

# **DOUGLAS**

## **PIPELINE COMPANY**

October 6, 2021

Mr. Bruce Perkins  
Interim Pipeline Safety Program Manager  
Idaho Public Utility Commission  
P.O. Box 83720-0074  
Boise, Idaho 83720-0074

Dear Mr. Perkins:

Thank you for your audit of Douglas Pipeline Company's procedures. This letter is in response to the Notice of Probable Violation dated October 4, 2021:

### **PROBABLE VIOLATIONS**

49 CFR §192.605; Procedural manual for operations, maintenance, and emergencies. *General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.*

Douglas Gas Pipeline, Idaho Power Langley Gulch and Idaho Power Bennett Mountain Operations & Maintenance Manual, Section 14 Transmission Lines: Leak Surveys, Leak Classification States:

Note: a visual vegetation leakage survey is done in conjunction with each pipeline patrol. This visual vegetation survey is not to be considered a substitute for the annual Leakage Survey with an instrument. The leakage survey instrument used is indicated on each Leak Survey Report. The instrument used for leak detection is calibrated prior to each survey with canned methane and calibrated annually by a manufacturer-authorized technician.

#### Finding:

Douglas Pipeline Companies Heath DP-IR Methane Leak Detector has a calibration sticker with a 2017 date indicating that it has not been calibrated annually by a manufacturer-authorized technician as required by the operations & maintenance procedures.

# DOUGLAS

## PIPELINE COMPANY

Douglas Pipeline Company acknowledges that the Leak Surveys section of the Operations and Maintenance Manual for the Idaho Power Langley Gulch facility, and the Idaho Power Bennett Mountain facility did not include the complete procedure for leak detection instrument calibration. As the Director of Regulatory Compliance, it is my responsibility to ensure that these written procedures are accurate, and that they are implemented by our technician team.

Statement #1 below describes the proposed revision to the O&M Manual that accurately describes the leak detection instrument procedure, and statement #2 describes the calibration verification of the instrument used at the Idaho Power locations on September 20, 2021.

1) Douglas Pipeline Company will revise Section 14: Transmission Lines: Leak Surveys, Leak Classification of the Idaho Power Operations and Maintenance Manual for the Idaho Power Langley Gulch facility, and the Idaho Power Bennett Mountain facility so that it is inclusive for all brands of leak detection instruments that Douglas Pipeline Company technicians may use to complete a leak survey:

“A gas leak survey with a leak detection instrument will be performed on the entire route of the pipeline in Class 1 and Class 2 Locations at least once each calendar year at intervals not exceeding 15 months. Due to the gas not being odorized, Douglas Pipeline shall also perform a gas leak survey in each Class 3 Location area at least twice per calendar year not exceeding 7 ½ months. As of the date of this manual there are no Class 4 Location segments on the Idaho Power pipeline system.

The leakage survey instrument used for each inspection is documented on each Leak Survey Report. The instrument used for leak detection shall be calibrated per the manufacturer's requirements and documented per Douglas Pipeline Company Procedure SOP-05-Leak Survey and SOP-23-Instrument Calibration.

DPC shall document these surveys and retain records of each leak survey as required by 49 CFR 192.723 for at least five years.

Whenever an indication of leakage is detected, DPC will further evaluate the area with a gas detector. Leak locations will require bar holes to be made and tested with a combustible gas indicator (CGI), the extent of gas migration determined, and the leak pinpointed and classified.

Each detected leak will be documented on the Leak Investigation Report showing a sketch of the leak location, any nearby buildings, leak classification, date, and signature.

The adequacy of all the repairs of leaks will be checked by appropriate methods immediately after repairs are completed. Where there is residual gas in the ground, a follow up inspection using a gas detector instrument must be made as soon as the gas has had an opportunity to dissipate, but no later than one month for Grade 1 leaks and six months for Grade 2 leaks. The date and status of recheck will be recorded on the leak repair record.

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Reference:

Douglas Pipeline Procedure SOP-05-Leak Survey  
Douglas Pipeline Procedure SOP-05B-Leak Investigation Report  
Douglas Pipeline Procedure SOP-23-Instrument Calibration”

2) The DP-IR used for the leak survey at the Idaho Power Bennett Mountain and Langley Gulch facilities on September 20, 2021, was calibrated by a Heath authorized technician on 05/17/2017 and subsequently self-tested per the manufacturer’s instructions.

