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Charlotte, NC 28201-1006  
704-382-6240 fax

March 31, 2014

North Carolina Department of Environment and Natural Resources  
Division of Waste Management  
Solid Waste Section  
2090 U.S. Highway 70  
Swannanoa, North Carolina 28778

Attn: Ms. Deborah Aja

Re: Compliance Inspection Response  
Flue Gas Desulfurization Landfill  
Permit No. 1809-INDUS  
Marshall Steam Station  
Terrell, North Carolina 28682

Dear Ms. Aja,

Duke Energy is in receipt of the Facility Compliance Inspection Report for the Marshall Steam Station Flue Gas Desulfurization (FGD) Landfill (1809-INDUS), dated March 24, 2014. This report was in reference to your inspection of the referenced landfill on February 20, 2014 and March 7, 2014. The purpose of this letter is to address the following Observed Violation referenced in the report:

*"On March 7, 2014, leachate collection system pipes were in the process of being cleaned and remote camera monitored. The previous high-pressure water flushing was performed on 10/18/2012 and 10/19/2012 (no defects were noted). The leachate collection system pipes had not been cleaned out in 2013 and thus had not been cleaned out at least once a year. This constitutes a violation of 15 NCAC 13B .0203(d).*

*To correct this violation and be in compliance with 15A NCAC 13B .0203(d), ensure that leachate collection system pipes are cleaned out in accordance with the approved Operations Plan. Please submit an electronic version of the report for the March 7, 2014 clean-out to Deborah Aja at [deborah.aja@ncdenr.gov](mailto:deborah.aja@ncdenr.gov) within seven (7) days of receipt of this report."*

Attached, you will find the requested leachate maintenance report for flushing and video inspection of the leachate system in March of 2014.

Additionally, we would like to clarify that while the current FGD Landfill Operations Plan language refers to flushing the lines once per year, during the 2013 North Carolina General Assembly Session, House Bill 74, was ratified. House Bill 74 amended North Carolina General Statute 130A-295.6(h)(3) by eliminating the annual cleaning requirement as shown below:

*"All leachate collection lines shall be designed and constructed to permanently allow cleaning and remote camera inspection. ~~All leachate collection lines shall be cleaned at least once per year, except that Department may allow leachate collection lines to be cleaned once every two years if:~~*

*(i) ~~The facility has continuous monitoring; and~~*

*(ii) ~~the permit holder demonstrates to the Department that the leachate collection lines are clear and functional based on at least three consecutive annual cleanings. Remote camera inspections of leachate collection lines shall occur upon completion of construction, at least once every five years thereafter, and following the clearing of blockages.~~*

*Remote camera inspections of the leachate collection lines shall occur upon completion of the construction and at least once every five years. Cleaning of leachate collection lines found necessary for proper functioning and to address buildup of leachate over the liner shall occur".*

Future Permit Modifications or Amendments for this facility will include updated language in the Operations Plan to conform with current regulatory guidelines.

Should you have any questions regarding this information, please contact Kim Hutchinson at 336-215-4576 or via e-mail at kim.hutchinson@duke-energy.com.

Respectfully submitted,



Jason M. Allen, SVP  
Environmental Health and Safety

Attachments: 2014-03 1809-INDUS Leachate System Maintenance Report

cc (via e-mail): George Tolbert, Duke Energy  
Ed Sullivan, Duke Energy  
Jason Watkins, NCDENR  
Sara Rice, NCDENR  
Larry Frost, NCDENR



*Video Inspection and Cleaning of Sewer and Storm Drain Systems*

2542-B Sam Moss Road • Creedmoor, NC 27522

**Scott Hamre**  
Phone: 919-427-0774

**Brian Hicks**  
Phone: 919-669-4536

Fax: 919-528-4584

3/28/14

To Duke Energy,

This letter is regarding the FGD Landfill leachate system at the Marshall Steam Station. The system has been cleaned off all debris, except for an 8 foot section of the Cleanout #2 line. At 887', from the access point, to 895' debris is approximately 1" – 2" in depth within a sag in the line that is approximately 85' in length. This was recorded and is documented with the accompanying DVD for the Cleanout #2 line. The Cleanout #1, #2, #3, #4 lines all appear to be functioning properly and were videoed to represent the functioning lines, as well as the sag in Cleanout #2.

