 9.0 COMPREHENSIVE SITE COMPLIANCE EVALUATION

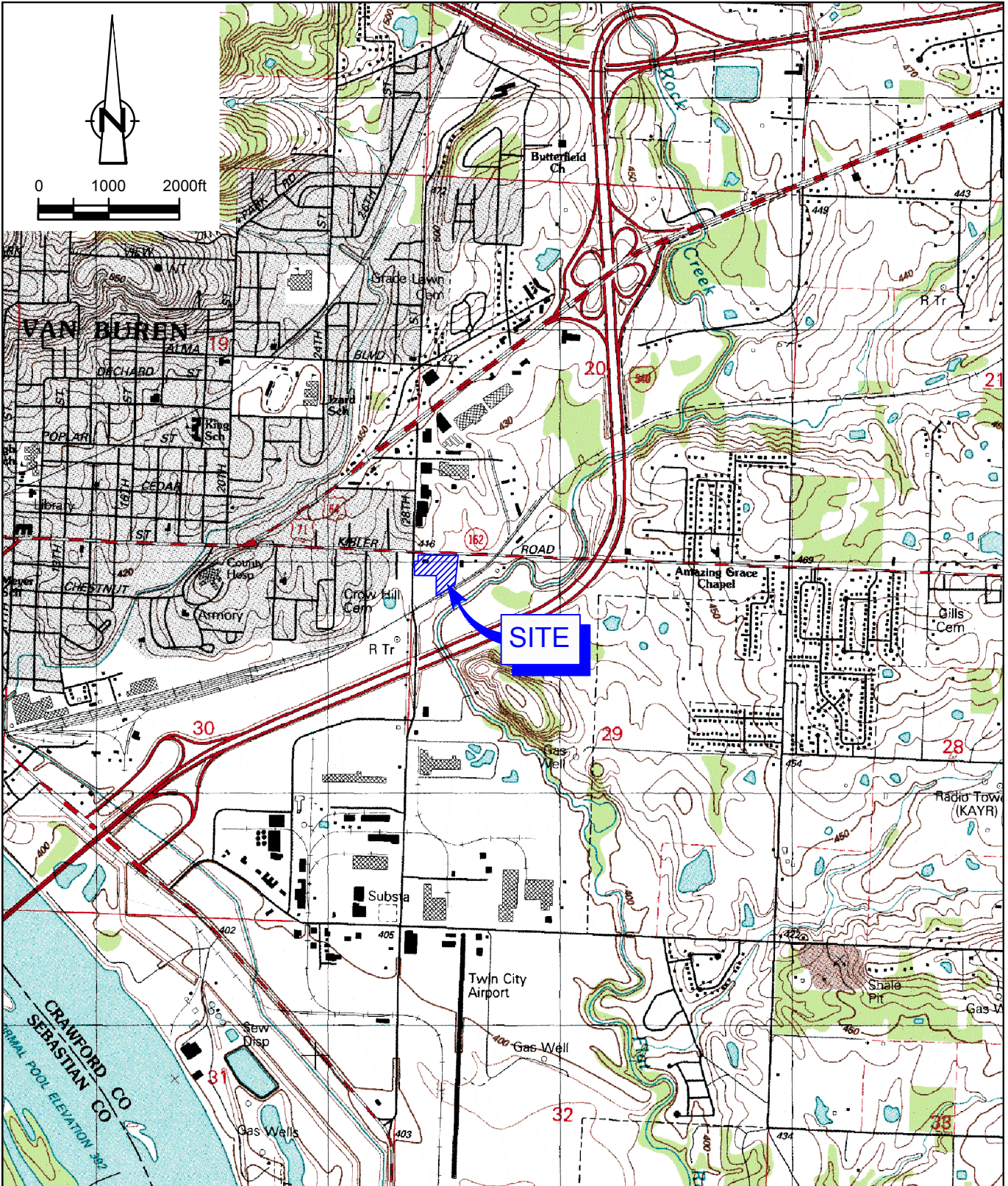
A Comprehensive Site Compliance Evaluation will be performed at least once per year by the Operations Manager to confirm the accuracy of the description of potential pollution sources contained in the Plan, determine the effectiveness of the Plan, and assess compliance with the Permit. This evaluation shall provide:

- 1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the Permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the Plan, such as spill response equipment shall be made.
- 2) Based on the results of the evaluation, the description of potential pollutant sources identified in the Plan (Section 5.2, in accordance with Part 4.6.5 of the Permit) and pollution prevention measures and controls identified in the Plan shall be revised as appropriate within the timeframes contained in the Permit.
- 3) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the Plan, and actions taken in accordance with the above paragraph must be documented and either contained in, or have on-Site record keeping location referenced in, the Plan at least 3 years after the date of the evaluation.
- 4) Where compliance evaluation schedules overlap the routine quarterly inspections required in the Permit, the compliance evaluation may be conducted in place of one such inspection.

The results will be recorded on the Comprehensive Site Compliance Evaluation report presented in Appendix B. The report will be signed by a duly authorized signatory and retained with this SWPPP for 3 years.

## 10.0 SECTION 303 CHEMICALS AND TOTAL MAXIMUM DAILY LOAD

Storm water discharges from the Facility does not enter a water body that is on the most recent 303 (d) list, or with an approved Total Maximum Daily Load (TMDL). As previously noted, the closest major surface water body is Flat Rock Creek, which is located approximately 300 feet south of the Site's property boundary, and storm water enters a drainage swale on Site but it does not drain to this creek.



SOURCE: USGS QUADRANGLE MAP: VAN BUREN, AR.

figure 1

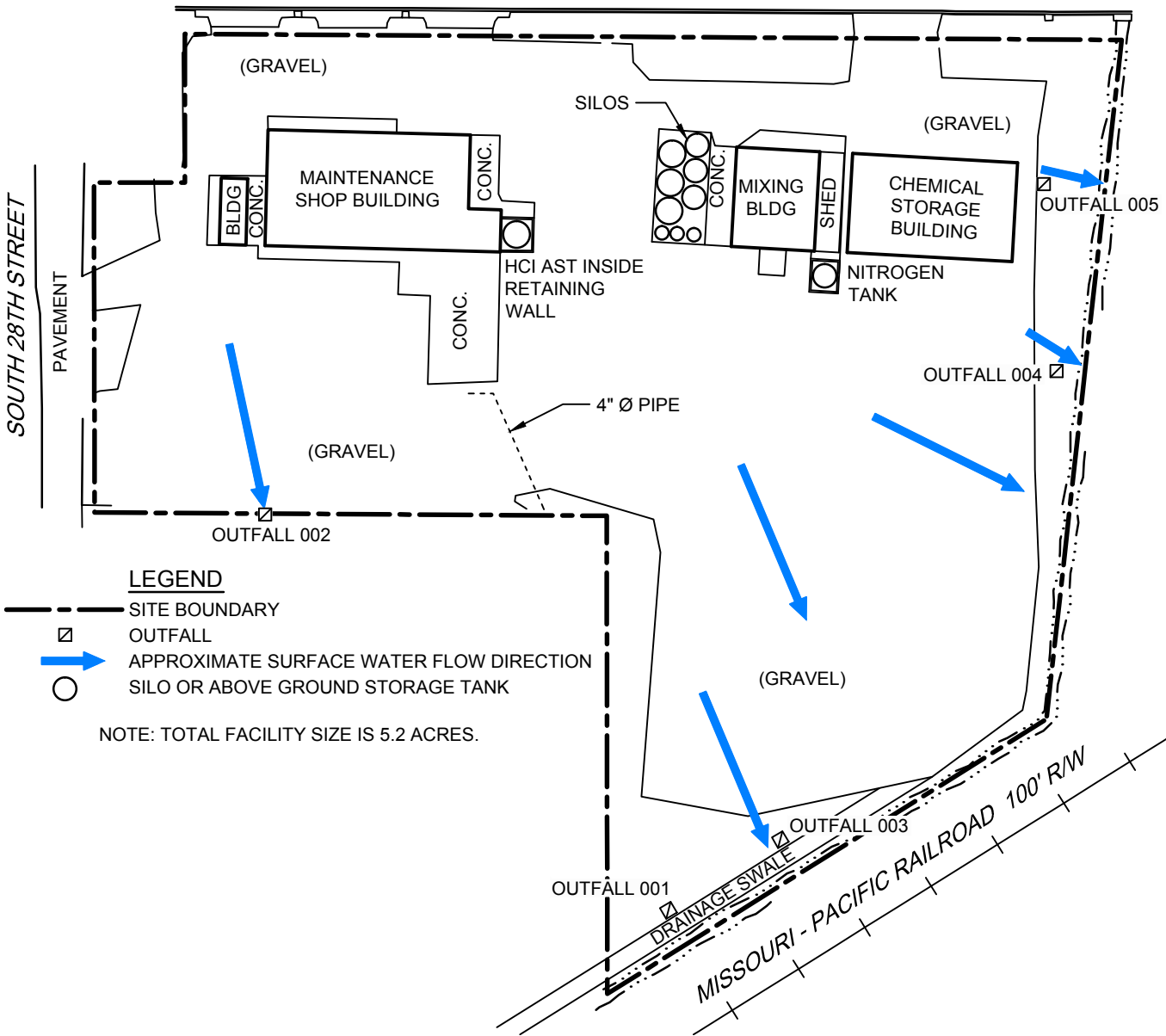
SITE LOCATION MAP  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 Van Buren, Arkansas







ARKANSAS STATE HIGHWAY 162 (KIBLER ROAD) R/W VARIES



**LEGEND**

- SITE BOUNDARY
- ☒ OUTFALL
- ➔ APPROXIMATE SURFACE WATER FLOW DIRECTION
- SILO OR ABOVE GROUND STORAGE TANK

NOTE: TOTAL FACILITY SIZE IS 5.2 ACRES.

figure 2

SITE PLAN  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 Van Buren, Arkansas



SOURCE: SATTERFIELD LAND SURVEYORS P.A., NW 1/4 NW 1/4, SECTION 29, T-9-N, R-31-W, DATED 7-7-11.