- Douglas Pipeline Procedure SOP-05-Leak Survey is attached as Exhibit 1.
- Douglas Pipeline Procedure SOP-23-Instrument Calibration is attached as Exhibit 2.
- The calibration/self-test portion of the Heath DP-IR operation manual is attached as Exhibit 3.
- Records of these self-tests are attached as Exhibit 4.

Thank you for your attention to this matter. We appreciate and respect the auditing process that The Commission provides and your support in promoting effective pipeline safety practices. Please contact me by phone or email if you have any questions.

Sincerely,

Andrea Shacklett



Director of Regulatory Compliance  
Douglas Pipeline Company  
412-531-2440 Ext. 29  
[ashacklett@douglaspipeline.com](mailto:ashacklett@douglaspipeline.com)

Exhibit 1  
Douglas Pipeline Procedure SOP-05-Leak Survey

**Douglas Pipeline Company Standard Operating Procedure: Leak Survey**

Description	<p>This procedure is used to inspect the pipeline for natural/landfill gas leaks using approved, authorized, and properly calibrated leak detection equipment.</p> <p>The leak survey shall be performed as part of a patrol to observe surface conditions for evidence of excavation damage or construction activities along the pipeline right-of-way.</p>
Code Reference - Frequency	<p>49 CFR Part 192.706 Leakage surveys of a transmission line must be conducted at intervals not exceeding 15 months, but at least once each calendar year. However, in the case of a transmission line which transports gas in conformity with §192.625 without an odor or odorant, leakage surveys using leak detector equipment must be conducted—</p> <p>(a) In Class 3 locations, at intervals not exceeding 7½ months, but at least twice each calendar year; and</p> <p>(b) In Class 4 locations, at intervals not exceeding 4½ months, but at least four times each calendar year.</p> <p>49 CFR Part 192.936 (d) An operator of a transmission pipeline operating below 30% SMYS located in a Class 3 or Class 4 area but not in a high consequence area must perform semi-annual leak surveys (quarterly for unprotected pipelines or cathodically protected pipe where electrical surveys are impractical).</p>
Revision Date/Number	<p>02/01/2017 – Revision 1 06/01/2019 – Revision 2</p>
Prerequisite	<ol style="list-style-type: none"> <li>1. Class Location survey, and odorant confirmation</li> <li>2. Ensure the exact location of the pipeline</li> <li>3. Current Instrument Calibration Documentation</li> </ol>

**Responsibilities:**

Operator personnel are responsible for completion of leak surveys on every transmission facility no less than the minimum frequency specified in State and Federal Pipeline Safety Regulations, or as specified in each pipeline owners Operations and Maintenance Manual.

Operator personnel must initiate follow-up checks, inspections, repair work, remedial actions, and protective measures resulting from leaks discovered by survey or reported by the public. It is also the responsibility of operations to ensure proper, correct, and complete documentation showing that Douglas Pipeline has complied with State and Federal Regulations, as well as pipeline owner requirements.

**Facilities that Require Leak Survey:**

Leak surveys may be conducted from ground patrols along the pipeline route.

Ground surveys are to include:

- Tap site
- Station yard piping up to building walls
- Station piping inside buildings
- Meter and regulator buildings
- Road and highway crossings
- Railroad crossings
- Casing vents
- Paved areas
- Valve sites including valves and piping
- Regulated Gathering and Storage field lines
- Transmission lines
- Compressor station piping not equipped with fixed gas detection

Surveying for odor, noise, or other indications of blowing gas or gas leaks should also be used to check for gas leaks during routine facility visits – normal quarterly patrols.

**Leak Detection Equipment:**

Leak detection equipment is required that has been calibrated and maintained per manufacturer recommendations. Each calibration procedure must be documented, and the document shall be stored in DPC's "Instrument Inventory" file.