Should you have additional questions, feel free to contact me.

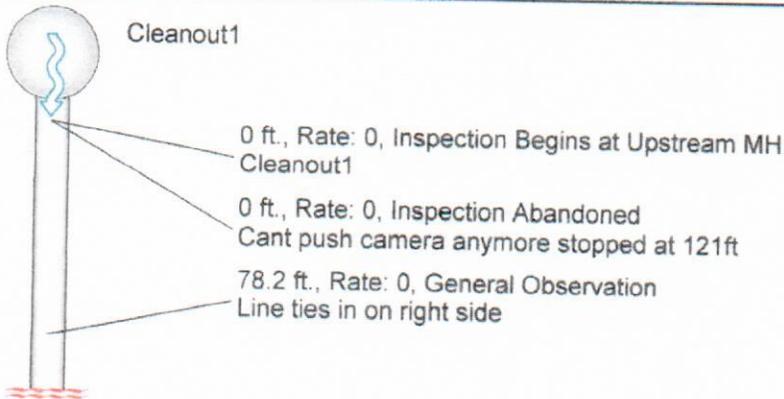
Thank you,  
Brian Hicks





### Scaled Plot

Pipe ID <b>1</b>	City <b>moorersville nc</b>	Street <b>Outfall</b>	Shape <b>Circular</b>	Map #1	Basin
US Manhole <b>Cleanout1</b>	Section Length	Year Laid	Material <b>hdpe</b>	Section Type <b>leach aid</b>	
DS Manhole <b>Sump</b>	Inspected Length <b>78.2</b>	Year Renewed	Depth US	Depth DS	Joint Leng... Diameter <b>6</b>
Cleaned	Jetting	Situation		Reason	
Date <b>20140306</b>	Clean Date	Weather <b>Cloudy</b>		General Condition Control	
Start Time <b>14:00</b>				Remark	
Operator <b>Eddie</b>	Customer <b>Charah/Duke Power</b>	Truck <b>ARGO</b>	Inspection Dir. <b>Downstream</b>	Info	
Operator Comment	P.O. Number	Present	Flow Control	Camera	