APPENDIX A  
CERTIFICATIONS



**CERTIFICATION OF THIS STORM WATER POLLUTION PREVENTION PLAN  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative:

Signature: Pat Kellam

Name: Patrick Kellam

Title: Environmental Manager

Date: May 30, 2013

**CERTIFICATION OF NON-STORM WATER DISCHARGES**

Facility: **NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD, VAN BUREN, ARKANSAS**

Date of testing and/or evaluation: May 10, 2013

Description of any potential significant sources of non-storm water:

No potential significant sources of non-storm water were identified.

Description of the results of any test and/or evaluation of each potential source for the presence of non-storm water discharges:

Not applicable - no potential sources identified.

Description of the evaluation criteria or testing method used:

Visual and review of existing Site facility drawings.

List of the outfalls and on-Site drainage points that were directly observed during the test:

The entire perimeter of the Site was observed, including Outfalls 001 through 005.

Certification: I hereby certify that all discharges (i.e., Outfalls 001 through 005) have been tested or evaluated for the presence of non-storm water.

Signature: *Pat Kellam*

Print name: Patrick Kellam

Date: May 10, 2013

APPENDIX B

FORMS

## RECORD OF REVIEWS AND AMENDMENTS

**RECORD OF REVIEWS AND AMENDMENTS  
STORM WATER POLLUTION PREVENTION PLAN  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

INSTRUCTIONS FOR COMPLETING THE RECORD BELOW

For the review of the Storm Water Pollution Prevention Plan (Plan):

1. Insert the date of completion of the review of the Plan
2. Circle whichever of the words "does" or "does not" is applicable, and delete whichever is not applicable
3. Sign the record

If the Plan requires amendment as a result of the review:

1. Insert the date of completion of the amendment(s) to the Plan
2. Circle whichever of the words "did" or "did not" is applicable, and delete whichever is not applicable
3. Sign the record

This Plan was reviewed on May 15, 2013, and does/ does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

Patrick Kellam

*Pat Kellam*

If the Plan required amendment, the amendment was completed on May 30, 2013.

Name of Person making Amendments:

Signature of Person making Amendments:

Daniel P. Cusick

*D.P. Cusick*

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

**RECORD OF REVIEWS AND AMENDMENTS  
(CONTINUED)**

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

This Plan was reviewed on \_\_\_\_\_, and does / does not as a result require amendment.

Name of Reviewer:

Signature of Reviewer:

\_\_\_\_\_

\_\_\_\_\_

If the Plan required amendment, the amendment was completed on \_\_\_\_\_.

Name of Person making Amendments:

Signature of Person making Amendments:

\_\_\_\_\_

\_\_\_\_\_

COMPREHENSIVE SITE COMPLIANCE  
EVALUATION REPORT

**COMPREHENSIVE SITE COMPLIANCE EVALUATION REPORT  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 VAN BUREN, ARKANSAS**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Inspected by (print name): \_\_\_\_\_

Signature: \_\_\_\_\_

<i>Areas Inspected*</i>	<i>Observations</i>	<i>Actions Taken</i>
Drainage swales and Outfalls are clear of debris		
Silt Fencing and Silt Socks are installed and in good shape		
HCl AST and containment		
Cement, Sand and Fly-Ash Silos (outside only)		
Empty drums, totes and debris		
Oil Storage inside Maintenance Shop Building		
Loading/Unloading areas		

\* = The areas identified in the above table must be inspected for:

- Industrial materials, residue, or trash that could be carried into a storm sewer
- Leaks or spills
- Unauthorized storm water discharges
- Off-Site tracking of industrial materials
- Tracking or blowing of raw, final, or waste materials from areas of no exposure (e.g., inside the building) to exposed areas (e.g., outside the building)
- Evidence of, or the potential of, pollutants entering the storm sewer



All the observations of non-compliance in the above table must be addressed prior to the next storm, if practicable, but no more than 12 weeks after the date of the inspection.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

---

Signature of duly authorized representative of  
NABORS COMPLETION AND PRODUCTION SERVICES CO.

---

Printed name of duly authorized representative of  
NABORS COMPLETION AND PRODUCTION SERVICES CO.

## STORM WATER INSPECTION REPORT

**STORM WATER INSPECTION REPORT  
 NABORS COMPLETION AND PRODUCTION SERVICES CO.  
 2802 KIBLER ROAD  
 VAN BUREN, ARKANSAS**

Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

Answer the questions below with "Y" (= Yes) or "N" (= No). If your answer is No, take corrective action

Inspection Items	HCl AST	Silos and Mixing Bldg				
Item/Device/Area is in good condition?						
Free of leaks?						
Foundation for containment in good condition?						
Water removed from dike or area if applicable?						
Piping all leak-free?						

<b>Inspection of spill control equipment and materials at loading and unloading areas</b>	
Are the following equipment/materials present and in good condition?	
<ul style="list-style-type: none"> <li>• Booms, absorbent pads, shovel, and oil dry</li> <li>• Sediment control Silt fence and Silt Socks installed and in good shape</li> </ul>	

<b>Inspection of Discharge in Storm water from Outfalls 001 through 005</b>	
Drain and discharge free of sheen or of any unusual discharge?	

Corrective actions: \_\_\_\_\_  
 \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

RELEASE NOTIFICATION FORM

**RELEASE NOTIFICATION FORM  
NABORS COMPLETION AND PRODUCTION SERVICES CO.  
2802 KIBLER ROAD  
VAN BUREN, ARKANSAS**

Name of person making notification: \_\_\_\_\_

Phone number of person making notification: \_\_\_\_\_

Facility Information:

Facility name and address: **Nabors Completion and Production Services Co.  
2802 Kibler Road, Van Buren, Arkansas**

Facility ID #:

- Latitude and longitude: **35.435693°, -94.328012°**

Date and time of the release: \_\_\_\_\_

Source and cause of the release: \_\_\_\_\_

Type of material released: \_\_\_\_\_

Estimated quantity of material released: \_\_\_\_\_

Streams/rivers/bodies of water, which have been or may be affected by the release (circle one):

**Flat Rock Creek**

Injuries caused by the release: \_\_\_\_\_

Damage caused by the release: \_\_\_\_\_

Whether evacuation was/will be necessary (circle one):                      **Yes**                      **No**

Steps being taken or proposed to contain and clean up the release: \_\_\_\_\_

Estimated quantity and disposition of any recovered materials: \_\_\_\_\_

Names of authorities who have also been/will also be contacted if the release is reportable:

- National Response Center: 1-800-424-8802
- Arkansas Department of Emergency Management: 1-800-322-4012

APPENDIX C

CHEMICAL INVENTORY LIST

<b>Product Name</b>	<b>CAS Number</b>	<b>Chemical</b>
Class A cement	12168-85-3	Tri-calcium silicate
Class H Cement	65997-15-1	Portland cement clinker
Silica Flour	014808-60-7	Quartz silicon dioxide
Fly Ash	7631-86-9	Ampohous silica hydrated
IC-100	77-92-9	2-hydroxl-1,2,3 Propanetricarboxic acid
Methanol	67-56-1	Methanol
No Foam 3	64742-54-7	Distillates (petroleum)
OB-Fe	57-55-6 7782-63-0	Propylene glycol Ferrous sulfate, heptahydrate
Propane	98-6	Propane
Sand	14808-60-7	Silica quartz
SAS-2	64742-47-8 8052-41-3 57-55-6 68551-12-2	Hydrotreated light distillates Mineral spirits Propylene glycol Ethoxylated alcohols
Super NE-100	67-63-0 111-76-2	Isopropyl alcohol Glycol ethers
SAS-2 Breaker	7782-63-0 77-92-9	Ferrous sulfate heptahydrate Citrus acid
Super Max	67-63-0 111-76-2 104-76-7	Isopropyl alcohol Glycol ethers Ethylhexanol
Super Penn 2000	104-76-7	Ethylhexanol
AI-2 Inhibitor	111-76-2 107-19-7 67-63-0	Glycol ether Propargyl alcohol Isopropyl alcohol