Leak detection equipment includes:

- Approved catalytic/thermal conductivity-type combustible gas indicator
- Flame Ionizations unit
- Optical remote methane detector

Additional equipment or methods which may be used to pinpoint leaks include Gas-Trak devices, personal monitors, bar hole probes for leak survey, and soapsuds

Leak Survey Form:

1. Complete the Leak Survey Form notating location of any leaks found
2. Grade leaks using the GTPC Classification chart
  - a. If Grade 1 or 2 leaks are found an AOC form should be completed
3. Leaks requiring immediate repair
4. Inform pipeline owner of action plan regarding any leaks found
5. Complete a Pre-construction form and schedule repair upon approval

**Leak Survey**

<b>Pipeline Name</b>		<b>Location</b>	
<b>Inspected By</b>		<b>Inspection Date</b>	
<b>Required Frequency</b>	<b>Annual?</b>	<b>Survey Method</b>	
<b>Instrument Used</b>		<b>Serial Number</b>	<b>Calibration Date</b>
<b>Areas Surveyed</b>			
<b>Valves and above ground piping?</b>			
<b>Leak Survey Results</b>			
<b>*If leaks are found, complete Location and Grade Section</b>			

**Leak Location and Grade**

<b>Leak Location</b>	<b>Grade</b>	<b>Action Plan</b>

**GPTC Leak Classification**

**Grade 1**

Definition	Action Criteria	Examples
A leak that represents an existing or probable hazard to persons or property, and requires immediate repair or continuous action until the conditions are no longer hazardous.	<p>Requires <i>prompt action</i>* to protect life and property, and continuous action until the conditions are no longer hazardous.</p> <p>*The prompt action in some instances may require one or more of the following:</p> <ul style="list-style-type: none"> <li>a. Implementation of company emergency plan (§192.615).</li> <li>b. Evacuating premises.</li> <li>c. Blocking off an area.</li> <li>d. Rerouting traffic.</li> <li>e. Eliminating sources of ignition.</li> <li>f. Venting the area.</li> <li>g. Stopping the flow of gas by closing valves or other means.</li> <li>h. Notifying police and fire departments.</li> </ul>	<ul style="list-style-type: none"> <li>1. Any leak which, in the judgment of operating personnel at the scene, is regarded as an immediate hazard.</li> <li>2. Escaping gas that has ignited.</li> <li>3. Any indication of gas which has migrated into or under a building, or into a tunnel.</li> <li>4. Any reading at the outside wall of a building, or where gas would likely migrate to an outside wall of a building.</li> <li>5. Any reading of 80% LEL, or greater, in a confined space.</li> <li>6. Any reading of 80% LEL, or greater in small substructures (other than gas associated substructures) from which gas would likely migrate to the outside wall of a building.</li> <li>7. Any leak that can be seen, heard, or felt, and which is in a location that may endanger the general public or property.</li> </ul>

**Grade 2**

Definition	Action Criteria	Examples
A leak that is recognized as being non-hazardous at the time of detection, but justifies scheduled repair based on probable future hazard.	<p>Leaks should be repaired or cleared within one calendar year, but no later than 15 months from the date the leak was reported. In determining the repair priority, criteria such as the following should be considered:</p> <ul style="list-style-type: none"> <li>a. Amount and migration of gas.</li> <li>b. Proximity of gas to buildings and subsurface structures.</li> <li>c. Extent of pavement.</li> <li>d. Soil type and soil conditions (such as frost cap, moisture and natural venting).</li> </ul> <p>Grade 2 leaks should be reevaluated at least once every six months until cleared. The frequency of</p>	<p><i>A. Leaks Requiring Action Ahead of Ground Freezing or Other Adverse Changes in Venting Conditions.</i></p> <p>Any leak which, under frozen or other adverse soil conditions, would likely migrate to the outside wall of a building.</p> <p><i>B. Leaks Requiring Action Within Six Months</i></p> <ul style="list-style-type: none"> <li>1. Any reading of 40% LEL, or greater, under a sidewalk in a wall-to-wall paved area that does not qualify as a Grade 1 leak.</li> </ul>



	<p>reevaluation should be determined by the location and magnitude of the leakage condition.</p> <p>Grade 2 leaks may vary greatly in degree of potential hazard.</p> <p>Some Grade 2 leaks, when evaluated by the above criteria, may justify scheduled repair within the next 5 working days.</p> <p>Others will justify repair within 30 days. During the working day on which the leak is discovered, these situations should be brought to the attention of the individual responsible for scheduling leak repair.</p> <p>On the other hand, many Grade 2 leaks, because of their location and magnitude, can be scheduled for repair on a normal routine basis with periodic reinspection as necessary</p>	<p>2. Any reading of 100% LEL, or greater, under a street in a wall-to-wall paved area that has significant gas migration and does not qualify as a Grade 1 leak.</p> <p>3. Any reading less than 80% LEL in small substructures (other than gas associated substructures) from which gas would likely migrate creating a probable future hazard.</p> <p>4. Any reading between 20% LEL and 80% LEL in a confined space.</p> <p>5. Any reading on a pipeline operating at 30 percent SMYS, or greater, in a class 3 or 4 location, which does not qualify as a Grade 1 leak.</p> <p>6. Any reading of 80% LEL, or greater, in gas associated substructures.</p> <p>7. Any leak which, in the judgment of operating personnel at the scene, is of sufficient magnitude to justify scheduled repair.</p>
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**Grade 3**