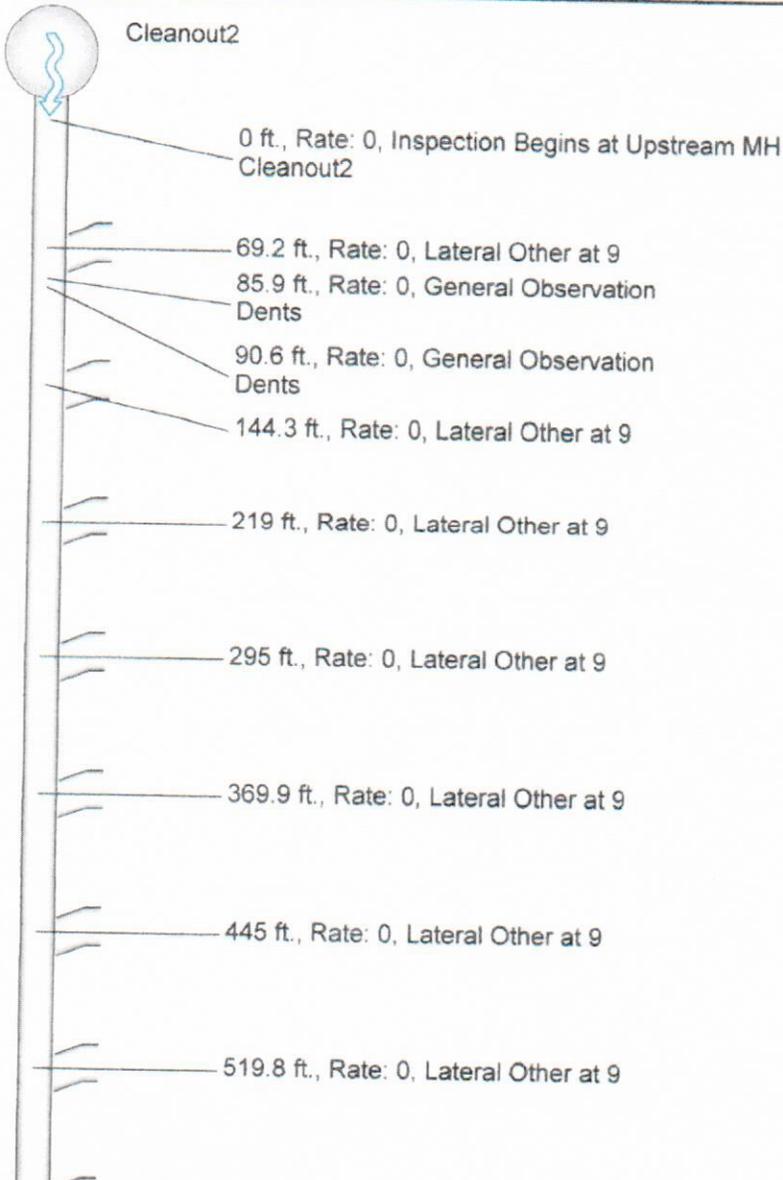


\* = clock positions adjusted automatically for reverse inspection



### Scaled Plot

Pipe ID <b>2</b>	City <b>mooreville nc</b>	Street <b>Outfall</b>	Shape <b>Circular</b>	Map #1	Basin
US Manhole <b>Cleanout2</b>	Section Length	Year Laid	Material <b>hdpe</b>	Section Type <b>leach aid</b>	
DS Manhole <b>Sump</b>	Inspected Length <b>942.3</b>	Year Renewed	Depth US	Depth DS	Joint Leng... <b>Diameter</b> <b>6</b>
Cleaned	Jetting	Situation		Reason	
Date <b>20140328</b>	Clean Date	Weather <b>Cloudy</b>		General Condition Control Remark	
Start Time <b>01:02</b>	Operator <b>Eddie</b>	Customer <b>Charah/Duke Power</b>	Truck <b>ARGO</b>	Inspection Dir. <b>Downstream</b>	Info
Operator Comment	P.O. Number	Present	Flow Control	Camera	



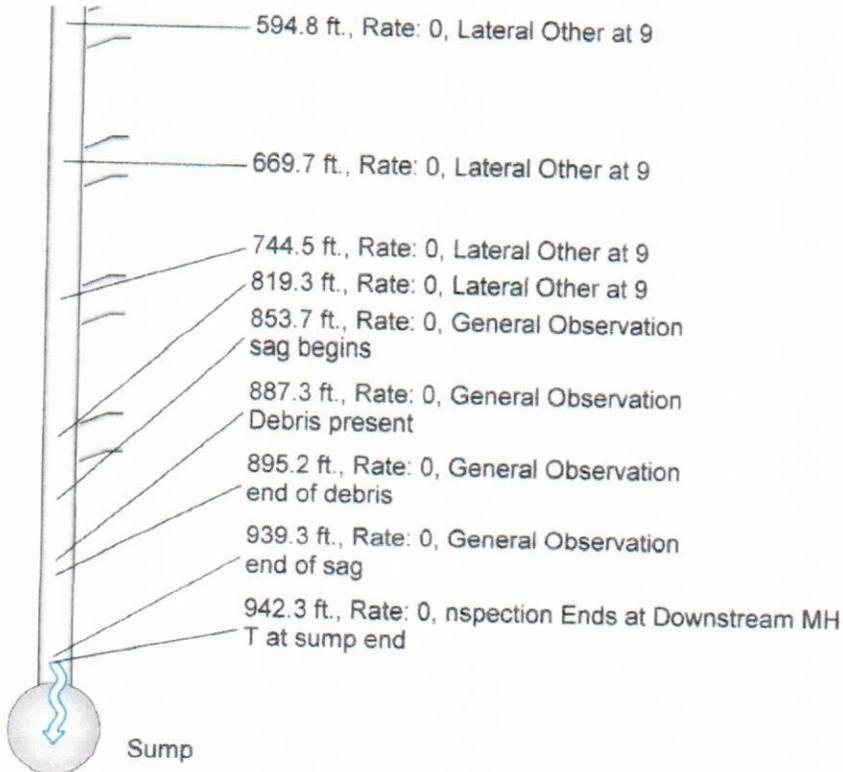
\* = clock positions adjusted automatically for reverse inspection

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### Scaled Plot

Pipe ID <b>2</b>	City <b>mooreville nc</b>	Street <b>Outfall</b>	Shape <b>Circular</b>	Map #1	Basin
US Manhole <b>Cleanout2</b>	Section Length	Year Laid	Material <b>hdpe</b>	Section Type <b>leach aid</b>	
DS Manhole <b>Sump</b>	Inspected Length <b>942.3</b>	Year Renewed	Depth US	Depth DS	Joint Leng... Diameter <b>6</b>