<b>Product Name</b>	<b>CAS Number</b>	<b>Chemical</b>
OW-3	67-63-0	Isopropyl alcohol
pH-15L	1310-73-2	Sodium hydroxide
	7647-14-5	Sodium chloride
Motor oil, packing oil, hydraulic oil.	64742-54-7	Lubricating oil base stock
Gear oil	64741-88-4	Lubricating oil base stock
Anti freeze	107-21-1	Ethylene glycol
Parts cleaners / paint thinners	8052-41-3	Petroleum distillates mineral spirits
Misc automotive maintenance chemicals	108-88-3	Possible Toluene
	1330-20-7	
pH-14	497-41-8	Sodium carbonate
pH-4	110-17-8	Fumaric acid
Wfr3-b	64742-47-8	Hydrotreated Light Distillate
Super Sil SP	1344-09-8	Sodium Silicate



APPENDIX D

DISCHARGE MONITORING REPORTS AND ANALYTICAL DATA



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Nashville  
2960 Foster Creighton Road  
Nashville, TN 37204  
Tel: 800-765-0980

TestAmerica Job ID: NUJ3719

Client Project/Site: 075095

Client Project Description: SWSI - Van Buren, AR Storm Water

For:

Conestoga Rovers Associates - Niagara Falls (8571)  
2055 Niagara Falls Boulevard Ste#3  
Niagara Falls, NY 14304

Attn: Paul McMahon



Authorized for release by:  
11/4/2011 3:01:49 PM

Ryan Fitzwater  
Project Manager

[Ryan.Fitzwater@testamericainc.com](mailto:Ryan.Fitzwater@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUJ3719-01	001	Water	10/27/11 10:14	10/28/11 08:40

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## Case Narrative

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

---

**Job ID: NUJ3719**

---

**Laboratory: TestAmerica Nashville**

### Narrative

---

All samples were received in good condition, properly preserved, and properly labeled. All analyses were completed within holding times. There were no relevant protocol specific QC and/or performance standard non-conformances to report with the following exceptions:

No COD EPA 410.4 matrix spike or matrix spike duplicate data reported for batch 11J7239. The source sample required a dilution which diluted the compounds below the detection limit. See blank spike.

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# Definitions/Glossary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Qualifiers

### WetChem

Qualifier	Qualifier Description
MNR	No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.

### TCLP

Qualifier	Qualifier Description
HTI	The holding time for this test is immediate. The laboratory measurement, therefore, may not be suitable for compliance purposes.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

**Client Sample ID: 001**  
**Date Collected: 10/27/11 10:14**  
**Date Received: 10/28/11 08:40**

**Lab Sample ID: NUJ3719-01**  
**Matrix: Water**

**Method: EPA 410.4 - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	46.3		10.0	2.00	mg/L		10/31/11 14:23	11/02/11 09:19	1.00

**Method: SM2540 D - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	226		10.0	5.00	mg/L		11/01/11 15:34	11/01/11 15:34	10.0

**Method: EPA 1664A - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease HEM	ND		6.10	1.59	mg/L		10/31/11 11:30	10/31/11 15:24	1.00

**Method: EPA 170.1 - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature of pH determination	21.0	HTI	0.00		Deg C		10/28/11 17:15	10/29/11 17:15	1.00

**Method: SW846 9040C - General Chemistry Parameters**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.00	HTI	0.100	0.100	pH Units		10/28/11 17:15	10/29/11 17:15	1.00





# QC Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Method: EPA 410.4 - General Chemistry Parameters

**Lab Sample ID: 11J7239-BLK1**  
**Matrix: Water**  
**Analysis Batch: 11J7239**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 11J7239\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0	2.00	mg/L		10/31/11 14:23	11/02/11 09:19	1.00

**Lab Sample ID: 11J7239-BS1**  
**Matrix: Water**  
**Analysis Batch: 11J7239**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 11J7239\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	20.0	19.5	MNR	mg/L		98	90 - 110

**Lab Sample ID: 11J7239-DUP1**  
**Matrix: Water**  
**Analysis Batch: 11J7239**

**Client Sample ID: 001**  
**Prep Type: Total**  
**Prep Batch: 11J7239\_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	46.3		45.3		mg/L		2	10

## Method: SM2540 D - General Chemistry Parameters

**Lab Sample ID: 11J7120-BLK1**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.00	0.500	mg/L		11/01/11 15:34	11/01/11 15:34	1.00

**Lab Sample ID: 11J7120-BS1**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	98.6		mg/L		99	90 - 110

**Lab Sample ID: 11J7120-DUP1**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Duplicate**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L			5

**Lab Sample ID: 11J7120-DUP2**  
**Matrix: Water**  
**Analysis Batch: 11J7120**

**Client Sample ID: Duplicate**  
**Prep Type: Total**  
**Prep Batch: 11J7120\_P**

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	0.900		ND		mg/L			5

# QC Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Method: EPA 1664A - General Chemistry Parameters

Lab Sample ID: 11J7059-BLK1  
 Matrix: Water  
 Analysis Batch: 11J7059

Client Sample ID: Method Blank  
 Prep Type: Total  
 Prep Batch: 11J7059\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease HEM	ND		5.21	1.35	mg/L		10/31/11 11:30	10/31/11 15:24	1.00

Lab Sample ID: 11J7059-BS1  
 Matrix: Water  
 Analysis Batch: 11J7059

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 11J7059\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease HEM	40.0	36.6		mg/L		91	78 - 114

Lab Sample ID: 11J7059-BSD1  
 Matrix: Water  
 Analysis Batch: 11J7059

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total  
 Prep Batch: 11J7059\_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease HEM	40.0	37.5		mg/L		94	78 - 114	3	18

Lab Sample ID: 11J7059-MS1  
 Matrix: Water  
 Analysis Batch: 11J7059

Client Sample ID: Matrix Spike  
 Prep Type: Total  
 Prep Batch: 11J7059\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease HEM	0.238		40.0	41.5		mg/L		103	78 - 114

## Method: EPA 170.1 - General Chemistry Parameters

Lab Sample ID: 11J6896-DUP1  
 Matrix: Water  
 Analysis Batch: 11J6896

Client Sample ID: Duplicate  
 Prep Type: Total  
 Prep Batch: 11J6896\_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
Temperature of pH determination	21.0		21.0		Deg C		0	200

## Method: SW846 9040C - General Chemistry Parameters

Lab Sample ID: 11J6896-BS1  
 Matrix: Water  
 Analysis Batch: 11J6896

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 11J6896\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.03		pH Units		100	95 - 105

Lab Sample ID: 11J6896-BSD1  
 Matrix: Water  
 Analysis Batch: 11J6896

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total  
 Prep Batch: 11J6896\_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
pH	7.00	7.05		pH Units		101	95 - 105	0.3	10

# QC Sample Results

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

## Method: SW846 9040C - General Chemistry Parameters (Continued)

Lab Sample ID: 11J6896-DUP1  
Matrix: Water  
Analysis Batch: 11J6896

Client Sample ID: Duplicate  
Prep Type: Total  
Prep Batch: 11J6896\_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
pH	7.40		7.40		pH Units		0	10

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# QC Association Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

## WetChem

### Analysis Batch: 11J7120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7120-BLK1	Method Blank	Total	Water	SM2540 D	11J7120_P
11J7120-BS1	Lab Control Sample	Total	Water	SM2540 D	11J7120_P
11J7120-DUP1	Duplicate	Total	Water	SM2540 D	11J7120_P
11J7120-DUP2	Duplicate	Total	Water	SM2540 D	11J7120_P
NUJ3719-01	001	Total	Water	SM2540 D	11J7120_P

### Analysis Batch: 11J7239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7239-BLK1	Method Blank	Total	Water	EPA 410.4	11J7239_P
11J7239-BS1	Lab Control Sample	Total	Water	EPA 410.4	11J7239_P
11J7239-DUP1	001	Total	Water	EPA 410.4	11J7239_P
NUJ3719-01	001	Total	Water	EPA 410.4	11J7239_P

### Prep Batch: 11J7120\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7120-BLK1	Method Blank	Total	Water	SOLIDS	
11J7120-BS1	Lab Control Sample	Total	Water	SOLIDS	
11J7120-DUP1	Duplicate	Total	Water	SOLIDS	
11J7120-DUP2	Duplicate	Total	Water	SOLIDS	
NUJ3719-01	001	Total	Water	SOLIDS	

### Prep Batch: 11J7239\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7239-BLK1	Method Blank	Total	Water	NO PREP	
11J7239-BS1	Lab Control Sample	Total	Water	NO PREP	
11J7239-DUP1	001	Total	Water	NO PREP	
NUJ3719-01	001	Total	Water	NO PREP	

## Extractions

### Analysis Batch: 11J7059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7059-BLK1	Method Blank	Total	Water	EPA 1664A	11J7059_P
11J7059-BS1	Lab Control Sample	Total	Water	EPA 1664A	11J7059_P
11J7059-BSD1	Lab Control Sample Dup	Total	Water	EPA 1664A	11J7059_P
11J7059-MS1	Matrix Spike	Total	Water	EPA 1664A	11J7059_P
NUJ3719-01	001	Total	Water	EPA 1664A	11J7059_P

### Prep Batch: 11J7059\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J7059-BLK1	Method Blank	Total	Water	1664 HEM/SGTHEM	
11J7059-BS1	Lab Control Sample	Total	Water	1664 HEM/SGTHEM	
11J7059-BSD1	Lab Control Sample Dup	Total	Water	1664 HEM/SGTHEM	
11J7059-MS1	Matrix Spike	Total	Water	1664 HEM/SGTHEM	
NUJ3719-01	001	Total	Water	1664 HEM/SGTHEM	