Definition	Action Criteria	Examples
A leak that is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous.	These leaks should be reevaluated during the next scheduled survey, or within 15 months of the date reported, whichever occurs first, until the leak is regraded or no longer results in a reading.	<p><i>Leaks Requiring Reevaluation at Periodic Intervals</i></p> <p>1. Any reading of less than 80% LEL in small gas associated substructures.</p> <p>2. Any reading under a street in areas without wall-to-wall paving where it is unlikely the gas could migrate to the outside wall of a building.</p> <p>3. Any reading of less than 20% LEL in a confined space.</p>

Exhibit 2  
Douglas Pipeline Procedure SOP-23-Instrument Calibration

Douglas Pipeline Company Standard Operating Procedure: Instrument Calibration

<b>Description</b>	<p>This procedure is used to ensure that instruments used to perform Operations and Maintenance, and Emergency procedures are calibrated per manufacturers recommendations and State and Federal Pipeline Safety Regulations.</p> <p>All records of calibration activity need to be readily available both in the field and in Egnyte.</p>	
<b>Applicability</b>	<p>All instruments being used to perform Operations and Maintenance and Emergency procedures on regulated natural/landfill gas pipelines that require regular calibration activity</p>	<ul style="list-style-type: none"> <li>• DP-IR</li> <li>• Odorator</li> <li>• MX4</li> <li>• MX6</li> <li>• Crystal Gauge</li> <li>• Torque Wrench</li> </ul>
<b>Frequency</b>	<p>Varies per manufacturer requirement and State and Federal Pipeline Safety Regulations.</p>	
<b>Revision Date/Number</b>	<ul style="list-style-type: none"> <li>• Revision 1: 06/01/2019</li> <li>• Version 1: 02/01/2017</li> </ul>	
<b>Prerequisite</b>	<ol style="list-style-type: none"> <li>1) Read the owner’s manual for each instrument</li> <li>2) Technicians must have preapproval before sending any instrument in for calibration or repairs</li> <li>3) Ensure that you have a back-up instrument to use if needed while yours is at the manufacturer for service</li> </ol>	

**Procedure** – Use the following calibration record to determine which instruments need to be calibrated and how often calibration is to occur.

- 1) You must always keep a current copy of the manufacturer’s calibration report or their recommended documentation form with each instrument.
- 2) You must submit evidence of the manufacturer’s calibration to the Director of Regulatory Compliance within 5 days of receipt:
  - This can be a picture that clearly shows all data on the calibration report, or a scan of the report, or mail a COPY of the report to the Pittsburgh office
- 3) **DP-IR’s require self-testing** to be documented monthly or before each use **instead of factory calibration**. Take a legible picture of your self-test records and send to Director of Regulatory Compliance at least once a month and a copy will be kept with each instrument
- 4) The **Heath Odorator2** requires documentation of self-tests monthly or before each use– take a legible picture of your self-test records and send to Director of Regulatory Compliance at least once a month
- 5) **Torque Wrenches**- Per manufacturers specification or annual calibration
- 6) **Crystals**- Per manufacturers specification or annual calibration

7) Industrial Scientific **MX4 & MX6** - require documentation of monthly calibrations and bump testing before each use. Take a legible picture of your monthly calibration record and bump-test records and send to the Director of Regulatory Compliance at least once a month.

8) **Instruments and Tools** requiring annual calibration/certification will be completed by a 3<sup>rd</sup> party vendor at the annual DPC safety training days.