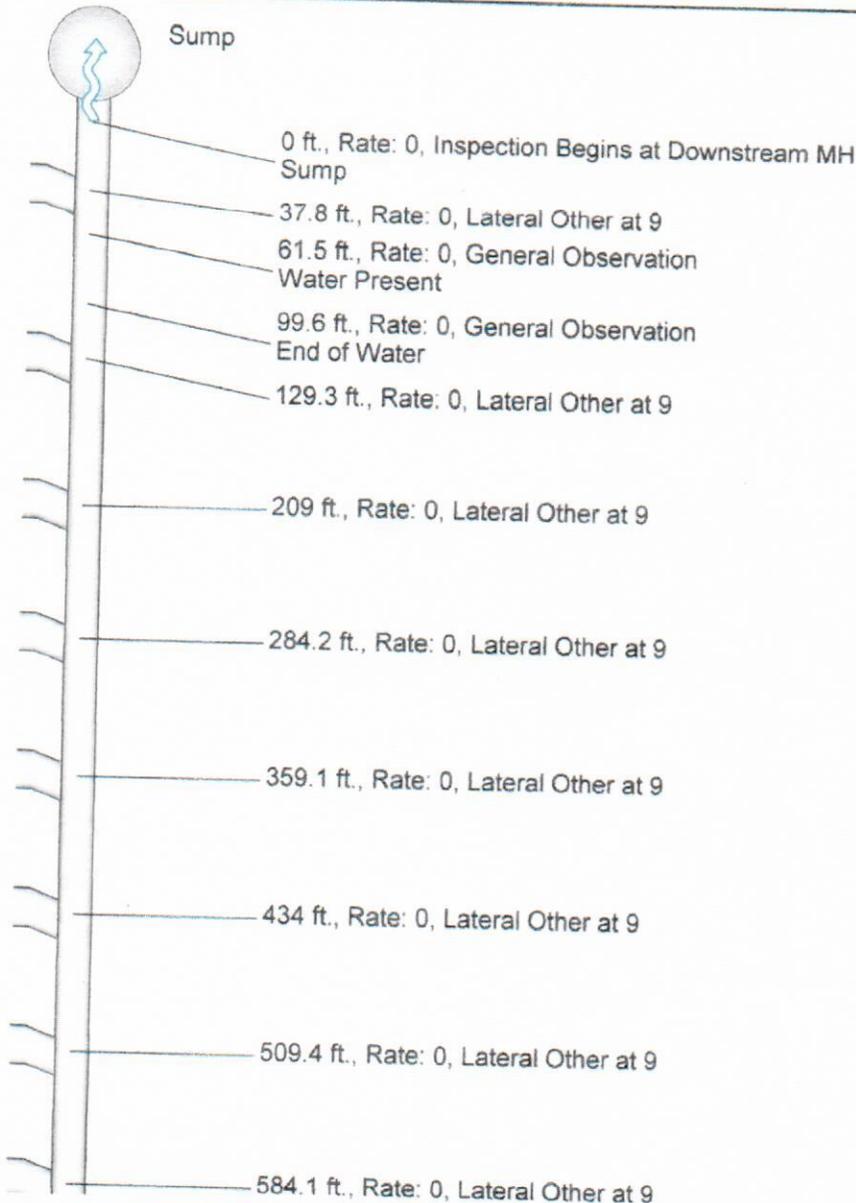
\* = clock positions adjusted automatically for reverse inspection

Scale: 1:1200



### Scaled Plot

Pipe ID <b>3</b>	City <b>mooreville nc</b>	Street <b>Outfall</b>	Shape <b>Circular</b>	Map #1	Basin
US Manhole <b>Cleanout1</b>	Section Length	Year Laid	Material <b>hdpe</b>	Section Type <b>leach aid</b>	
DS Manhole <b>Sump</b>	Inspected Length <b>871.1</b>	Year Renewed	Depth US	Depth DS	Joint Leng... Diameter <b>6</b>
Cleaned	<b>Jetting</b>	Situation		Reason	
Date <b>20140313</b>	Clean Date	Weather <b>Cloudy</b>		General Condition Control	
Start Time <b>09:52</b>				Remark	
Operator <b>Eddie</b>	Customer <b>Charah/Duke Power</b>	Truck <b>ARGO</b>	Inspection Dir. <b>Upstream</b>	Info	
Operator Comment	P.O. Number	Present	Flow Control	Camera	