# QC Association Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

## TCLP

### Analysis Batch: 11J6896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J6896-BS1	Lab Control Sample	Total	Water	SW846 9040C	11J6896_P
11J6896-BSD1	Lab Control Sample Dup	Total	Water	SW846 9040C	11J6896_P
11J6896-DUP1	Duplicate	Total	Water	SW846 9040C	11J6896_P
11J6896-DUP1	Duplicate	Total	Water	EPA 170.1	11J6896_P
NUJ3719-01	001	Total	Water	SW846 9040C	11J6896_P
NUJ3719-01	001	Total	Water	EPA 170.1	11J6896_P

### Prep Batch: 11J6896\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J6896-BS1	Lab Control Sample	Total	Water	METHOD PREP	
11J6896-BSD1	Lab Control Sample Dup	Total	Water	METHOD PREP	
11J6896-DUP1	Duplicate	Total	Water	METHOD PREP	
NUJ3719-01	001	Total	Water	METHOD PREP	

# Lab Chronicle

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

**Client Sample ID: 001**

**Lab Sample ID: NUJ3719-01**

**Date Collected: 10/27/11 10:14**

**Matrix: Water**

**Date Received: 10/28/11 08:40**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	NO PREP		1.00	11J7239_P	10/31/11 14:23	AMB	TAL NSH
Total	Analysis	EPA 410.4		1.00	11J7239	11/02/11 09:19	MSJ	TAL NSH
Total	Analysis	SM2540 D		10.0	11J7120	11/01/11 15:34	DRM	TAL NSH
Total	Prep	SOLIDS		10.0	11J7120_P	11/01/11 15:34	JRM	TAL NSH
Total	Prep	1664 HEM/SGTHEM		1.00	11J7059_P	10/31/11 11:30	CEC	TAL NSH
Total	Analysis	EPA 1664A		1.00	11J7059	10/31/11 15:24	JJR	TAL NSH
Total	Prep	METHOD PREP		1.00	11J6896_P	10/28/11 17:15	SJM	TAL NSH
Total	Analysis	SW846 9040C		1.00	11J6896	10/29/11 17:15	SJM	TAL NSH
Total	Analysis	EPA 170.1		1.00	11J6896	10/29/11 17:15	SJM	TAL NSH

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

# Method Summary

Client: Conestoga Rovers Associates - Niagara Falls (8571)  
Project/Site: 075095

TestAmerica Job ID: NUJ3719

Method	Method Description	Protocol	Laboratory
EPA 1664A	General Chemistry Parameters		TAL NSH
EPA 170.1	General Chemistry Parameters		TAL NSH
SW846 9040C	General Chemistry Parameters		TAL NSH
EPA 410.4	General Chemistry Parameters		TAL NSH
SM2540 D	General Chemistry Parameters		TAL NSH

**Protocol References:**

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980



# Certification Summary

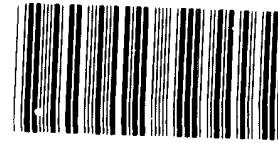
Client: Conestoga Rovers Associates - Niagara Falls (8571)  
 Project/Site: 075095

TestAmerica Job ID: NUJ3719

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	AIHA - LAP	IHLAP		100790
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas	State Program	6	88-0737
TestAmerica Nashville	CALA	CALA		3744
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	Illinois	NELAC	5	200010
TestAmerica Nashville	Iowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	Kentucky UST	4	19
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA100011
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Minnesota	NELAC	5	047-999-345
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana	MT DEQ UST	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina	North Carolina DENR	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio	OVAP	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	USDA		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.





NUJ3719

Cooler Received/Opened On 10/28/2011 @ 08:40

1. Tracking # 7680 (last 4 digits, FedEx)

Courier: FEDEX IR Gun ID 95610068

2. Temperature of rep. sample or temp blank when opened: 3.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES  NO  NA

4. Were custody seals on outside of cooler? YES  NO  NA

If yes, how many and where: 1 - Front

5. Were the seals intact, signed, and dated correctly? YES  NO  NA

6. Were custody papers inside cooler? YES  NO  NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.H.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # \_\_\_\_\_

I certify that I unloaded the cooler and answered questions 7-14 (initial) \_\_\_\_\_

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) \_\_\_\_\_

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) \_\_\_\_\_

I certify that I attached a label with the unique LIMS number to each container (initial) \_\_\_\_\_

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...# \_\_\_\_\_



**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
STORMWATER DISCHARGE MONITORING REPORT  
(DMR)**

PERMIT NUMBER: ARR000825 PERMITTEE NAME: Nabors Completion & Production Services Company (NCPS)  
 FACILITY NAME: NCPS Van Buren FACILITY PHYSICAL ADDRESS: 2802 Kibler Highway  
Van Buren, AR

INDUSTRIAL SECTOR: 11 OUTFALL NO: 001 REPORTING YEAR: 2012

PARAMETER	Benchmark Value	QUALITY OR CONCENTRATION		UNITS
		JANUARY-JUNE	JULY-DECEMBER	
Chemical Oxygen Demand (COD)	120		<10.0	mg/L
Total Suspended Solids (TSS)	100		7.08	mg/L
Oil and Grease (O&G)	15		<4.57	mg/L
pH	6.0-9.0		7.40	S.U.

Sampling Period:	JANUARY-JUNE	JULY-DECEMBER	
Date of Storm Event Sampled:		10/10/2012	
Duration of Event:		24	hours
Estimate of Rainfall Event:		0.13	inches
Time Since Last Measurable Event:		3	days
Estimate of Total Discharged Volume:		17,023	gallons

Comments: \_\_\_\_\_  
 \_\_\_\_\_

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

\_\_\_\_\_  
 Signature & Date

Patrick Kellam, Environmental Manager  
 Printed Name & Title of Official

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Nashville  
2960 Foster Creighton Drive  
Nashville, TN 37204  
Tel: (615)726-0177

TestAmerica Job ID: 490-8918-1  
Client Project/Site: Van Buren, AR Stormwater

For:  
Conestoga-Rovers & Associates, Inc.  
2055 Niagara Falls Blvd., Suite 3  
Niagara Falls, New York 14304

Attn: Mr. Paul McMahon



Authorized for release by:  
10/19/2012 4:17:39 PM

Ryan Fitzwater  
Senior Project Manager  
[ryan.fitzwater@testamericainc.com](mailto:ryan.fitzwater@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-8918-1	NCPS #1	Water	10/10/12 08:30	10/11/12 08:15
490-8918-2	NCPS #2	Water	10/10/12 08:35	10/11/12 08:15
490-8918-3	NCPS #3	Water	10/10/12 08:40	10/11/12 08:15
490-8918-4	NCPS #4	Water	10/10/12 08:45	10/11/12 08:15
490-8918-5	NCPS #5	Water	10/10/12 08:50	10/11/12 08:15
490-8918-6	NCPS #6	Water	10/10/12 08:55	10/11/12 08:15
490-8918-7	NCPS #7	Water	10/10/12 09:00	10/11/12 08:15
490-8918-8	NCPS #8	Water	10/10/12 09:05	10/11/12 08:15
490-8918-9	NCPS #9	Water	10/10/12 09:10	10/11/12 08:15
490-8918-10	NCPS #10	Water	10/10/12 09:15	10/11/12 08:15
490-8918-11	NCPS #11	Water	10/10/12 09:20	10/11/12 08:15
490-8918-12	NCPS #12	Water	10/10/12 09:25	10/11/12 08:15



## Case Narrative

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

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**Job ID: 490-8918-1**

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**Laboratory: TestAmerica Nashville**

### Narrative

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**Job Narrative**  
**490-8918-1**

### Comments

No additional comments.

### Receipt

The samples were received on 10/11/2012 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

Except:

The Chain of Custody was received without listing a date or a time of sample collection.

### General Chemistry

No analytical or quality issues were noted.

### Organic Prep

No analytical or quality issues were noted.