Exhibit 3  
Calibration/self-test portion of the Heath DP-IR Operation Manual

# DP-IR<sup>TM</sup>

Detecto Pak-Infrared

## User's Manual

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Heath Consultants Incorporated  
Houston, TX  
Phone: 713-844-1300  
Fax: 713-844-1309  
**1-800-HEATH-US**  
[www.heathus.com](http://www.heathus.com)



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# Table of Contents

Notice .....	2
Warnings .....	3
Overview .....	6

## Chapter I

DP-IR System Specifications .....	7
DP-IR System Components .....	8
Optional Accessories .....	10

## Chapter II

Operating the DP-IR .....	11
Keypad .....	11
User Interface .....	12
External Features .....	13
Turning the DP-IR On/Off .....	13
Using the Menu .....	14
Zero .....	14
Auto/Manual Ranging .....	14
Alarm Level .....	15
Detection Modes .....	15
Using the Tick Mode .....	15
Self-Test .....	16

## Chapter III

### Battery/External Power Operation

Rechargeable Battery .....	18
Battery Charging .....	19
Battery Replacement .....	19
External Power .....	19

## **Chapter IV**

Serial Data Communication .....	20
---------------------------------	----

## **Chapter V**

Surveying with the DP-IR .....	21
--------------------------------	----

Using the Bar Hole Probe .....	22
--------------------------------	----

## **Chapter VI**

### Maintenance and Troubleshooting Information

Troubleshooting the Instrument .....	23
--------------------------------------	----

Maintenance .....	24
-------------------	----

## **Chapter VII**

### Service Information

Warranties and Warranty Repair .....	25
--------------------------------------	----

Obtaining Service .....	25
-------------------------	----

DP-IR Parts List .....	26
------------------------	----

DP-IR Daily Self-Test and Calibration Log .....	33
---	----

Declaration of Conformity .....	34
---------------------------------	----

Contact Information .....	35
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## Overview

The **HEATH** Detecto Pak-Infrared (DP-IR™) uses highly advanced optical technology capable of detecting methane gas utilizing the Infrared Controlled Interference Polarization Spectrometry method. The DP-IR is the latest leak survey instrument from **HEATH** that greatly improves productivity, cost and safety of walking and mobile surveys.

The DP-IR functions by using an infrared optical gas detection system. This instrument is intended to replace the current surveying equipment using the traditional Flame Ionization method with next-generation technology utilizing an infrared light beam, eliminating the need for expensive gas cylinders and refill systems. It is designed to be highly selective to detecting methane gas and will not false alarm on other hydrocarbon gases which may be encountered during a normal natural gas leak survey.



**Figure 1: The DP-IR uses advanced infrared optical technology to achieve high sensitivity to methane gas.**

The DP-IR operates under a variety of field conditions, including cold and hot temperatures. Its rugged design will stand up to normal field use and operating conditions.

The DP-IR has a built-in self-test function that will verify that the instrument is operating properly. Using the internal calibration cell, the operator performs the self-test as part of a daily start-up routine. While in operation, the DP-IR continuously monitors several internal parameters to ensure that it is functioning properly. Should any of these parameters go outside of operational limits, a constant audible alarm will sound and an ERROR icon will be displayed.

# CHAPTER I

## DP-IR System Specifications

Detection Method:	Infrared Controlled Interface Polarization Spectrometer	
Measurement Range:	0-100,000 PPM 1-100% Gas	
Display Range:	Auto Ranging: PPM: 0-10,000 % Gas: 1-100%	Manual Ranging: PPM scale: 0-10,000 % Gas: 0-100%
Sensitivity:	0-1000 PPM: 1 PPM 1000-10,000 PPM: 5 PPM 1-100% Gas: 0.5%	
Accuracy:	Greater of +/- .5% or +/- 10% of reading (typical, std conditions) (% Gas on manual mode)	
Detection Alarms Modes:	Digital Methane Detection (DMD): Audible tone when detection threshold is exceeded Adjustable Alarm Level from 1 to 9000 PPM Tick: Continuous audio tone relative to concentration	
System Fault Warning:	Audible tone and indication on the display	
Self-Test & Calibration:	Built in Self-Test and Calibration function verifies operation and adjusts calibration for maximum sensitivity. Test gas cell integrated within the instrument.	
Compliance:	EN 61326-1 Conducted Emissions Class B Radiated Emissions Class B ANSI C63.4 Class B FCC 47 CFR Part 15 Class B	EN 61326-1 EN 61000-4-2 4kV/8kV EN 61000-4-3 3 V/M
Dust Filter:	Replaceable filter provides dust protection. Easy change out quick disconnect filter cap.	
Display:	Large easy to read backlit LCD (.75" Numeric)	
Operating Temperature:	0 to + 122° F (-17 to 50° C) (nominal battery voltage)	
Humidity:	5 to 95% RH, non-condensing	
Enclosure:	IP54 (Water splash and Dust resistant)	
Instrument Weight:	5.6 lbs.	
Carrying Case:	13 lbs. empty; 21 lbs. filled 24.5" x 21" x 9"	
Power Supply:	Internal rechargeable Li-ion battery or External 12 VDC car battery with optional power conditioner	
Battery Operating Life:	8 hours at 32° F with out backlight on	
Battery Charger:	External, in-line, 110 - 240 VAC, 50/60 hertz. 10 hours to 90% charge	
Shoulder Strap:	Single over the shoulder padded strap	
Speaker Volume:	108 dBs @ Alarm port (A-fast)	
Survey Probe:	Quick connect fitting with locking clasp. Adjustable length from 25" to 41"	
Bar hole Probe:	Std: 20"; Optional 36"	
Intrinsic Safety:	Class 1 Division 1 Group D T3 UL 913 and CSA 22.2 No. 157 MET Lab #E112840	