\* = clock positions adjusted automatically for reverse inspection

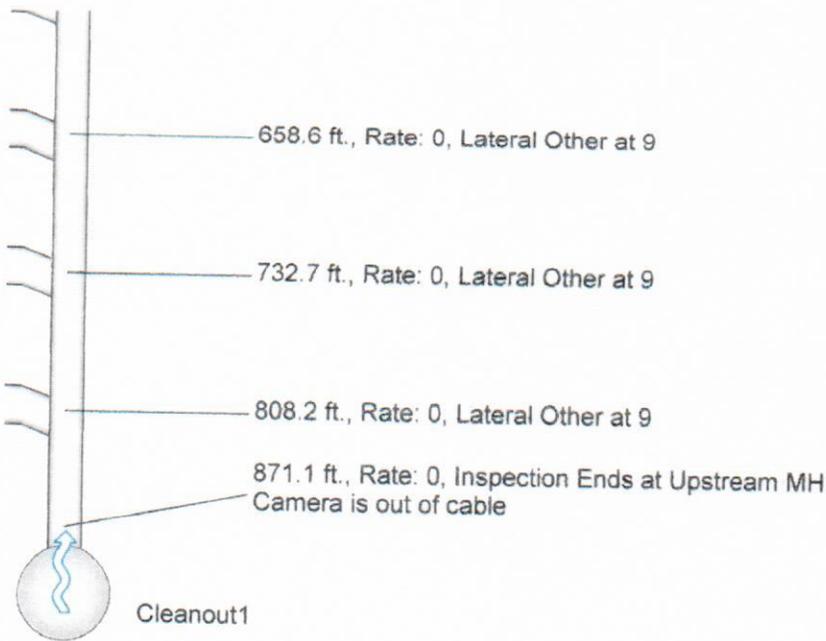
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Vision NC  
2542B Sam Moss-Hayes Road  
Creedmoor NC 27522  
919-669-4536

### Scaled Plot

<b>Pipe ID</b> 3	<b>City</b> moorerville nc	<b>Street</b> Outfall	<b>Shape</b> Circular		<b>Map #1</b>	<b>Basin</b>
<b>US Manhole</b> Cleanout1	<b>Section Length</b>	<b>Year Laid</b>	<b>Material</b> hdpe		<b>Section Type</b> leach aid	
<b>DS Manhole</b> Sump	<b>Inspected Length</b> 871.1	<b>Year Renewed</b>	<b>Depth US</b>	<b>Depth DS</b>	<b>Joint Leng...</b>	<b>Diameter</b> 6



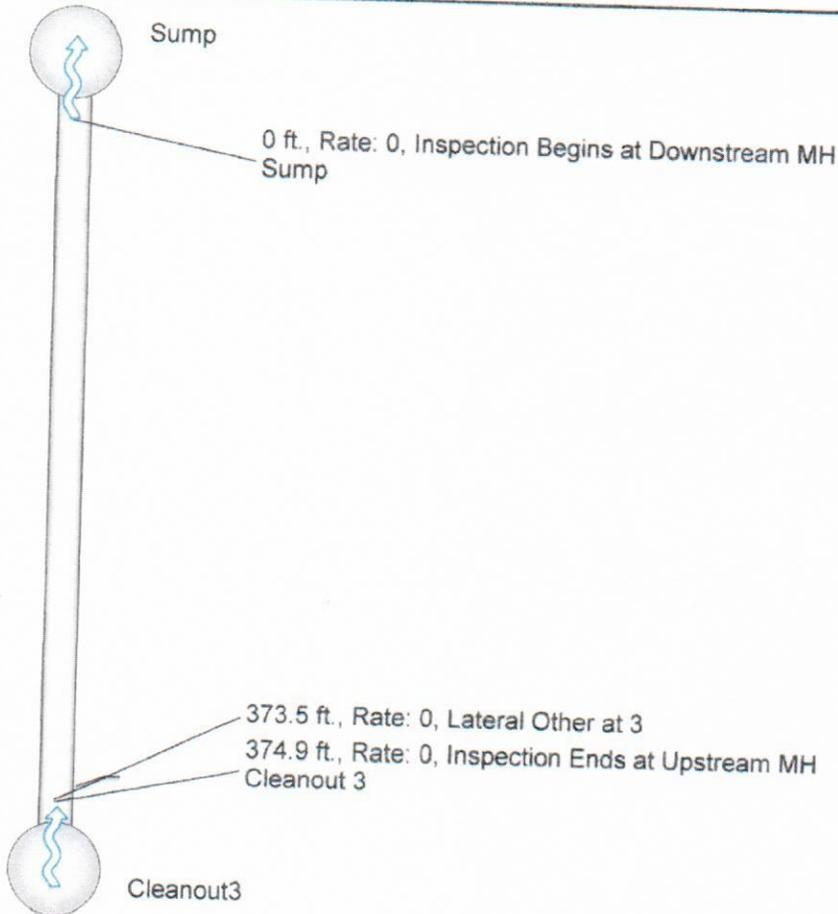
\* = clock positions adjusted automatically for reverse inspection