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# Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #1**

**Lab Sample ID: 490-8918-1**

**Date Collected: 10/10/12 08:30**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
- 11
- 12
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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #2**

**Lab Sample ID: 490-8918-2**

**Date Collected: 10/10/12 08:35**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

1

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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #3**

**Lab Sample ID: 490-8918-3**

**Date Collected: 10/10/12 08:40**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #4**

**Lab Sample ID: 490-8918-4**

**Date Collected: 10/10/12 08:45**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.57		mg/L		10/16/12 10:07	10/16/12 10:07	1

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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #5**

**Lab Sample ID: 490-8918-5**

**Date Collected: 10/10/12 08:50**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.74		mg/L		10/16/12 10:07	10/16/12 10:07	1

- 1
- 2
- 3
- 4
- 5
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- 11
- 12
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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #6**

**Lab Sample ID: 490-8918-6**

**Date Collected: 10/10/12 08:55**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.63		mg/L		10/16/12 10:07	10/16/12 10:07	1

- 1
- 2
- 3
- 4
- 5
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- 9
- 10
- 11
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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #7**

**Lab Sample ID: 490-8918-7**

**Date Collected: 10/10/12 09:00**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	7.08		1.04		mg/L			10/13/12 13:26	1

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# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #8**

**Lab Sample ID: 490-8918-8**

**Date Collected: 10/10/12 09:05**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	7.58		1.05		mg/L			10/13/12 13:26	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #9**

**Lab Sample ID: 490-8918-9**

**Date Collected: 10/10/12 09:10**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	7.39		1.09		mg/L			10/13/12 13:26	1

1

2

3

4

5

6

7

8

9

10

11

12

13

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #10**

**Lab Sample ID: 490-8918-10**

**Date Collected: 10/10/12 09:15**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.20	HF	0.100		SU			10/13/12 11:07	1
Temperature	21.5	HF	0.100		Degrees C			10/13/12 11:07	1

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #11**

**Lab Sample ID: 490-8918-11**

**Date Collected: 10/10/12 09:20**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.40	HF	0.100		SU			10/13/12 11:07	1
Temperature	21.5	HF	0.100		Degrees C			10/13/12 11:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

**Client Sample ID: NCPS #12**

**Lab Sample ID: 490-8918-12**

**Date Collected: 10/10/12 09:25**

**Matrix: Water**

**Date Received: 10/11/12 08:15**

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.40	HF	0.100		SU			10/13/12 11:07	1
Temperature	21.5	HF	0.100		Degrees C			10/13/12 11:07	1

1

2

3

4

5

6

7

8

9

10

11

12

13

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 490-28397/1-A  
Matrix: Water  
Analysis Batch: 28402

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 28397

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		4.00		mg/L		10/16/12 10:07	10/16/12 10:07	1

Lab Sample ID: LCS 490-28397/2-A  
Matrix: Water  
Analysis Batch: 28402

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 28397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	41.7	36.46		mg/L		87	78 - 114

Lab Sample ID: 490-8859-M-1-A MS  
Matrix: Water  
Analysis Batch: 28402

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 28397

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM	ND		50.6	45.95		mg/L		91	78 - 114

## Method: 410.4 - COD

Lab Sample ID: MB 490-28895/1  
Matrix: Water  
Analysis Batch: 28895

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			10/18/12 13:24	1

Lab Sample ID: LCS 490-28895/4  
Matrix: Water  
Analysis Batch: 28895

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	20.0	21.13		mg/L		106	90 - 110

Lab Sample ID: LCSD 490-28895/5  
Matrix: Water  
Analysis Batch: 28895

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	20.0	20.94		mg/L		105	90 - 110	1	20

Lab Sample ID: 490-8918-1 MS  
Matrix: Water  
Analysis Batch: 28895

Client Sample ID: NCPS #1  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		50.0	56.63		mg/L		95	90 - 110

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Method: 410.4 - COD (Continued)

Lab Sample ID: 490-8974-B-1 DU  
 Matrix: Water  
 Analysis Batch: 28895

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chemical Oxygen Demand	ND		ND		mg/L		NC	20

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 490-27802/1  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Method Blank  
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.00		mg/L			10/13/12 13:26	1

Lab Sample ID: LCS 490-27802/2  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	97.80		mg/L		98	90 - 110

Lab Sample ID: 490-8973-J-1 DU  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	ND		ND		mg/L		NC	20

Lab Sample ID: 490-9016-I-1 DU  
 Matrix: Water  
 Analysis Batch: 27802

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	ND		1.200		mg/L		NC	20

## Method: SM 4500 H+ B - pH

Lab Sample ID: 490-8918-10 DU  
 Matrix: Water  
 Analysis Batch: 27899

Client Sample ID: NCPS #10  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.20	HF	7.200		SU		0	20
Temperature	21.5	HF	21.50		Degrees C		0	20

# QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## General Chemistry

### Analysis Batch: 27802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8918-7	NCPS #7	Total/NA	Water	SM 2540D	
490-8918-8	NCPS #8	Total/NA	Water	SM 2540D	
490-8918-9	NCPS #9	Total/NA	Water	SM 2540D	
490-8973-J-1 DU	Duplicate	Total/NA	Water	SM 2540D	
490-9016-I-1 DU	Duplicate	Total/NA	Water	SM 2540D	
LCS 490-27802/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 490-27802/1	Method Blank	Total/NA	Water	SM 2540D	

### Analysis Batch: 27899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8918-10	NCPS #10	Total/NA	Water	SM 4500 H+ B	
490-8918-10 DU	NCPS #10	Total/NA	Water	SM 4500 H+ B	
490-8918-11	NCPS #11	Total/NA	Water	SM 4500 H+ B	
490-8918-12	NCPS #12	Total/NA	Water	SM 4500 H+ B	
LCS 490-27899/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

### Prep Batch: 28397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8859-M-1-A MS	Matrix Spike	Total/NA	Water	1664A	
490-8918-4	NCPS #4	Total/NA	Water	1664A	
490-8918-5	NCPS #5	Total/NA	Water	1664A	
490-8918-6	NCPS #6	Total/NA	Water	1664A	
LCS 490-28397/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 490-28397/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 28402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8859-M-1-A MS	Matrix Spike	Total/NA	Water	1664A	28397
490-8918-4	NCPS #4	Total/NA	Water	1664A	28397
490-8918-5	NCPS #5	Total/NA	Water	1664A	28397
490-8918-6	NCPS #6	Total/NA	Water	1664A	28397
LCS 490-28397/2-A	Lab Control Sample	Total/NA	Water	1664A	28397
MB 490-28397/1-A	Method Blank	Total/NA	Water	1664A	28397

### Analysis Batch: 28895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-8918-1	NCPS #1	Total/NA	Water	410.4	
490-8918-1 MS	NCPS #1	Total/NA	Water	410.4	
490-8918-2	NCPS #2	Total/NA	Water	410.4	
490-8918-3	NCPS #3	Total/NA	Water	410.4	
490-8974-B-1 DU	Duplicate	Total/NA	Water	410.4	
LCS 490-28895/4	Lab Control Sample	Total/NA	Water	410.4	
LCSD 490-28895/5	Lab Control Sample Dup	Total/NA	Water	410.4	
MB 490-28895/1	Method Blank	Total/NA	Water	410.4	

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Client Sample ID: NCPS #1

Date Collected: 10/10/12 08:30

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	28895	10/18/12 13:24	MJ	TAL NSH

## Client Sample ID: NCPS #2

Date Collected: 10/10/12 08:35

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	28895	10/18/12 13:24	MJ	TAL NSH

## Client Sample ID: NCPS #3

Date Collected: 10/10/12 08:40

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	28895	10/18/12 13:24	MJ	TAL NSH

## Client Sample ID: NCPS #4

Date Collected: 10/10/12 08:45

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	28402	10/16/12 10:07	CC	TAL NSH
Total/NA	Prep	1664A			28397	10/16/12 10:07	CC	TAL NSH

## Client Sample ID: NCPS #5

Date Collected: 10/10/12 08:50

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	28402	10/16/12 10:07	CC	TAL NSH
Total/NA	Prep	1664A			28397	10/16/12 10:07	CC	TAL NSH

## Client Sample ID: NCPS #6

Date Collected: 10/10/12 08:55

Date Received: 10/11/12 08:15

## Lab Sample ID: 490-8918-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	28402	10/16/12 10:07	CC	TAL NSH
Total/NA	Prep	1664A			28397	10/16/12 10:07	CC	TAL NSH



# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Client Sample ID: NCPS #7

Lab Sample ID: 490-8918-7

Date Collected: 10/10/12 09:00

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	27802	10/13/12 13:26	DM	TAL NSH

## Client Sample ID: NCPS #8

Lab Sample ID: 490-8918-8

Date Collected: 10/10/12 09:05

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	27802	10/13/12 13:26	DM	TAL NSH

## Client Sample ID: NCPS #9

Lab Sample ID: 490-8918-9

Date Collected: 10/10/12 09:10

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	27802	10/13/12 13:26	DM	TAL NSH

## Client Sample ID: NCPS #10

Lab Sample ID: 490-8918-10

Date Collected: 10/10/12 09:15

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 H+ B		1	27899	10/13/12 11:07	BG	TAL NSH

## Client Sample ID: NCPS #11

Lab Sample ID: 490-8918-11

Date Collected: 10/10/12 09:20

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 H+ B		1	27899	10/13/12 11:07	BG	TAL NSH

## Client Sample ID: NCPS #12

Lab Sample ID: 490-8918-12

Date Collected: 10/10/12 09:25

Matrix: Water

Date Received: 10/11/12 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 H+ B		1	27899	10/13/12 11:07	BG	TAL NSH

### Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Method Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	TAL NSH
410.4	COD	MCAWW	TAL NSH
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL NSH
SM 4500 H+ B	pH	SM	TAL NSH

**Protocol References:**

1664A = EPA-821-98-002

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

**Laboratory References:**

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177



# Certification Summary

Client: Conestoga-Rovers & Associates, Inc.  
 Project/Site: Van Buren, AR Stormwater