3. If the location with the fastest tick rate is consistent, then the leak is at that spot.
4. If the tick rates are not consistent, keep working the area. The gas plume may be drifting around causing inconsistent readings. In some cases, the gas plume may be large enough that localization is not very accurate.

## **Self-Test**

The DP-IR has a built-in function to perform a self-test and calibration of the instrument. The self-test feature should be used on a daily basis to ensure that the instrument is in proper working order. **HEATH** recommends that the self-test function be performed prior to beginning your survey day. Each self-test should be recorded into a daily log. An example daily log has been included at the end of this manual for your convenience.

To perform the self-test, the following procedure should be followed:

1. Remove the instrument from the carrying case.
2. Turn on the instrument and allow it to warm up.
3. Verify that the battery has four or more bars.
4. Press the MENU button until the SELF-TEST icon is shown on the display (Note: the Retry and OK icon are also displayed).
5. Press the UP button to initiate the self-test.
6. If the OK icon is displayed, the instrument passed the self-test.
  - a. If the RETRY icon is displayed then the instrument failed the self-test, press the UP button to retry the self-test.
7. Press the MENU button to return to the survey run display.

If the self-test fails multiple times make sure the battery is fully charged and the instrument is properly warmed up.

### **\*\*Note\*\***

The instrument may continue to stabilize for up to 10 to 15 minutes. Re-zero as need or re-run self-test.

### **\*\*Caution\*\***

Should the instrument not pass after several attempts, do not use the instrument for survey work until the problem is corrected. Contact **HEATH** for further assistance.

Self-test may fail if performed shortly after reading high gas concentrations, (e.g. after bar holing measurement) do to gas still present in the sample cell. Allow the unit to fully purge before running a self-test.

Self-test may fail if the battery voltage is too low (below four bars).