Scale: 1:1200



### Scaled Plot

Pipe ID <b>4</b>	City <b>moorestville nc</b>	Street <b>Outfall</b>	Shape <b>Circular</b>	Map #1	Basin
US Manhole <b>Cleanout3</b>	Section Length	Year Laid	Material <b>hdpe</b>	Section Type <b>leach aid</b>	
DS Manhole <b>Sump</b>	Inspected Length <b>374.9</b>	Year Renewed	Depth US	Depth DS	Joint Leng... <b>Diameter</b> <b>6</b>
Cleaned	Jetting	Situation		Reason	
Date <b>20140313</b>	Clean Date	Weather <b>Cloudy</b>		General Condition Control	
Start Time <b>10:44</b>				Remark	
Operator <b>Eddie</b>	Customer <b>Charah/Duke Power</b>	Truck <b>ARGO</b>	Inspection Dir. <b>Upstream</b>	Info	
Operator Comment	P.O. Number	Present	Flow Control	Camera	

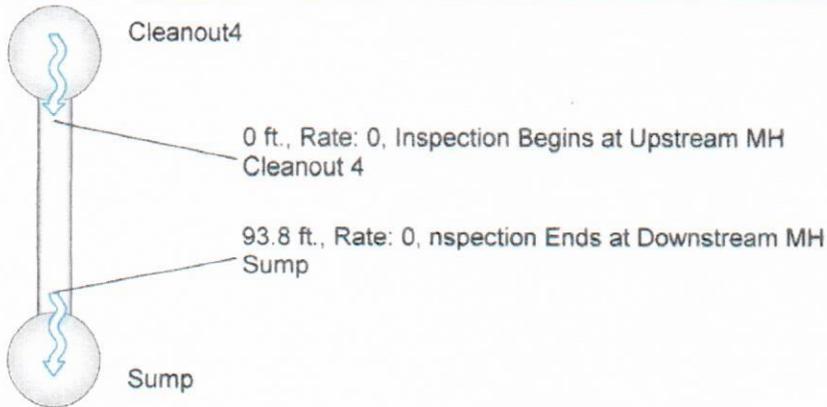


\* = clock positions adjusted automatically for reverse inspection



### Scaled Plot

Pipe ID <b>5</b>	City <b>mooreville nc</b>	Street <b>Outfall</b>	Shape <b>Circular</b>	Map #1	Basin
US Manhole <b>Cleanout4</b>	Section Length	Year Laid	Material <b>hdpe</b>	Section Type <b>leach aid</b>	
DS Manhole <b>Sump</b>	Inspected Length <b>93.8</b>	Year Renewed	Depth US	Depth DS	Joint Leng... Diameter <b>10</b>
Cleaned	Jetting	Situation		Reason	
Date <b>20140313</b>	Clean Date	Weather <b>Cloudy</b>		General Condition Control	
Start Time <b>11:21</b>		Operator <b>Eddie</b>		Info	
Operator Comment	Customer <b>Charah/Duke Power</b>	Truck <b>ARGO</b>	Inspection Dir. <b>Downstream</b>	Camera	
	P.O. Number	Present	Flow Control		



\* = clock positions adjusted automatically for reverse inspection