TestAmerica Job ID: 490-8918-1

## Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-12
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAC	9	1168CA	10-31-12
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Colorado	State Program	8	N/A	02-28-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAC	4	E87358	06-30-13
Illinois	NELAC	5	200010	12-09-12
Iowa	State Program	7	131	05-01-14
Kansas	NELAC	7	E-10229	10-31-12
Kentucky	State Program	4	90038	12-31-12
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAC	6	LA110014	12-31-12
Louisiana	NELAC	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAC	5	047-999-345	12-31-12
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAC	1	2963	10-09-13
New Jersey	NELAC	2	TN965	06-30-13
New York	NELAC	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-12
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAC	10	TN200001	04-30-13
Pennsylvania	NELAC	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-12
South Carolina	State Program	4	84009 (001)	02-28-13
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAC	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAC	8	TAN	06-30-13
Virginia	NELAC	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-13
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

## COOLER RECEIPT FORM



490-8918 Chain of

Cooler Received/Opened On 10/11/2012 @ 0815

1. Tracking # 0381 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 14740456

2. Temperature of rep. sample or temp blank when opened: 1.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) EF

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES NO..NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) EF

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA EF 10-11-12

16. Was residual chlorine present? YES NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) EF

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) EF

I certify that I attached a label with the unique LIMS number to each container (initial) EF

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#

EF  
10-11-12

**TestAmerica Nashville**  
 2960 Foster Creighton Drive  
 Nashville, TN 37204  
 Phone (615) 726-0177 Fax (615) 726-0954

**Chain of Custody Record**



THE LEADER IN ENVIRONMENTAL TESTING

**Client Information**

Client Contact:  
 Mr. Paul McMahon  
 Company:  
 Conestoga-Rovers & Associates, Inc.  
 Address:  
 2055 Niagara Falls Blvd, Suite 3  
 City:  
 Niagara Falls  
 State, Zip:  
 NY, 14304  
 Phone:  
 Email:  
 pmcmahon@crworld.com  
 Project Name:  
 Van Buren AR Stormwater  
 Site:

Sampler:  
 Ryan Fitzwater

Lab PM:  
 Fitzwater, Ryan  
 E-Mail:  
 ryan.fitzwater@testamericainc.com

Carrier Tracking No(s):

COC No:  
 490-4289-1998-1

Page:  
 Page 1 of 1

Due Date Requested:

TAT Requested (days):

PO #:  
 Purchase Order Requested

Project #:  
 49001692

SSOV#:

**Analysis Requested**

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Trislu, A=Air)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested
				Water		S	S	410.4 - Chemical Oxygen Demand
				Water		S	N	SM4500_H+ - pH & Temperature
				Water		S	S	1664A - HEM
				Water		S	N	2540D - Total Suspended Solids

Loc: 490  
 8918

Preservation Codes:	Special Instructions/Note:
A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA M - Hexane N - None O - AsH2O2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	

**Possible Hazard Identification**  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological  
 Deliverable Requested: I, II, III, IV, Other (specify)  
 Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Custody Seals Intact:  Yes  No  
 Custody Seal No.: \_\_\_\_\_  
 Cooler Temperature(s) °C and Other Remarks:

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 Special Instructions/OCC Requirements:  
 Method of Shipment: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: 12-11-12 08:15 Company: TRAV  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

## Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 490-8918-1

**Login Number: 8918**

**List Source: TestAmerica Nashville**

**List Number: 1**

**Creator: Ford, Easton**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	





**CONESTOGA-ROVERS  
& ASSOCIATES**

103 G... Drive, Suite 110  
Pittsburg, Pennsylvania 15238  
Telephone: (412) 933-7313 Fax: (412) 933-7314  
www.CRA.com

May 31, 2013

Reference No. 075095

Ms. Angela Coats  
Oil & Gas Field Inspector  
Water Division  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

Dear Ms. Coats:

Re: **Corrective Actions for Compliance Inspection**  
**Permit Number ARR000825**  
**AFIN: 17-00056**  
**Nabors Completion and Production Services Co.**  
**2802 Kibler Road**  
**Van Buren, Arkansas 72956**

---

## INTRODUCTION

On behalf of Nabors Completion and Production Services Co. (NCPS), this letter is in response to the Arkansas Department of Environmental Quality (ADEQ) Industrial Stormwater Compliance Inspection performed on April 5, 2013. The results and violations noted during the inspection were detailed in a letter dated April 30, 2013. The facility has been issued a National Pollutant Discharge Elimination System (NPDES) Permit No. ARR000825 (the Permit). The ADEQ comments regarding the stormwater inspection, and the comments and/or corrective actions to mitigate these concerns are addressed in the remainder of this letter.

## VIOLATIONS AND RESPONSES

**ADEQ Comment No. 1:** *During the inspection, four additional outfalls were noted, two on the east side of the property and two on the south. Currently the facility is not authorized to discharge from these locations. This is a violation of Part 1.6 of the permit.*

**NCPS Response No. 1:** Only one outfall was identified during the inspection for the Notice of Intent (NOI) submitted for the Permit. The four additional outfall locations (Outfalls 002 through 005) have been identified and will be sampled in accordance with the Permit requirements. Figure 2 in the revised Storm Water Pollution Prevention Plan (SWPPP) shows the five outfall locations. Please advise if ADEQ is requiring a Notice of Intent (NOI) for submittal to add these outfalls.

---

Engineer  
Professional Engineer  
Engineer

REGISTERED COMPANY FOR  
**ISO 9001**  
ENGINEERING DESIGN



**CONESTOGA-ROVERS  
& ASSOCIATES**

May 31, 2013

2

Reference No. 075095

***ADEQ Comment No. 2:** Samples were not collected during the January to June 2012 monitoring period. This is a violation of Part 3.5 of the permit.*

**NCPS Response No. 2:** Samples were not collected in error during this semiannual period. Sample collection and monitoring will be conducted semiannually in accordance with the Permit frequency.

***ADEQ Comment No. 3:** Samples for Outfall #1 were not being collected from the monitoring point specified in the NOI. Samples for 2012 were collected near a drainage pipe by the concrete pad adjacent to the maintenance shop building. This is a violation of Part 3.6 of the permit (Photo #5).*

**NCPS Response No. 3:** NCPS personnel will be retrained on where to collect samples from all outfall locations.

***ADEQ Comment No. 4:** A Corrective Action Plan was not implemented for the benchmark exceedance of Total Suspended Solids (TSS) of 226 milligrams/Liter (mg/L) for the July to December 2011 monitoring period. This is violation of Part 3.11.2 of the permit.*

**NCPS Response No. 4:** NCPS has installed sediment controls to reduce solids from entering the storm water discharge. Section 5.5 of the revised SWPPP details the corrective actions implemented. As a corrective action for the TSS exceedance, NCPS has installed silt/sediment barriers along the eastern property boundary in an effort to reduce solids from run-off. The barriers (e.g., silt fence and/or silt socks) will be adjusted as needed based on the analytical results for the Outfall sampling.

***ADEQ Comment No. 5:** The annual report for 2012 was not submitted to ADEQ by January 31, 2013. This is a violation of Part 3.12.b of the permit.*

**NCPS Response No. 5:** In error, NCPS did not submit the report before January 31, 2013 and submitted it late. NCPS will ensure that all future reporting is submitted within the Permit schedule requirements.

***ADEQ Comment No. 6:** The pH was not analyzed within 15 minutes of the time of the sample collection. This is a violation of Part 3.7.2.d of the permit.*





**NCPS Response No. 6:** Nabors has purchased a pH meter that will be used to measure the pH of the storm water samples within 15 minutes of sample collection.

*ADEQ Comment No. 7: The SWPPP does not contain the updated facility name and NAICS code. This is a violation of Part 4.6.1 of the permit.*

**NCPS Response No. 7:** The SWPPP has been revised to include this information. Please see Section 3.0 for the information.

*ADEQ Comment No. 8: The facility site map does not contain the size of the property in acres. This is a violation of Part 4.6.4.a of the permit.*

**NCPS Response No. 8:** The facility site map has been revised to include this information and is included as Figure 2 in the revised SWPPP. The property is approximately 5.2 acres.

*ADEQ Comment No. 9: A drainage pipe running from the concrete slab by the maintenance shop building to the property line is not shown on the site map. This is a violation of Part 4.6.4.f of the permit (Photos #5 and #6).*

**NCPS Response No. 9:** The drainage pipe has been added to the facility site map included as Figure 2 in the SWPPP. The drainage pipe is not a permitted sample outfall and will not be sampled.

*ADEQ Comment No. 10: The SWPPP does not include a section on risk identification and summary of potential pollutant sources. This is a violation of Part 4.6.5.5 of the permit.*

**NCPS Response No. 10:** Section 5.3 in the revised SWPPP includes this information.

*ADEQ Comment No. 11: The SWPPP does not include a description of the BMPs that are used by the facility to eliminate or reduce the potential to contaminate storm water. This is a violation of Part 4.6.6.1 of the permit.*

**NCPS Response No. 11:** The SWPPP has been revised to include this information. Please see Section 6.1.1.



***ADEQ Comment No. 12:** The SWPPP does not include a discussion on minimizing exposure. This is a violation of Part 4.6.6.2 of the permit.*

**NCPS Response No. 12:** The SWPPP has been revised to include this information. Please see Section 6.0.

***ADEQ Comment No. 13:** Evidence of past spills was observed on the south side of the property along the fence line. This area had not been cleaned. This is a violation of Part 4.6.6.5 of the permit (Photos #5 and #6)*

**NCPS Response No. 13:** This area has been cleaned by NCPS and will not affect future storm water discharge. NCPS contracted Hubbs Construction (Hubbs) to excavate an area of oil-stained gravel on April 22, 2013. Hubbs removed stained gravel to a depth ranging from approximately 0.2 to 0.7 feet below existing grade. One composite sample was collected for disposal characterization using Toxicity Characteristic Leaching Procedures (TCLP). The TCLP results indicated the sample was non-hazardous and the gravel/soil was disposed of off-Site at a licensed disposal facility. The analytical results are included as Attachment A. The area was backfilled with clean gravel. Photographic documentation is included as Attachment B.