Exhibit 4  
Records of DP-IR Self-tests



**DPIR SELF TEST AND CALIBRATION REPORT**

DATE	TECHNICIAN	SELF-TEST	READING	READING	LEVEL	NOTES
1/16/2019	Urbanski	Yes	78	93	1	Acme(2) Calhoun
1/21/2019	Urbanski	Yes	75	97	1	Cherokee
1/27/2019	Urbanski	Yes	76	93	1	UPS and Big Ox
2/5/2019	Urbanski	Yes	77	94	1	FQT and Arriza
3/10/2019	Urbanski	Yes	76	96	1	Beech Island
3/25/2019	Urbanski	Yes	74	96	1	Idaho Power
4/14/2019	Urbanski	Yes	78	94	1	UPS and Big Ox
5/21/2019	Urbanski	Yes	74	96	1	Beech Island
6/24/2019	Urbanski	Yes	77	95	1	Aiken and Easley Housing
6/25/2019	Urbanski	yes	91	113	1	Greenwood
7/24/2019	Urbanski	Yes	89	109	1	Ironwood
7/28/2019	Urbanski	yes	78	108	1	Big ox compressor station
8/7/2019	urbanski	Yes	79	96	1	Sent to Jamestown
8/20/2019	Urbanski	Yes	91	114	1	Return from Jamestown
9/24/2019	Urbanski	Yes	82	97	1	Boise
10/21/2019	Urbanski	Yes	83	94	1	UPS
10/30/2019	Urbanski	Yes	86	93	1	Aiken and Easley Housing
11/19/2019	Urbanski	Yes	88	93	1	Big Ox compressor station
12/26/2019	Urbanski	Yes	83	108	1	Alanta UPS
12/27/2019	Urbanski	Yes	89	106	1	Aiken and Easley Housing
12/30/2019	Urbanski	Yes	91	99	1	Easley
1/9/2020	Urbanski	Yes	103	97	1	Acme
1/10/2020	Urbanski	Yes	97	94	1	Calhoun
1/20/2020	Urbanski	Yes	101	92	1	Cherokee
1/31/2020	Urbanski	Yes	96	93	1	Blossman
2/10/2020	Urbanski	Yes	99	93	1	First Quality
2/26/2020	Urbanski	Yes	103	91	1	Mt Home
2/26/2020	Urbanski	Yes	103	91	1	Langley Gultch
3/18/2020	Urbanski	Yes	98	91	1	Tropicana
4/19/2020	Urbanski	Yes	97	94	1	Aiken
5/15/2020	Urbanski	Yes	89	94	1	UPS Louisville
6/3/2020	Urbanski	Yes	91	92	1	Greenwood
6/4/2020	Urbanski	Yes	97	104	1	Beech Island
6/5/2020	Urbanski	Yes	94	89	1	Beech Island
6/16/2020	Urbanski	Yes	89	101	1	KC Jenks
9/10/2020	Urbanski	Yes	95	89	1	Aiken
9/16/2020	Urbanski	Yes	98	91	1	bennett mt.
11/18/2020	Urbanski	Yes	83	102	1	Atlanta UPS
12/23/2020	Urbanski	Yes	104	94	1	Easley Housing
1/11/2021	Urbanski	Yes	93	101	1	Amce Brick NG
1/12/2021	Urbanski	Yes	104	94	1	Calhoun
1/18/2021	Urbanski	Yes	92	94	1	UPS Atlanta
2/11/2021	Urbanski	Yes	92	88	1	KCC Beech Island
2/12/2021	Urbanski	Yes	94	88	1	First Quality
2/16/2021	Urbanski	Yes	98	91	1	Tropicana

2/25/2021	Urbanski	Yes	91	94	1	Greenwood
2/26/2021	Urbanski	Yes	100	95	1	Greenwood
3/4/2021	Urbanski	Yes	89	101	1	Ironwood
3/23/2021	Urbanski	Yes	94	98	1	Idaho Power- Bennett Mtn
3/23/2021	Urbanski	Yes	87	93	1	Idaho Power - Langley Gulch
3/25/2021	Urbanski	Yes	88	94	1	Smithfield Hog
4/5/2021	Cash McGinnis started tracking on the Heath form - kept with the instrument					



# DP-IR Daily Self-Test and Calibration Log

DP-IR S/N 910152113

Date	Operator	Passed Self-Test?	Self-Test ppm Reading	Alarm Level	Notes
4-5-21	Cash Melanos	Yes	96 / 94	1	OK
4-8-21	Cash Melanos	Yes	92 / 96	1	OK
5-8-21	Cash Melanos	Yes	91 / 92	1	OK
5-8-21	Cash Melanos	Yes	78 / 84	1	OK 2000
5-25-21	Cash Melanos	Yes	89 / 92	1	Fail Daily
5-26-21	Cash Melanos	Yes	91 / 91	1	Fail Daily
6-15-21	Cash Melanos	Yes	88 / 91	1	Greenwood
7-16-21	Cash Melanos	Yes	816 / 916	1	Clearance
7-17-21	Cash Melanos	Yes	90 / 92	1	Alert
7-19-21	Cash Melanos	Yes	86 / 89	1	UPS battery
7-22-21	Cash Melanos	Yes	89 / 92	1	UPS battery
7-27-21	Cash Melanos	Yes	96 / 95	1	Beach Island
8-2-21	Cash Melanos	Yes	828 / 94	1	First Quality
8-5-21	Cash Melanos	Yes	816 / 97	1	Early Haul
8-20-21	Cash Melanos	Yes	114 / 92	1	Tanks
8-25-21	Cash Melanos	Yes	98 / 94	1	Treated
9-22-21	Cash Melanos	Yes	83 / 96	1	Greenwood
9-14-21	Cash Melanos	Yes	<b>73 / 94</b>	<b>1</b>	Treated