***ADEQ Comment No. 14:** The SWPPP does not contain a narrative on the management of run-on and runoff. This is a violation of Part 4.6.6.8 of the permit.*

**NCPS Response No. 14:** The SWPPP has been revised to include this information. Please see Section 7.2.

***ADEQ Comment No. 15:** A comprehensive site compliance evaluation was not completed for 2012. This is a violation of Part 4.6.10.2 of the permit.*

**NCPS Response No. 15:** A comprehensive site compliance evaluation will be completed for 2013 and each subsequent year in accordance with the Permit. NCPS personnel will be re-trained in procedures for completing the compliance evaluation.



**CONESTOGA-ROVERS  
& ASSOCIATES**

May 31, 2013

5

Reference No. 075095

**CLOSING**

A copy of the revised SWPPP has been included with this letter and addresses the violations noted in the April 5, 2013 inspection.

We trust that the aforementioned responses and revised SWPPP address ADEQ's concerns and the violations reported in the April 30, 2013 letter. If you have any questions or require additional information, please contact me at (412) 963-7313.

Respectfully submitted,

Daniel P. Cusick, P.G. <sup>(1)</sup>

<sup>1)</sup> Licensed in PA, S.C., MO, and IN

DPC/ro/01

Encl.

c.c. Mr. Patrick Kellam - NCPS (electronic copy)  
Mr. Heath Davis - NCPS (electronic copy)

ATTACHMENT A  
ANALYTICAL RESULTS

May 7, 2013

Nabors  
Daniel Roberson  
28<sup>th</sup> Street  
Van Buren, AR 72956

Gravel Lot Cleanup

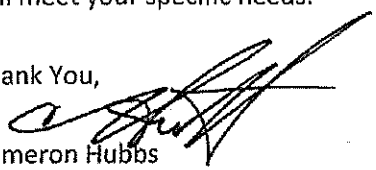
#### Scope of Work

After taking soil samples of affected areas of gravel lot and receiving tests results showing material to be at acceptable limits for disposal/use (see attached), we propose the following as a course of action for clean-up/grading of gravel lot.

1. Excavate affected areas to a depth required for removal of "soiled" gravel (2"-8")
2. Haul-off and disposal of excavated materials (local dumping)
3. Placement of new 3.5"-5.5" rock base in excavated areas to bring to proper grade
4. Placement of gravel base over top of areas to tie in existing lot areas for proper drainage.

If this course of action is not acceptable for our needs, please let us know and we can discuss other methods that will meet your specific needs.

Thank You,

  
Cameron Hubbs  
President, Cameron Hubbs Const. inc.



May 1, 2013  
Control No. 166884  
Page 1 of 5

Data Testing, Inc.  
ATTN: Ms. Dolores Shelby  
Post Office Box 1507  
Fort Smith, AR 72902

This report contains the analytical results and supporting information for the sample submitted on April 25, 2013. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Laboratory Director or a qualified designee.

A handwritten signature in cursive script that reads 'Steve Bradford'.

Steve Bradford  
Deputy Laboratory Director

This document has been distributed to the following:

PDF cc: Data Testing, Inc.  
ATTN: Ms. Dolores Shelby  
testing@mwc-engr.com



May 1, 2013  
Control No. 166884  
Page 2 of 5

Data Testing, Inc.  
Post Office Box 1507  
Fort Smith, AR 72902

**SAMPLE INFORMATION**

**Project Description:**

One (1) soil sample(s) received on April 25, 2013

**Receipt Details:**

A Chain of Custody was provided. The samples were delivered in one (1) ice chest. Ice chest #1 was delivered with shipping documentation.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

**Sample Identification:**

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Sampled Date/Time</u>	<u>Notes</u>
166884-1	Cameron Hubbs Construction 4-22 0930	22-Apr-2013 0930	1

**Notes:**

1. Sample container did not meet regulatory requirement

**Qualifiers:**

- Result is from a secondary dilution factor

**Case Narrative:**

Analysis of soils/sludges are reported on a dry-weight basis unless otherwise specified.

**References:**

- "Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
- "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
- "Standard Methods for the Examination of Water and Wastewaters", 21st edition.
- "American Society for Testing and Materials" (ASTM).
- "Association of Analytical Chemists" (AOAC).



May 1, 2013  
 Control No. 166884  
 Page 3 of 5

Data Testing, Inc.  
 Post Office Box 1507  
 Fort Smith, AR 72902

**ANALYTICAL RESULTS**

AIC No. 166884-1  
 Sample Identification: Cameron Hubbs Construction 4-22 0930

Analyte	Result	RL	Units	Qualifier
<b>Total Solids</b> SM 2540 G	90	0.01	%	
Prep: 26-Apr-2013 1026 by 302	Analyzed: 30-Apr-2013 0858 by 302		Batch: W43368	
<b>TCLP: Solids</b> EPA 1311	100	0.5	%	
	Analyzed: 26-Apr-2013 1630 by 100		Batch: S34384	
<b>TCLP: Arsenic</b> EPA 3010A, 6010C	< 0.3	0.3	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Barium</b> EPA 3010A, 6010C	0.51	0.01	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Cadmium</b> EPA 3010A, 6010C	< 0.02	0.02	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Chromium</b> EPA 3010A, 6010C	< 0.04	0.04	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Lead</b> EPA 3010A, 6010C	< 0.2	0.2	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Selenium</b> EPA 3010A, 6010C	< 0.4	0.4	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Silver</b> EPA 3010A, 6010C	< 0.04	0.04	mg/l	D
Prep: 26-Apr-2013 1207 by 270	Analyzed: 26-Apr-2013 1817 by 305		Batch: S34515	Dil: 5
<b>TCLP: Mercury</b> EPA 7470A	< 0.008	0.008	mg/l	D
Prep: 26-Apr-2013 1208 by 270	Analyzed: 30-Apr-2013 1806 by 271		Batch: S34518	Dil: 40
<b>Total Petroleum Hydrocarbons</b> AR TPH	210	36	mg/Kg	
	Analyzed: 30-Apr-2013 0814 by 295		Batch: B8312	





May 1, 2013  
 Control No. 166884  
 Page 4 of 5

Data Testing, Inc.  
 Post Office Box 1507  
 Fort Smith, AR 72902

**DUPLICATE RESULTS**

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Total Petroleum Hydrocarbons	166884-1	210 mg/Kg				30Apr13 0814 by 285		
	Batch: B8312 Duplicate	240 mg/Kg	13.6	34.0		30Apr13 0814 by 285		
Total Solids	166903-1	1.3 %			28Apr13 1028 by 302	30Apr13 0858 by 302		
	Batch: W43358 Duplicate	1.3 %	0.613	10.0	28Apr13 1027 by 302	30Apr13 0858 by 302		

**LABORATORY CONTROL SAMPLE RESULTS**

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	5 mg/l	108	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Barium	0.5 mg/l	105	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Cadmium	5 mg/l	102	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Chromium	0.5 mg/l	101	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Lead	5 mg/l	101	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Selenium	5 mg/l	105	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Silver	0.1 mg/l	92.8	85.0-115			S34515	28Apr13 1207 by 270	28Apr13 1802 by 305		
TCLP: Mercury	0.0025 mg/l	86.2	85.0-115			S34515	28Apr13 1208 by 270	30Apr13 1743 by 271		
Total Petroleum Hydrocarbons	400 mg/Kg	98.0	91.3-104			B8312		30Apr13 0814 by 285		
	400 mg/Kg	98.0	91.3-104	0.00	20.0	B8312		30Apr13 0814 by 285		



May 1, 2013  
 Control No. 166884  
 Page 5 of 5

Data Testing, Inc.  
 Post Office Box 1507  
 Fort Smith, AR 72902

**MATRIX SPIKE SAMPLE RESULTS**

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
TCLP: Arsenic	166884-1	5 mg/l	106	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	106	75.0-125	S34515	28Apr13 1207 by 270	26Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.129	20.0	S34515				
TCLP: Barium	166884-1	0.5 mg/l	101	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	0.5 mg/l	100	75.0-125	S34515	28Apr13 1207 by 270	26Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.523	20.0	S34515				
TCLP: Cadmium	166884-1	5 mg/l	95.6	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	95.8	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.193	20.0	S34515				
TCLP: Chromium	166884-1	0.5 mg/l	99.9	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	0.5 mg/l	99.7	75.0-125	S34515	28Apr13 1207 by 270	26Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.205	20.0	S34515				
TCLP: Lead	166884-1	5 mg/l	97.4	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	97.6	75.0-125	S34515	28Apr13 1207 by 270	26Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.217	20.0	S34515				
TCLP: Selenium	166884-1	5 mg/l	106	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1807 by 305	5	D
	166884-1	5 mg/l	107	75.0-125	S34515	28Apr13 1207 by 270	26Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.281	20.0	S34515				
TCLP: Silver	166884-1	0.1 mg/l	89.4	75.0-125	S34515	28Apr13 1207 by 270	26Apr13 1807 by 305	5	D
	166884-1	0.1 mg/l	89.6	75.0-125	S34515	28Apr13 1207 by 270	28Apr13 1812 by 305	5	D
	Relative Percent Difference:		0.306	20.0	S34515				
TCLP: Mercury	166884-1	0.0025 mg/l	85.5	70.0-130	S34515	28Apr13 1208 by 270	30Apr13 1748 by 271	40	D
	166884-1	0.0025 mg/l	89.6	70.0-130	S34515	28Apr13 1208 by 270	30Apr13 1753 by 271	40	D
	Relative Percent Difference:		3.52	20.0	S34515				

**LABORATORY BLANK RESULTS**

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Total Solids	< 0.01 %	0.01	0.01	W43368-1	28Apr13 1207 by 302	30Apr13 0858 by 302	
TCLP: Arsenic	< 0.05 mg/l	0.05	0.05	S34515-1	28Apr13 1207 by 270	26Apr13 1754 by 305	
TCLP: Barium	< 0.002 mg/l	0.002	0.002	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Cadmium	< 0.004 mg/l	0.004	0.004	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Chromium	< 0.007 mg/l	0.007	0.007	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Lead	< 0.04 mg/l	0.04	0.04	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Selenium	< 0.07 mg/l	0.07	0.07	S34515-1	28Apr13 1207 by 270	26Apr13 1754 by 305	
TCLP: Silver	< 0.007 mg/l	0.007	0.007	S34515-1	28Apr13 1207 by 270	28Apr13 1754 by 305	
TCLP: Mercury	< 0.0002 mg/l	0.0002	0.0002	S34515-1	28Apr13 1208 by 270	30Apr13 1739 by 271	
Total Petroleum Hydrocarbons	< 32 mg/Kg	32	32	B8312-1		30Apr13 0814 by 295	



ATTACHMENT B  
PHOTOGRAPHS



Photo 1: View of remediation conducted for oil-stained gravel in Southern portion of Facility. Backfilled after excavated (Note: ADEQ, Item No. 13).



Photo 2: View of final grade and backfill for excavated oil-stained gravel in Southern portion of Facility (Note: ADEQ Item No. 13).

## SITE PHOTOGRAPHS





Photo 3: View looking west for remediation conducted in Southern portion of the Facility.



Photo 4: Catch basin with 4-inch diameter pipe at the end of the concrete driveway for the Maintenance Shop Building.

## SITE PHOTOGRAPHS





Photo 5: Fill and grading to control storm water flow at the end of the driveway for the Maintenance Shop Building.



Photo 6: Fill and grade in center of the Property to influence proper drainage.

## SITE PHOTOGRAPHS

## Rinearson, Kassie

---

**From:** Cusick, Daniel <dcusick@croworld.com>  
**Sent:** Friday, May 31, 2013 2:29 PM  
**To:** Coats, Angela; Water-Inspection-Report  
**Cc:** McCabe, Kerri; Kellam, Patrick; Davis, Doran  
**Subject:** 075049 -Nabors Completion & Production Services - Van Buren, AR  
**Attachments:** 075095-RPT-1 Rev1.pdf; 075095COAT-001-053113.pdf

My Comment

Attached, please find the Corrective Action/Response letter on behalf of Nabors Completion & Production Services Co. (NCPS) for the violations noted for their facility in Van Buren, AR. A revised State Water Pollution Prevention Plan (SWPPP) is also included which addresses the deficiencies noted and is due to be filed for the facility and corrective action. A hard copy of each will be delivered to your attention on Monday, June 3, 2013. Please let us know if you have any questions or concerns during our review.

Thank you again for the excellent and our cooperation in working forward with our environmental compliance at this facility.

Have a great weekend.

Best regards,

---

**DANIEL P. CUSICK, P.G.**

**CONESTOGA-ROVERS & ASSOCIATES (CRA)**

103 Gamma Drive Extension., Suite 110

Pittsburgh, Pennsylvania 15238


(412) 963-7313 (office)

(412) 963-7314 (fax)

(412) 327-0863 (cell)

Email: [dcusick@CRAworld.com](mailto:dcusick@CRAworld.com)

[www.CRAworld.com](http://www.CRAworld.com)

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Perform every task the safe way, the right way, every time!

---



**From:** Coats, Angela [<mailto:COATS@adeq.state.ar.us>]

**Sent:** Thursday, May 16, 2013 11:21 AM

**To:** Cusick, Daniel

**Cc:** McCabe, Kerri

**Subject:** RE: 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

I will change your response due date to May 31, 2013.

Thanks,

*Angela Coats*

ADEQ Director

Water Division

Fort Smith Field Office

Office: 479-424-0331

Cell: 501-454-3139

---

**From:** Cusick, Daniel [<mailto:dcusick@craworld.com>]

**Sent:** Wednesday, May 15, 2013 9:28 AM

**To:** Coats, Angela

**Subject:** 075049 - Request for Extension - AFIN 17-00056 - Nabors Completion & Production Services ~COR-075049~

Mr. Coats:

Due to a clerical error, the attached document titled "Notification of Intent to Receive" was not received on time. Unfortunately, the due date for corrective action is noted in the letter as today. Therefore, on behalf of Nabors Completion & Production Services (NCPS), we are respectfully requesting an extension for submission of the corrective action and related documents. The due date requested is May 31, 2013.

Please respond to this email as soon as possible for our records.

Thank you for your consideration and cooperation.

Best regards,

---

**DANIEL P. CUSICK, P.G.**

**CONESTOGA-ROVERS & ASSOCIATES (CRA)**

103 Gamma Drive Extension., Suite 110

Pittsburgh, Pennsylvania 15238


(412) 963-7313 (office)

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Email: [dcusick@CRAworld.com](mailto:dcusick@CRAworld.com)

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# ADEQ

ARKANSAS  
Department of Environmental Quality

June 17, 2013

Patrick Kellam, Environmental Manager  
Nabors Completion and Production Services Co.  
350 High Street  
Bradford, PA 16701

**RE: Response Letter to ADEQ Inspection (Crawford Co);  
Permit #: ARR000825; AFIN: 17-00056**

Dear Mr. Kellam:

I have reviewed the response submitted by Conestoga-Rovers & Associates on behalf of Nabors Completion and Production Services Co. pertaining to my April 5, 2013, inspection of your Van Buren facility. However, the information provided does not sufficiently address the violations referenced in my inspection report.

All outfalls of stormwater discharge from a facility need to be identified and submitted to the Department. This includes the drainage pipe referenced in "NCPS Response No. 9". Please provide the ADEQ Water Division Permits Branch with an updated Notice of Intent (NOI) that includes all of the outfall locations. Please submit a NOI signed by the Cognizant Official by **no later than June 27, 2013**. If you have any questions pertaining to the NOI or your permit, please contact Jamal Solaimanian, Engineer Supervisor, at 501-682-0620 or [Jamal@adeq.state.ar.us](mailto:Jamal@adeq.state.ar.us).

Thank you for your attention to this matter. Should you have any questions regarding my inspection, feel free to contact me at 479-424-0331 or you may e-mail me at [Coats@adeq.state.ar.us](mailto:Coats@adeq.state.ar.us).

Sincerely,



Angela Coats  
Oil & Gas Field Inspector  
Water Division

cc: Heath Davis, Environmental Coordinator, [Dorian.Davis@nabors.com](mailto:Dorian.Davis@nabors.com)  
Daniel P. Cusick, P.G., [dcusick@CRAworld.com](mailto:dcusick@CRAworld.com)

# ADEQ

ARKANSAS  
Department of Environmental Quality

October 1, 2013

Patrick Kellam, Environmental Manager  
Nabors Completion and Production Services Co.  
350 High Street  
Bradford, PA 16701

**RE: Response Letter to ADEQ Inspection (Crawford Co);  
Permit #: ARR000825; AFIN: 17-00056**

Dear Mr. Kellam:

The Water Division Permits Branch has reviewed the response submitted by Conestoga-Rovers & Associates on behalf of Nabors Completion and Production Services Co. pertaining to my April 5, 2013, inspection of your Van Buren facility. The information provided sufficiently addresses the violations referenced in my inspection report. At this time the Department has no further comment concerning this particular inspection. Acceptance of this response by the Department does not preclude any future enforcement action deemed necessary at this site or any other site.

If we need further information concerning this matter, we will contact you. Thank you for your attention to this matter. Should you have any questions, feel free to contact me at 479-424-0331 or you may e-mail me at [Coats@adeq.state.ar.us](mailto:Coats@adeq.state.ar.us).

Sincerely,



Angela Coats  
Oil & Gas Field Inspector  
Water Division

cc: Heath Davis, Environmental Coordinator, [Dorian.Davis@nabors.com](mailto:Dorian.Davis@nabors.com)  
Daniel P. Cusick, P.G., [dcusick@CRAworld.com](mailto:dcusick@CRAworld.com)